Foreword

Research studies on student engagement and academic performance reveal that undergraduate students who participate in research benefit by earning higher grades, are more likely to achieve timely graduation, and have greater plans to attend graduate or professional school. It is the exposure to systematic inquiry, support of a faculty mentor, and involvement with disciplinary concepts beyond the classroom that attracts students to the McNair Scholars Program.

The benefits scholars receive by participating in research include gains in their ability to explain, present, discuss, and defend their work to advisors, other faculty, and their peers. Being a McNair scholar also strengthens the students’ sense of belonging as an academic professional and awareness of their ability to obtain greater academic achievement.

In higher education, interdisciplinary coursework and research experiences are becoming more frequent. Fifteen years ago, when we started the McNair Scholars Research Seminar, we taught the students to ask the “big questions,” read literature from multiple disciplines, and to challenge themselves and their peers to learn not only to be good researchers in their disciplines, but also to be critical consumers of information and to challenge their peers to conduct quality research studies. When we started we had few examples of interdisciplinary research courses, but we utilized the bonds between scholars, their peers, and the faculty mentors to offer a quality research experience.

The tradition continues today and students learn to conduct research within their disciplines and also to read and interact with scholars from other disciplines as they engage in research studies. It is the interdisciplinary nature of the program that serves to enrich the scholarly experience of McNair participants.

Here at California State University, Sacramento, we are proud of the accomplishments of our scholars, and the commitment that our faculty mentors make to our scholars’ successes. In this volume, you will find articles related to economics, health, gender equity, science, and cultural studies. Thus, we showcase the interdisciplinary nature of our program, the talents of our scholars, and the commitment of the faculty mentors and program staff.

As a community of educators, we are especially proud of the students whose work is included in this volume and wish them continued success on their journey to earn the doctoral degree.

Chevelle Newsome, Ph.D.
Dean of Graduate Studies
McNair Director and Principal Investigator
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Double Consciousness

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**Abstract**

According to W.E.B. Du Bois (1903), double consciousness is looking at one's self through the eyes of another who views you with amused contempt and disdain. This study examines Du Bois' (1903) theory of double consciousness within the context of how African Americans see themselves through the eyes of European Americans, who view them with amused contempt and disdain thus, resulting in the concept of double consciousness. In search of answers that may help to reverse some of the negative effects of double consciousness, the researcher developed a theoretical model representing Oneness. The theoretical model that was created as a result of this research shows multiple elements leading to the path to oneness. The research in this paper revealed that the need for a rich cultural heritage is a key element in regaining oneness.

**Introduction**

This study is being conducted in hopes that a deeper understanding will be developed from the conceptualization of Du Bois (1903) and from the sharing of his scholarly work with the world in the form of “The Souls of Black Folk”, as it investigates double consciousness. As a result of three centuries of slavery, double consciousness was developed by African Americans as an attempt to gain resources and to eliminate any past prejudices by mainstream culture. Double consciousness is the conscious splitting of the inner self in an attempt to create a character that would be accepted into mainstream society. Du Bois (1903, 3) defines double consciousness as “this sense of always looking at oneself through the eyes of another.” This definition implies that a stripping of one's self identity has taken place and that replacement information has been internalized by African Americans. The type of replacement information referred to includes, but is not limited to: English philosophy that equates the color black to “foul, dark or dirty in purpose, malignant, sinister and wicked”, which is very much so within the limits of miseducation (Takaki 1993, 50). The miseducation goes even further by describing Africans as beastly without religion, God or law and that their dark skin makes them devil's incarnate (Takaki 1993). The impact of miseducation resulted in the loss of African generational heritage, self-identity, and the development of double consciousness (Du Bois 1903). Heritage/culture is in reference to the relationship between people rather than their physical appearance.
Double consciousness refers to the state of being cognizant of two experiences that impact life. Those experiences are the African characteristics on the one hand, and the American characteristics on the other with the hope that both will merge to create a union that is better than the experience that each provides as a single unit (Du Bois 1903, 4). The expectation for this cultural group goes beyond surviving to having the desire to thrive in a world that does not always welcome them with opportunities (11). When the African American realized no gain after the signing of the emancipation proclamation, he appeared to be unproductive, weak, and without power. Du Bois (1903, 4) attributes this to the contradiction of double aims (p 4). Dialogue on the issue of double consciousness is important because this failed strategy was a pivotal point and should be viewed as a stepping stone, not the end. Du Bois (1903) wrote that a dim feeling in African Americans was rising and making them feel that to gain a footing in society “they must be themselves and not another” to regain their true self-identity.

Civil conditions for African Americans have improved since The Civil Rights Act of 1964. No one is dragging African Americans out of their homes and committing horrendous crimes against them as a matter of business as usual. African Americans can buy homes virtually in any neighborhood. Funds are made available for everyone to attend schools of higher learning and the FAFSA application is not biased. African Americans are able to open their own businesses at will and employ people of their choice. Cultural bashing is not considered business as usual in today’s political environment. African Americans are at liberty to participate in religion as they see fit and some even incorporate religion with politics. There are many qualified African American instructors that are employed to teach. The improvement is inspiring but there is still much work to be done before an egalitarian society can be realized. In a journal article entitled “Education and Civil Rights” the importance of education is discussed in a manner that does not address the rich cultural aspects of education during early childhood. Education as we know it today is not enough to remedy the effect of double consciousness. It is merely a parting of information (Woodson 2005).

The discourse between African Americans is a reflection of internalizing the overwhelming negative influence by mainstream society (Du Bois 1903; Banks 1973; Frazier 1988). Influence about race as projected through mass media and the educational process caused many African Americans to internalize self-hatred and give up their culture (Banks 1973). This is the very thing that needs to be eliminated within the group; culture is an important element in reversing the effects of double consciousness (Du Bois 1903). To gain respect, the African American must learn to “be themselves not another” and this means actively seeking education that is wholesome, an education that leads to self-determination (Du Bois 1903, 8). Self-determination means the ability to
work and produce economic stability as a group and a cordial social order for generations to come.

Research on the idea of double consciousness is important because statistics reveal a vast disparity in unemployment as an ongoing process. This is directly related to the sustaining of double consciousness because double consciousness was developed as a method to acquiring resources. During the civil rights era, many important gains were acquired, but unemployment statistics for African Americans have not improved. For example, according to CNN Money (Fox 2012), African American unemployment rates have been consistently twice that of European Americans between January 2007 and June 2012. When unemployment for European Americans was 4.2%, it was 7.9% for African Americans. When it rose to 7.4% for European Americans, it rose to 14.4% for African Americans.

Going back even further, unemployment rates for African Americans have doubled that of European Americans since 1960, the dawning of the civil rights era. In an article on the crisis of African American unemployment (Algernon 2011), reference is given to the unemployment rate of African Americans when compared to European Americans. Further research is needed to determine the disparity in quality of jobs that are attained by African Americans. In this investigation, consideration is given to the difference in political climate of African Americans between 1903 and present. Therefore, in view of the fact that unemployment rates may be near 8% for African Americans, this also means the employment rate is a substantial difference of 92%, following emancipation when few to no jobs were available for African Americans in northern states and only menial jobs were available in the South.

In consideration of African Americans’ mindset of today and in relation to double consciousness as defined by Du Bois (1903), this author hopes to disclose any semblance of information that may lead to oneness. Oneness is an element of the character that Du Bois (1903) considered powerful. In discussing the power of Booker T. Washington, Du Bois (1903) spoke of Washington’s power through “singleness of vision and oneness of his age” without mention of culture, but it may be implied within the structure of oneness. In other words, it is not clear if Du Bois is referencing Washington’s cultural awareness in conjunction with his business prowess. Nevertheless, Booker T. Washington was one of the most powerful men of his day and Du Bois defines his power as oneness in spite of their differences. And, Du Bois (1903) makes it clear throughout his works that cultural awareness is an important element in the building of self-esteem and self-awareness.

According to Du Bois (1903), the three elements of work, culture, and liberty, when used simultaneously make up the formula that leads to complete freedom. History, as a matter of ethical practice should be recorded with accuracy so that culture may be passed truthfully from generation to generation. Altered or
diminished history lessens the reader’s information base. To deny one’s historical information base, may result in psychological injury (Banks 1973). Cultural Studies should be taught as a matter of course. Cultural Studies research should not be about just writing, it should reflect the author’s concern for an improved society and governing bodies by reporting past truths, according to the evidence.

**Literature Review**

Dr. William Edward Burghardt Du Bois was a historical writer and political motivator for Africans of the Diaspora and for social justice worldwide. His one hundred eleven year old account of the political atmosphere of African Americans when “Souls of Black Folk” was published in 1903 is applicable today because double consciousness still exists and is still widespread (Ciccariello-Maher 2009). Du Bois (1903) was a social scientist who investigated the political/economic/social structure of his environment and came to the conclusion that African Americans’ minds have been strongly influenced after hundreds of years of abuse. Du Bois (1903, 2) begins by asking the question “how does it feel to be a problem?” which sets the stage for an enormous amount of dialogue. He goes on to describe it as like a feeling of not being acknowledged as a human being of equal standing in society. In Du Bois’ (1903) words, it seemed like being behind a “veil”, of not being seen or acknowledged by mainstream society, a type of non-existence unless needed for service of the dominant culture. Du Bois’ (1903) first encounter with racism was from a peer in early childhood who shed light on the fact that two worlds exist based on skin color. Skin color is the foundation that the concept of race is built on. Europeans created racism to create economic advantage (Banks 1973). The concept of race is a social construct for economic advantage for one group and in turn creating economic hardships for many others (Mosupyoe and Ramose 2011). The concept of race played an important role in the development of double consciousness (Vincent 1973). In other words, if a person begins to believe another’s definition of who they are and what their history is, then the believer becomes imprisoned in a world with no self-identity, which is in direct conflict with finding oneness.

Colonialism strips the colonized of group identity, cultural heritage, language, and any semblance of who they were before crusader presence (Perinbam 1982). According to Banks (1973), taking over the body and mind of a person leaves that person void of any worthy information. Replacement knowledge is controlled by the ruling class, and therefore no useful information comes forward for those excluded from mainstream society. As a result of cultural stripping, mental and physical injury, and conflict; double consciousness is born, and a mental slavery ensues. Du Bois (1903, 182) states that a “truer self-knowledge” is the one thing that has been an ongoing process for African Americans and for many years was retained through folklore and “animal stories”. Animal stories are used to create visions of
African history and culture. For example, “the lion is the protector of the pride”, as you must be the protector of the community in which you belong. This would be part of the educational process of an adolescent male approaching manhood at about the age of twelve. In an article entitled “John Henrik Clarke: Historian, Scholar, and Teacher”, one of Clarke’s most influential statements for African Americans and the world is recorded. Here, Clark reminds us that keeping history in its true perspective is important; he writes, “history is a clock that people use to tell their time of day”, and “It is a compass that people use to locate themselves on the map of human geography”. This means that we should look to African American scholars and compare their versions of history to other versions of history. African Americans who reject the importance of learning clear, concise histories of Africa before outside intervention may suppress the political growth of African Americans for generations to come (Horne and Young 2001).

Three hundred years of forced labor, emancipation, and being ostracized from mainstream society, left the freedman in a precarious situation. The problem with being emancipated and not having government support until recovery could be realized was defenselessness against racist doctrines. The Freedmen Bureau was shut down within a five-year period after emancipation; this led to cultural bashing in many Southern states and some Northern states (Frazier 1988). African Americans had to find a way to pay the bills and create stability in their daily lives. During this era Booker T. Washington gained enormous financial support from Southern planter-class residents because of his agreement to surrender political aspirations for African Americans. He had little support from African Americans of the time, but Southern land owners were attracted to Washington’s theory of African Americans surrendering political aspirations and becoming strictly a hands-on work force. Southern land owners provided huge financial support for Washington’s theory (Du Bois 1903). Although Du Bois (1903) believed in the internal remaking of society without violence, he drew the line and defended his position that African Americans should not surrender political aspirations in their search for work, as Booker T. Washington promoted. Du Bois (1903) believed that Washington’s strategy for economic stability would obstruct African Americans’ political aspirations for an undetermined amount of time and would add fuel to the negative effects of double consciousness. Freedom, citizenship, and suffrage had not worked, and the bleak hope for education had not yet been realized. There were few exceptions to the rule in 1903. African Americans who had been exposed to and influenced by a system of slavery and racial stratification needed to be mentally replenished with new ideals (Du Bois 1903) because the door to prosperity had been closed abruptly.

Du Bois (1903) describes his encounters with Europeans as an uncomfortable experience, almost as if some Europeans acted awkward, knowing the injury imposed on African Americans. In Du Bois’ day, one might hear, “I know an
excellent colored man”. Today that would mean that “one of my closest friends is black”. Another example is that in 1903, “Southern outrages make their blood boil” might be translated into, “I know how you feel” in modern times. The injury imposed on African Americans through slavery was devastating, but the idea of reparation for the African American descendant has been consistently denied. The door to prosperity being closed lead to double consciousness becoming the catalyst of hope for equality in the late 19th century. The influence of racist practices that caused double consciousness has been a negative input for African Americans and served no political advantage (Banks 1973). In a CNN Time article (1997), President Clinton acknowledges that discrimination, past and present is a problem for African Americans, but Clinton does not offer a concrete plan to eradicate the problem. He makes clear that today’s African Americans are so far removed from slavery that it would be too difficult to compensate them all. According to Banks (1973), early childhood education is the critical point for encouraging a student to grow in a positive, productive direction. The child must learn that in order to be successful in the social order of things, cultural heritage must be surrendered, and a complete remaking of identity must be completed before induction into middle class America (Banks 1973). To deny cultural heritage in early childhood education is to alter history. When policies are implemented that systematically omit or change history in a profound way, history becomes fiction, and racist practices do not diminish (Banks 1973). Denial of heritage alters a person’s personality and causes them to detach from their family history; “either they must betray family and heritage or they must settle for socioeconomic failure”, which leaves the student with two choices that are most undesirable (14). Observable indicators of political/economic/social prejudices, such as unemployment rates, disparity in median wealth, and institutional racism, illustrate the difficult struggle for African Americans in the pursuit of equality. If the healing process from generational slavery is not addressed in a rational, balanced way, African Americans may be stagnated politically and indefinitely. Political stagnation means that economic planning and development, correct historical education, youth intervention against criminal behavior on the macro level, and the spiritual connection of people in general has not begun (Williams 1987). Correct history of African Americans taught in early childhood appears to be one of the main missing links in reversing the negative effects of double consciousness. Moore (2005, 757) states it in a clear and concise manner “when history is read correctly, double consciousness is not needed” which signifies the importance of epistemological limits when recording history. Du Bois (1903) goes on to explain his findings that suggest African Americans had not made any significant political improvement in the forty years since emancipation as a result of being ostracized by society. As a result of not being accepted into mainstream society and being denied resources, double
consciousness was developed as a strategy to prosper and alleviate the slave stigma (Du Bois 1903). The very definition of double consciousness suggests that self-awareness and self-determination have been lost or compromised. Self-awareness and self-determination may be realized through African Americans becoming fully aware of their potential through cultural retention (Banks 1973). The type of culture must be of a rich nature that provides insight that is supported by evidence into the distant past of African Americans.

Du Bois (1903) also explores the issues of quackery and demagogy of the Negro minister, as it applies to the sustaining of double consciousness in the sense of a lowly task. According to Frazier (1988), Western Christianity is directly related to controlling people in relation to the slave trade. Western society has used Christianity to make merchandise of people, namely Africans. History based on evidence and archeological finds are not taught as a matter of Christian doctrine, whether it be Catholic, Protestant, or Methodist; rather beating slaves until little life remains in the body is the history of Christianity in relation to Africans (Frazier 1988). American missionaries are sent to convert so-called heathens while subjecting men, women and children of African descent to the most horrific crimes known to mankind (Frazier 1988). These religious concepts are directly related to the sustaining of double consciousness in that they are oppressive conditions that exclude prosperity and happiness. Prosperity and happiness is another way to say work, culture, and liberty, qualities that Du Bois (1903) defines as the three key elements to finding oneness of purpose that leads to freedom. African American ministers teach the doctrines of Christianity, which have historically been involved in the “The Atlantic Slave Trade” (Frazier 1988). The rebellious fugitive slave gave African American religion new meaning with liberation at the forefront of their doctrine (Frazier 1988). At the onset of colonizing America, Shakespeare was a major source of public influence for western expansion. His plays *The Tempest* and *Stephano* portrayed indigenous people of America as savages and unworthy of owning land and living in peace (Takaki 1993). In the present day, newspapers and public broadcasts replaced posters and plays for creating public opinion. Mass media reigns with absolute power in the persuasion of public opinion. This widespread control over public opinion suppressed the individual efforts of the rebellious fugitive slave who began churches with politics as part of their agenda.

According to Karenga (2008) in an article titled, “The Moral Anthropology of Marcus Garvey”; he discusses the concept of “African American Political Thought” in view of problems that govern people of ancient times and in today’s world about humanitarian issues and African liberation worldwide. Garvey’s anti Judeo-Christian analysis of history is at the core of this scholarly work. Black Nationalism, whom Garvey is the father of, is intent on shedding light on the welfare and prosperity of African folk; this is a direct line of defense against
double consciousness (Karenga 2008). Garvey’s ideas of Black Nationalism were a result of direct activism and engagement in defense against racist doctrines and to invalidate the implementation of those doctrines (Karenga 2008). It should be noted that many assaults against Africans were a result of recorded guidelines and European hegemony that demands the power to control African lives in a way that benefits Europeans most; free labor and free resources (Karenga 2008, 171). Garvey holds steadfast that “The Power that holds Africa is not divine” and can be undone. This observation clearly takes the Judeo-Christian belief systems out of the equation which paves the way for critical thinking. The development of critical thinking is a necessary element in the process of merging the two aspects of double consciousness. Critical thinking is the individual ability to absorb information and use it in a productive, rational, and reasonable way.

Dr. Du Bois spent most of his life courageously trying to mitigate social injustices brought about by prejudices and discrimination based on skin color. One of his most notable contributions to society, post slavery, is encouragement of self-determination across cultural lines. Du Bois (1903) believed in a culturally rich education and an internal remaking of governing bodies as a recovery strategy from double consciousness. Du Bois (1903) strongly suggests that a careful study of historical events worldwide will help to reduce the level of stress that racist practices create (Horne and Young 2001). He believed that the only way an egalitarian society may be realized is through African Americans examining and fixing the divided character through true world history and a critical discourse analysis of African American’s successes, stagnations and failures since emancipation. The type of history needed is the accurate experiences of Africans before crusader wars.

Du Bois (1903) asserts that the development of double consciousness by African Americans was an attempt to bring an end to striving, thus allowing for the use of energy in a more productive manner. Productive manner means living a life that is enshrouded with gainful “work, culture, and liberty”; the three must be utilized simultaneously to achieve this aim for complete freedom (Du Bois 1973, 11). A practical definition of these three themes may be helpful in the search oneness.

**Work**

Within three years after emancipation, the Freedmen Bureau was established as leverage for African Americans to regain life skills needed to thrive in a world without biased laws and protocols that restrained the group to subservient roles. During early reconstruction after the civil war, freed men experienced high hopes of re-gaining footing on the world stage (Du Bois 1903). The Freedmen Bureau was established by the act of 1866 and served the freed man in many aspects (Du Bois 1903). The Bureau made laws and enforced them, defined and punished
crime with military force and sought to find a balance in the new order. The Bureau was responsible for selling and re-distributing land in the South, setting up schools and medical treatment accommodations, and providing food in the South (Du Bois 1903). However the Freedmen Bureau was short lived and did not have sufficient amount of time nor personnel to restore to full form all that had been lost by African Americans. After Lincoln’s assassination and the swearing in of Johnson, the Bureau evolved to a point of corruption. In one single day “all the hard earned money of the freedman disappeared” with the crash of the Freedmen’s Bank (Du Bois 1903, 36). Du Bois (1903) stated that a debriefing period should have followed slavery in order for the freed man to regain some sense of mental balance which may have prevented the strategy of double consciousness. According to Du Bois (1903) “a handicapped people should not be asked to race with the world, but given time to work out their own social problems” (Du Bois 1903 9). This cannot be done without government approval and support.

After emancipation, employment opportunities for African Americans were less abundant in the North than those in the South (Frazier 1988). Oppressive conditions were blatant in the South. African Americans were only allowed to do certain kinds of work, usually work that no one else wanted (Frazier 1988). African Americans in the South knew what jobs to apply for and which jobs they could get (i.e., picking cotton). Those in the North were in competition for jobs with immigrant populations of European descent (Frazier 1988). Although they were able to get work of some sort, those in the South had social boundaries that the so-called freed men dared not cross on threat of life and limb (Frazier 1988). The problem with this type of work is that it was not productive for the needs of the family. It was common practice immediately following emancipation to hire the freed man and refuse to pay a fair wage or resort to paying no wage at all (Shaw 2013). Therefore the freed men in the North and South were deliberately cast into slave-like conditions after emancipation (Frazier 1988). The liberal Republican Party of 1877 became indifferent to Black political aspirations and looked the other way as the White south re-gained free reign to deal with African Americans as they chose (Frazier 1988). Mississippi was the first southern state to legally restrain Africans Americans from suffrage through violence and intimidation (Frazier 1988).

The problem in the North was that trade unions would not accept African Americans, which forced them into unskilled or domestic labor or no labor (Frazier 1988). With the great migration of the Irish to America, jobs became even less accessible for African Americans, even unskilled jobs. This conflict in the job market led to the bloody Draft Riots in 1863, in New York City, when Irish hoodlums beat, burned and destroyed the homes of African Americans at random (Frazier 1988). It is common practice in the job market of today to hire African
Americans last and all others first through the passing of jobs through inheritance
and endogamous practices (Banks 1973). This information is consistent with
evidence on unemployment rates presented earlier in this article.

The hope for a happy, prosperous life immediately following emancipation
was short lived due to discontinued funding of the Freedmen’s Bureau in 1870
(Frazier 1988). A lack of funding caused the Freedmen’s Bureau in 1870 to
withdraw much needed support for African Americans, thus causing them to
regress into a slave-like state of being (Frazier 1988). Land that was granted by
the Freedmen’s Bureau to African Americans was taken back, and slavery, in the
form of share cropping ensued (Frazier 1988). In 1883, courts ruled the Civil
Rights Act of 1875 unconstitutional, which in effect gave the green light for
discrimination (Frazier 1988). There was little difference between sharecropping
and slavery (Takaki 1993). In 1870 the Freedmen’s Bureau closed, and the 15th
amendment became the hope (Du Bois 1903).

Soon after reconstruction failed, empirical studies by Du Bois (1903) revealed
that two worlds existed in the same space; those who lived in the wallows of
prosperity and those who lived at the very bottom of suffering; even though
they were both born into a land of plenty, it would seem logical that all would
prosper equally. Quite to the contrary, it led the Negro to plunder in the quest
for self-determination by having to choose between the divided inner self; i.e.,
one attempting to live up to the standards of those who hate and oppress and
the other suffering from the void of no genuine identity, both as a direct result
of the caste system based on race (Cameron-Wedding and Mosupyo 2008). The
concept of race appears to be an intricate part of sustaining the idea of double
consciousness and hindering the recovery process of African Americans in their
quest for meaningful work.

It is important that African Americans learn how to generate revenue for
themselves to eliminate the effects of rejection by mainstream society. A college
degree may help but is not absolutely necessary in finding a niche for income. For
example, a great sandwich sold in the right location may provide enough income
to support a family in today’s world and has even made some millionaires. Beauty
supplies have always been a great seller in the African American community. Sarah
Breedlove better known as Madam C.J. Walker was a self-made millionaire in late
1800s who manufactured and sold African American beauty supplies (Grimm
2002). African Americans must become innovative and creative in basic skills
that lead to independence. Those that are career and trade bound should learn
according to their aspirations but must not detach from their humble beginnings
and use their achievements to enhance the political status of African Americans
(Du Bois 1903).
Rich Cultural Heritage

Du Bois recognized a valuable connection between African Americans and Africa, according to Horne and Young (2001). According to Du Bois (1903), a rich cultural heritage is an important element for the development of self-awareness. Rich cultural heritage refers to the entire scope of a group’s background, instead of an imposed starting point like slavery. The importance of correct history about Africans from an historical viewpoint is relative to recovery from double consciousness and to finding oneness. African Americans need to be taught the history of Africa before slavery in the same light as the “a twice told tale, that the white world teaches Greek to his own flesh and blood” (Du Bois 1903) to give African Americans a sense of self-esteem from early childhood. A rich cultural heritage means African Americans learning their ancestral contributions to society as far back as the evidence supports. Woodson (2005) affirms that African Americans have the same rich history enshrouded with great accomplishment, contributions to society, and defeats as everyone else when history is presented in truth.

The 13th, 14th, and 15th amendments to the constitution were important constitutional transitions for African Americans but did not remedy the psychological comparison of dark skin with evil. The 13th amendment (1865) freed the African slave and put him/her in a position that many European Americans perceived as a threat to job security despite the fact that African Americans had been culturally bashed for centuries. These amendments served little to no purpose in 1903. When the Freedmen Bureau collapsed and no longer was allowed to give much needed support and protection to the freed slave, social conditions reached an all-time low for African Americans (Du Bois 1903). In addition to not being allowed to use skills in a manner that would provide for their families, they were constantly under attack by racial extremists (Frazier 1988); there was no time for cultural regrouping and cultural remaking. The 15th amendment (1870) was like pouring gasoline on a fire; racial hatred for African Americans by many European Americans became more intense and more detrimental because of a perceived threat by the vote (Frazier 1988). The vote was suppressed by violent influence upon the voters, and African Americans had to resort to other strategies like double consciousness, in an attempt at equality (Du Bois 1903). And so, in the midst of much suffering, consideration was not afforded to African Americans in the creating of historical truth that leads to rich cultural heritage.

Du Bois (1903) was a teacher who believed in the Declaration of Independence and actively sought its enforcement. An indirect method of enforcement was educating African Americans to the detrimental effects of colonizing people (Horne and Young 2001) and its impact in causing double consciousness to be developed and the cultural heritage of African Americans to be suppressed. The
basic concept that helps to sustain double consciousness is society judging people by skin tone and nothing else (Banks 1973). This powerful spoken and inferred belief system of racism could only be diminished by African Americans becoming aware of the rich culture, raw materials, creation, inventions, and civilizations that Africans sustained for centuries before crusader wars (Horne and Young 2001).

Liberty
Du Bois (1903) observed a new platform that African Americans believed necessary to become truly free. Du Bois (1903, 7) wrote that in the following years after 1876, “A new vision began gradually to replace the dream of political power, a powerful movement, the ideal of book learning” is still the hope for African Americans today. These words strongly suggest that suffrage in standing alone for the African American had failed to produce reasonable results toward freedom (Woodson 2005), and therefore, the movement shifted to education. However, today the vote is still a strategy used by African Americans as represented with the election of President Obama. But, the endeavor of book learning gave the freed man a sense of dawning self-consciousness, self-realization, and self-respect (Du Bois 1903). The idea was to gain what the oppressor had that the slave did not have, book learning. However, African Americans found that book learning of the era fanned the flames of racism by teaching that the black face is associated with evil and that the plight of African Americans was hopeless (Woodson 2005). This did not hinder the determination to learn to read, write, and do arithmetic. The aim was to open schools for the freed men and fill them with qualified African American teachers (Du Bois 1903). Schools for African Americans had three serious flaws to overcome which slowed the progress of recovery from slavery and its residual effects of double consciousness. First, the schools were little more than shacks with few, if any supplies and often times had dangerous floors that could prove to be fatal during nap time (Du Bois 1903). Second, qualified educators of African descent who could teach not just the letter but teach a people who had been denied ideals about culture and life itself were too few (Du Bois 1903). Third, and probably the most severe flaw was the problem of the color line (Du Bois 1903). The color line represented being judged and categorized by skin tone and nothing else; the darker the skin, the less the opportunity (Du Bois 1903).

The idea of book learning coupled with rich cultural images was a promising prospect for the African American to gain equality. Du Bois felt it was a great place to begin to regain that which was lost to the African during the slave trade; a great rallying point in the face of colonial wars (Horne and Young 2001). Early on, book learning was a steep, uphill climb, and even if some degree of education was acquired, job opportunities for African Americans of the era were used to create dissension within the group which created internal hatred thus allowing
the ruling class to benefit from cheap labor (Du Bois 1903). The stage for the development of double consciousness was well established.

The ideal of book learning is an ongoing process for African Americans. The type of book learning needed to reverse the negative effects of double consciousness is an interdisciplinary cultural studies curriculum in early childhood education (Banks 1973, 55). Failure to teach children their rich cultural histories leaves the path open for attempting to attach to another culture’s reality. A rich cultural/historical investigation may lead to mitigation of confused thinking about heritage and African contribution to society. Reading about the past in a truthful light supported by evidence may reverse the effects of double consciousness. Historical truths may lead to a more healthy internal self-analysis and oneness.

**Fanonian Perspective**

Dr. Frantz Fanon (1961) was also a prolific writer whose analysis of the indigenous Algerian’s conflict mirrored that of Du Bois about the African American strife, but with a diverse perspective about resolution. Fanon’s (1961) analysis of the problem with the Algerians was colonization and the remedy was decolonization. Fanon (1961) was steadfast in defining the problems that faced indigenous Algerians and believed “the yardstick of whiteness that devalues black consciousness and results in cultural and psychic genocide” must be reversed to reflect cultural and historic pride as a means of recovery to realigning the character into oneness. Fanon’s (1961) more direct approach was geared toward educating the masses for rejecting the culprit with equal or greater force and for leaving the responsibility of revolution with the masses. Fanon (1961, 2) was clear in his belief that indigenous Algerians could not achieve any degree of liberation through begging administrators of the colonial system for handouts: “Decolonization, therefore, implies the urgent need to thoroughly challenge the colonial situation” and his position was not negotiable. One similarity between Du Bois (9103) and Fanon (1961) was the fact that colonial rule was at the core of creating double consciousness and that the system of governing needed changing or fixing. During the initial colonial implementation of American government, the founding fathers believed that slavery was a necessary element in Western expansion. History reveals that when governments invade and colonize indigenous people, it is necessary to destroy any semblance of originality in language, culture, lifestyle, leadership and to dehumanize the native to a state of animal excluding them for resources (Kimenyi and Scott 2001). The purpose of establishing colonies is to gain control of precious metals, gems, raw materials and to exploit indigenous people (Horne and Young 2001). Once people of Algeria and America were successfully colonized, double consciousness became a group strategy in an attempt to be accepted by the new mainstream society. In accord with his revolutionary spirit, Fanon quit his job working for the French government to engage in revolutionary activities whose aim was to remove French
rule from Algerian soil (Moore 2005). Like Du Bois (1903), Fanon (1961) argues that finding any semblance of oneness can only be done through education of the masses and perhaps not just any education (Fanon 1961). This means that oneness can only be realized by African Americans through regaining and internalizing the history of Africa before colonialism.

Fanon’s (1961) theoretical framework mirrors Du Bois (1903) in that there was a problem with the Algerians not having equal footing in society. Being viewed and demonized by the new ruling class as absolute evil set the stage for physical and psychological genocide (Du Bois 1961). It is the same set of circumstances that set the stage for the creation of double consciousness in Western society (Takak 1993). Fanon’s (1961) strong inclinations toward rallying the masses to a revolutionary state of mind and action radiates throughout his writings.

Magsig Analysis
In consideration of the Master of Arts thesis submitted by Marla Jean Magsig, B.A., University of California, Irvine, Magsig (1995) argues that the Toni Morrison theory about language having the power to destroy or rebuild the body provides an adequate foundation for discussing double consciousness in a manner that seeks remedy. The argument here is that any language that creates hierarchy, results in opposing terms where one term is favorable over the other. For example, the favored terms “white” and “man” as opposed to terms regarded as subservient or lacking such as “black” and “woman” pave the way for destruction of the black body. Magsig (1995) further demonstrates the point by drawing a parallel example of Lincoln freeing the slaves. Here, Lincoln signed the emancipation proclamation but could not remedy the master narrative that black bodies are subhuman. The attractive force in declaring themselves a part of the established colonizers for incoming Europeans to North America was skin tone and nothing more. Demonizing of the word black and then relating it to Africans has been instrumental in the loss of self-identity and the development of double consciousness.

Restoring African Americans individual and cultural self-identity requires a multi-faceted approach that addresses both the depth and breadth of double consciousness. The author’s proposed process to reverse double consciousness is illustrated in [Figure 1] The Theoretical Model of Oneness (Magsig 1995). The model provides a foundational process for the renewal of oneness among African Americans by regaining and internalizing the history of Africa before colonialism. The model is made up of several components of cultural enrichment which contribute to the renewal of Oneness: Rich Cultural Heritage & Knowledge Building, Liberty, Political Power via Suffrage, Critical Thinking & Engagement, Work & Economic Development, Interdisciplinary Education & Practice, Strong
Family Ties, Entrepreneurship, Communication Skills, and Early Childhood Education via Historical Truths.

Figure 1. Theoretical Model Inspiring Oneness

Limitations

A limitation that this writer encountered was not enough time to further explore and analyze additional works from W.E.B. Du Bois concerning double consciousness. This researcher was not able to expand the reading to incorporate more modern day, relevant works, journals, and articles, so the scope of the model may be limited. With more time allotted, a comparative case study could have been conducted comparing Du Bois’s theory of double consciousness in relation to the current political and social thought of African Americans. Another limitation could be researcher bias because of the writer’s African American cultural and historical experiences.

Implications and Future Research

Future research should include interviews with African Americans who have studied their history from an Afrocentric perspective and understand the rich
culture that existed prior to European intervention and those that have relied on school curriculum written from a European perspective. Also, developing a survey that allows people to define their perspective of oneness from their own experiences and designing questions that will help determine how external factors contribute to a person’s sense of oneness.

**Conclusion**

When people are deceived as to their origin and historical background, it creates a vacuum that only the truth can fill. According to Du Bois (1903), history written in an ethical straight forward manner that includes all people of the earth is the remedy to distorted stories. True history reveals beauty, strengths, and weaknesses of all cultures and stays within epistemological limits. Without rich cultural heritage, oneness may not be regained, and double consciousness will continue to remain on auto pilot throughout generational lineage.

Double consciousness has not worked in the past, is not working in the present, and is highly unlikely to work in the future. Under the present order of society, African Americans cannot become full-fledged Americans because hegemony remains firmly in place (Moore 2005). Removing skin color from the equation may create an ideal for all people of the world to be acknowledged as human beings with full rights, to grow and prosper without opposition. According to Woodson (2005, 19), to become an egalitarian society, the educational system must not just be the “imparting of information, it must inspire people to live more abundantly”.


Still A Minority: Exploring Black Student Enrollment Decline in the California State University System

Nyree Hall
Dr. Jessie Gaston, Faculty Mentor

Abstract

The California State University (CSU) system has suffered a decline in student enrollment since the passage of Proposition 209. Up to date, the decline in Black student enrollment has been the most severe. With a growing emphasis on diversity in higher education, it is imperative that attention is given to student populations struggling to enter the California State University system. This study explores factors that contribute to the decline in enrollment of Black students in the California State University system. In particular, this study focuses on how these factors specifically affect Black student enrollment at California State University, Sacramento. According to analyzed enrollment data, it has been found that Black enrollment percentages were higher before Prop 209 was implemented in the California State University system in 1997. This suggests that the banning of affirmative action in California has negatively affected Black enrollment in the California State University system, and Black students are slowly disappearing from the California State University system.

Introduction

Diversity includes a variety of factors such as race, ethnicity, gender, life experiences, socio-economic status, mental, physical ability and/or disability, and identity. With demographics changing in the United States, there is a greater need to support and include different populations of people; this is especially important on college campuses. It is crucial that our institutions of higher education, which help to create well-rounded leaders, are providing environments where learning and appreciation of diversity can take place. These multiple perspectives on life help students learn from each other and become more open minded (Peterson’s Staff 2013). Although the term diversity includes many populations of people, the focus of this study is on racial diversity.

The numerical representation of diverse groups, known as structural diversity, should be an important factor that a student considers when deciding which school to attend (Gurin et al 2002). When a student applies to a college, especially a student of color, one of the first things they should look at is the
California State University, Sacramento

campus’ demographics. College informational websites list student demographics as an important question that should be asked by prospective students when talking to recruiters (20 Top Questions to Ask a College n.d.). Many students want to be surrounded by people who share their race and culture; thus, visible representation is crucial to both students and campuses (Kell 2014). Lack of visual representation is a direct challenge to increasing campus diversity; students may be discouraged to apply or attend a college if they do not see themselves in the student body. The University of California, Berkeley is an example of a school where Black students are becoming discouraged to apply and attend (Allen-Taylor 2013). Some Black students who are accepted into universities similar to University of California, Berkeley choose to attend other campuses such as Historically Black Colleges and Universities because they do not see an adequate representation of themselves or support on campuses. Racial, ethnic, and socio-economic campus diversity should be reflected in all areas of campus life, including administration, faculty, staff, and students. As the United States becomes more diverse, it is crucial that we have universities that reflect this diversity and create supportive environments for students attending these schools. It should be a goal of every college campus to make their students feel included and represented, especially those who have been historically underrepresented in higher education, such as Black students.

Other challenges to increasing campus diversity are seen in university policies that negatively affect the admission of students of color. For example, the University of Michigan’s law school used affirmative action in an effort to make their campus more diverse (Barnes 2014). The University of Michigan law school is a prestigious law school that is ranked number nine on U.S. News’ top law schools for 2014 (Best Law Schools n.d.). The University of Michigan has alumni that have been ambassadors for foreign countries, have served on the UN, and have been professors at top research centers and universities (History and Alumni n.d.). Unfortunately, the University of Michigan’s affirmative action policy resulted in the Supreme Court case Grutter v. Bollinger, 539 U.S. 306 (2003). In 2002, a white female student decided to sue the University of Michigan’s law school after being declined by the program. She discovered that race was considered in the school’s admission criteria and felt discriminated against (Grutter v. Bollinger n.d.). Although Grutter didn’t win the case, this led the way for the introduction of Proposal 2 in 2006, a ban on affirmative action in Michigan. Banning affirmative action can often make it more difficult for universities to make their campuses more diverse, which can lead to low representations of diverse students on campus, further isolating students of color (Woodhouse 2014).

Although it is constantly stressed that college campuses need structural diversity, informal interaction diversity and classroom diversity are also beneficial to college
Informal interaction diversity includes frequent, quality interaction between students outside of the classroom. Classroom diversity is a structured learning environment with diverse peers inside the classroom (Gurin et al. 2002). Informal interactional diversity and classroom diversity need structural diversity to thrive. Therefore, if a campus does not have a structural diversity, it can be difficult for a campus to create a positive environment for diversity.

Maintaining a diverse campus provides students with opportunities to interact with peers who are culturally different from themselves (Enberg 2007). This interaction can lead to new ideas and ways of thinking, which is an important part of a college experience (Enberg 2007). In fact, this interaction is not only necessary for personal betterment but for preparation to enter the workforce (Chang et al. 2006). It is necessary to know how to work and interact with people from diverse backgrounds because we live in an ever-growing, diverse country. Being exposed to diversity in higher education allows students to “address issues of prejudice and discrimination, dispel myths and stereotypes surrounding achievement, incompetence, and lack of professionalism that they may have previously internalized about students of color” (Foster and Boehm 2002, 287). Positive diverse interaction will be necessary to create a peaceful environment inside and outside of the classroom.

The California State University system prides itself on diversity (Report Shows CSU Campuses Among Nation’s Most Diverse 2000). A troubling reality in the California State University system today is that Black enrollment has consistently declined from Fall 1996 to Fall 2013, which means that many campuses within this system are lacking structural diversity. As previously mentioned, if a campus is lacking numerical representation, overall diversity can also be lacking. Some colleges in states with large Hispanic and Asian populations are preparing to become Hispanic serving institutions and Asian American Pacific Islander serving institutions (AAPI) (Office for Civil Rights n.d.). Minority serving institutions are those that serve a “significant percentage of minority students” (Office for Civil Rights n.d.).

This is especially true for several campuses in the California State University system (Office for Civil Rights n.d.). As efforts are made to support these populations of students in higher education because of their growing numbers, it is imperative to ensure that other underrepresented groups, especially groups such as Black students who are declining in the California State University system, are also being supported. This research examines not only the factors which have contributed to the declining numbers of Black enrollment in the California State University system but how these factors have specifically affected Black student enrollment at California State University, Sacramento. The question guiding this research is: What factors contribute to the decline in Black enrollment in the California State University system?
This article will discuss literature on factors that have contributed to the
decline in Black student enrollment nationwide. Factors affecting Black student
enrollment nationwide also affect the California State University system when it
comes to financial aid changes and affirmative action policies such as proposition
209 (prop 209) in California. The article will then discuss the methodology and
the results of the study. To conclude, a discussion on the results that considers the
implication of declining enrollment will be provided.

**Literature Review**

**Enrollment Decline due to Financial Aid and Tuition**

Financial aid is extremely important to college students, especially those who
have low socio-economic statuses. There are often grants and scholarships that
will support students for the first few years in the university system, which help
tremendously. However, as students remain in the institution for more than four
years, it may be harder to pay for school, as there are year limits on how long a
person qualifies for aid. For example, effective for the 2012-2013 school year, The
U.S. Department of Education notified students about changes to the Federal Pell
Grant program, a program designed to help college students from low-income
families afford college (Kingkade 2012). The eligibility of aid was reduced from
eighteen semesters to twelve semesters (Kingkade 2012). Along with this change,
the maximum family earning to qualify for the grant was reduced from $30,000
to $23,000 and the ability to receive the grant for classes during the summer was
discontinued (Nelson 2011). The Pell Grant is specifically designed to help low
income students pay for college; yet if aid is being reduced, it may be much more
difficult for students to pay for college. As a result, students may struggle to stay in
school and finish their degrees.

Other changes to financial aid include the federal Direct PLUS Loan, a loan that
a parent without adverse credit can borrow on behalf of their undergraduate child
who is a dependent (Federal Student Aid n.d.b ). In 2011, the Department of
Education changed their credit check standards for the PLUS Loan. As a result
of this change, more than 200,000 fewer recipients were approved for the loan
in 2013 than in 2011 (Bidwell 2014). Before the changes were made, parents
had to have no delinquencies, foreclosures, bankruptcies, or defaults within
ninety days of their credit check history. In October 2011, the Department of
Education passed a change to include debts that had been charged off or sent to
collections as criteria for negative credit, which resulted in increased PLUS Loan
denials beginning in the 2012-2013 school year (Bidwell 2014). Department of
Education claimed these changes were to prevent families from acquiring more
debt than they could afford (Nelson 2011). For many families, student loans are
used as a last resort to pay for college (Financial Student Aid n.d.a). With so many
families suddenly unable to qualify for loans, families may have an even harder time paying for college.

In California, the California State University system tuition prices have also increased throughout the years. According to the California State University system’s ten-year fee history, tuition prices were $2,334 in the 2004-2005 fiscal year (CSU Budget Office 2013). As of the 2013-2014 fiscal year, tuition is currently $5,472, a $3,138 increase. Studies on financial aid and tuition changes in higher education have shown that students such as Black and low income students are less likely to enroll in college when there are financial aid decreases and/or tuition increases (Heller 2001). This suggests that changes made to the Pell Grant program and the Direct PLUS Loan program in 2011, along with increased tuition prices, could have had a negative effect on Black student enrollment.

Enrollment Decline due to State Policies
Black enrollment has declined not just in the California State University system but also nationwide (Dobbs 2004). According to Dobbs (2004), schools such as Pennsylvania State University (Penn State), the University of Minnesota, the University of North Carolina at Chapel Hill, the University of Georgia, Ohio State University, University of Illinois at Urbana-Champaign, and the University of Pennsylvania have also reported decreases in Black enrollment. In 2004, Black freshmen enrollment at the University of Georgia declined by 26%. Similarly, Ohio State University declined by 29%, and 32% at the University of Illinois Urbana (Dobbs 2004). This decline in Black enrollment shows signs of a growing problem across the country.

Factors that contribute to Black enrollment decline include changes to state affirmative action policies that affect admissions processes (Dobbs 2004). Affirmative action is defined as a set of procedures designed to eliminate unlawful discrimination, such as racial and gender discrimination, to amend prior discrimination, and to prevent future discrimination (Legal Information Institute n.d.). When the Civil Rights Act of 1964 was passed, the government made more of an effort to enforce laws against racial discrimination in areas such as employment, health care, and education (Taylor and Liss 1992). When it came to higher education, affirmative action was used in recruiting and admitting minority students, as well as in creating support for these students through counseling and training programs to help them succeed (Taylor and Liss 1992). Affirmative action has been considered a step in the right direction (Pratt 1997). By actively including those who have been institutionally discriminated against into institutions such as higher education, positive change is being created. However, others consider it a form of reverse racism that discriminates against white people, especially white men (Wilcox 2009). Although people of color can be prejudiced or can discriminate against white people individually, they cannot
be racist because they lack the institutional power to disempower white people on a societal level (Rosado n.d.). This belief of reverse discrimination has ultimately led to a ban on many affirmative action programs (Pratt 1997). As a result, many Black students may have missed opportunities in higher education.

After the state of Michigan passed a voter initiative called Proposal 2 in 2006, the University of Michigan changed to a race-neutral policy, and therefore, has been unable to award points for race in their admission process. (Liptak 2014). These changes in admission significantly reduced their Black population (Kurashige 2014). In 1996 and 1997, Black enrollment at the University of Michigan was at its highest at 9.2% (Kurashige 2014). In 2006, Black enrollment declined to 7%, and in 2013 Black enrollment declined further to 4.7%. These statistics suggest that the University of Michigan’s ban on affirmative action has negatively affected Black student enrollment.

In states such as California where affirmative action was banned, other methods of affirmative action have been considered. Early advocates of Prop 209 in California claimed that efforts such as the University of California, Board of Regents outreach to disadvantaged youth, regardless of color, was a fair method of affirmative action and would still bring in students of color (Connerly and Rhodes 1997). Unfortunately, this did not bring in students of color the way they thought it would. The University of Michigan also believed an alternative to using race in admissions would bring in students of color. They believed the elimination of race would still benefit low-income students, thereby admitting students of color (Kurashige 2014). As university statistics have shown, the University of Michigan and schools in the University of California system experienced a substantial decline in Black student enrollment when these policies were passed, suggesting they have been harmful to Black enrollment, even after using other methods to bring in diverse students.

**Prop 209**

California has two public university systems, the University of California (UC) and California State University (CSU). The California State University system has twenty-three campuses and serves about 447,000 students (The California State University n.d.). The University of California system has nine campuses and serves more than 233,000 students (The University of California n.d.). One of the biggest factors in Black enrollment in California’s public universities is Prop 209, which passed on November 5, 1996 by California voters (The Leadership Conference 1997). Under Prop 209, “The state shall not discriminate against, or grant preferential treatment to any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting” (The Leadership Conference 1997).
This initiative ended affirmative action policies in California, especially race based policies in the University of California and California State University admissions.

The change in admission policies to exclude race as a factor resulted in an initial decline in enrollment for students of color in both the University of California and the California State University systems, with Latino and Black student enrollment suffering the most (Arcidiacono et al. 2011). Two University of California campuses that have gotten the most attention for their dwindling Black student population are University of California, Berkeley and University of California, Los Angeles. At University of California, Berkeley, acceptance rates alone for Black students have declined from 51% to 15% from 1994 to 2013, and at University of California, Los Angeles they have declined from 58% to 14% (Bernstein 2013). These campuses have tried to adjust their admission policies to be more "holistic" where an applicant’s entire educational and life experiences are considered. However, enrollment has still been very low when it comes to Black students (Ocampo 2006). If such a policy seems to have negatively affected Black enrollment in the University of California system, which serves fewer students in California than the California State University system, Black enrollment in the California State University system should also be analyzed to see how banning affirmative action, along with any other factors, have affected Black students.

**Methodology**

Enrollment data were collected from the California State University Statistical Reports page of the California State University website on June 29, 2014. For this Study, data was collected from the California State University Statistical Reports page, which displayed the California State University system enrollment numbers from fall 1984 through Fall 2013. Statistics from the enrollment data were placed into a table showing total California State University system enrollment and total African American enrollment in the California State University system. This was done in order to observe increases or decreases in enrollment for both populations.

The California State University system started documenting enrollment percentages by race and campus in 1992. A second table was created for the California State University campuses with the highest Black enrollment percentages to observe which campuses in the California State University system had the highest Black enrollment from 1992 to 2013. This table was also used to compare the Black enrollment of the other twenty California State University campuses to the California State University campuses with the highest Black enrollment. A third table was created for the California State University campuses with the lowest Black enrollment percentages to observe which campuses in the California State University system had the lowest Black enrollment throughout the twenty-one years of campus specific enrollment percentages. This table was
also used to identify campuses that struggled with structural diversity. A fourth table was created for Black enrollment at California State, University Sacramento to compare Black enrollment at this campus with the entire California State University system.

This methodology was chosen to focus on the structural diversity in the California State University system. And, in order to focus on structural diversity, numerical enrollment, including percentages, were collected. The following section contains the tables of enrollment data and the results of the current study.

**Results**

**System Wide Enrollment**

Analyzing enrollment data for campuses in the California State University system has suggested that there is a decline in Black enrollment in the California State University system. Table 1 presents the California State University total numerical enrollment for all students, as well as the total numerical enrollment and percentage for African American students from the years 1984-2013.
Table 1. Total California State University enrollment and African American enrollment from Fall 1984 to Fall 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Total CSU Enrollment</th>
<th>African American Enrollment</th>
<th>African American Enrollment Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>316,005</td>
<td>16,955</td>
<td>6.0 %</td>
</tr>
<tr>
<td>1985</td>
<td>324,626</td>
<td>16,900</td>
<td>5.8 %</td>
</tr>
<tr>
<td>1986</td>
<td>333,424</td>
<td>16,781</td>
<td>5.6 %</td>
</tr>
<tr>
<td>1987</td>
<td>342,776</td>
<td>17,161</td>
<td>5.6 %</td>
</tr>
<tr>
<td>1988</td>
<td>355,106</td>
<td>17,739</td>
<td>5.6 %</td>
</tr>
<tr>
<td>1989</td>
<td>360,838</td>
<td>18,507</td>
<td>5.7 %</td>
</tr>
<tr>
<td>1990</td>
<td>369,053</td>
<td>19,648</td>
<td>6.0 %</td>
</tr>
<tr>
<td>1991</td>
<td>361,904</td>
<td>19,719</td>
<td>6.2 %</td>
</tr>
<tr>
<td>1992</td>
<td>347,693</td>
<td>19,647</td>
<td>6.4 %</td>
</tr>
<tr>
<td>1993</td>
<td>325,639</td>
<td>19,861</td>
<td>6.6 %</td>
</tr>
<tr>
<td>1994</td>
<td>319,368</td>
<td>19,307</td>
<td>7.0 %</td>
</tr>
<tr>
<td>1995</td>
<td>325,604</td>
<td>20,661</td>
<td>7.3 %</td>
</tr>
<tr>
<td>1996</td>
<td>336,803</td>
<td>21,824</td>
<td>7.5 %</td>
</tr>
<tr>
<td>1997</td>
<td>343,779</td>
<td>22,005</td>
<td>7.5 %</td>
</tr>
<tr>
<td>1998</td>
<td>349,804</td>
<td>21,524</td>
<td>7.3 %</td>
</tr>
<tr>
<td>1999</td>
<td>359,719</td>
<td>21,602</td>
<td>7.2 %</td>
</tr>
<tr>
<td>2000</td>
<td>368,469</td>
<td>21,549</td>
<td>7.0 %</td>
</tr>
<tr>
<td>2001</td>
<td>388,605</td>
<td>22,500</td>
<td>7.0 %</td>
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<tr>
<td>2002</td>
<td>407,088</td>
<td>23,138</td>
<td>7.0 %</td>
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<tr>
<td>2003</td>
<td>408,946</td>
<td>22,942</td>
<td>7.0 %</td>
</tr>
<tr>
<td>2004</td>
<td>397,048</td>
<td>22,585</td>
<td>6.9 %</td>
</tr>
<tr>
<td>2005</td>
<td>405,282</td>
<td>23,765</td>
<td>7.0 %</td>
</tr>
<tr>
<td>2006</td>
<td>417,112</td>
<td>25,106</td>
<td>6.0 %</td>
</tr>
<tr>
<td>2007</td>
<td>433,017</td>
<td>26,019</td>
<td>6.0 %</td>
</tr>
<tr>
<td>2008</td>
<td>437,008</td>
<td>26,193</td>
<td>6.0 %</td>
</tr>
<tr>
<td>2009</td>
<td>433,054</td>
<td>24,614</td>
<td>5.7 %</td>
</tr>
<tr>
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<td>412,372</td>
<td>21,330</td>
<td>5.2 %</td>
</tr>
<tr>
<td>2011</td>
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<td>21,462</td>
<td>5.0 %</td>
</tr>
<tr>
<td>2012</td>
<td>436,560</td>
<td>20,902</td>
<td>4.8 %</td>
</tr>
<tr>
<td>2013</td>
<td>446,530</td>
<td>20,499</td>
<td>4.6 %</td>
</tr>
</tbody>
</table>

Note: Data adapted from California State University Statistical Reports website.
In 1984, the total percentage of Black student enrollment in the California State University system was at 6.0%. Numerically, total Black student enrollment was at 16,955, and the total system wide student enrollment was at 316,005. The total percentage of Black enrollment fluctuated from 1985 to 1993, staying between 5% and 6%, and in 1994, the percentage of Black student enrollment reached 7.0% for the first time since 1984. At this time, the total Black enrollment was at 19,307 whereas the total California State University student enrollment had reached 319,368.

From 1984 to 2013, the highest system-wide Black student enrollment percentage was in 1996 and 1997 at 7.5% (See Table 1). In 1996, total Black enrollment was at 21,824, and the total California State University enrollment was at 336,803. In 1997, total Black enrollment was at 22,005 while the total California State University enrollment was at 343,779 students. The highest total Black enrollment by number in the California State University system was in 2008 at 26,193 students. At this time, total California State University enrollment was at 437,008, and the total Black enrollment percentage was at 6.0% (See Table 1). The highest total California State University enrollment since 1984 was in 2013 at 446,530 students. At this time, the total Black enrollment was at 20,499 students, and the total Black enrollment percentage was at 4.6%, the lowest it has been since 1984.

The data also suggested that a five-year decline in Black enrollment started in 2009. Although the overall California State University enrollment shifted between 412,332 and 446,530 students from 2009 to 2013, there was a consecutive five-year decline in the percentage of Black students enrolled in the California State University system. From 2009 to 2013, with 2013 being the California State University highest number of students enrolled since 1992, Black student enrollment declined 0.28% each year (See Table 1).

**California State Universities with Highest Black Enrollment**

Enrollment data has shown that the campus in the California State University system with the highest Black enrollment percentages has consistently been California State University, Dominguez Hill. California State University, Hayward, which had its name changed to California State University, East Bay in 2005, California State University, Los Angeles, and California State University, San Bernardino have also been schools with the highest Black enrollment. Analyzing data from Table 2 with the California State University campuses with the highest Black enrollment has also suggested a decline in Black enrollment.
Table 2. California State University Campuses with the Highest African American Enrollment Percentages from Fall 1992 to Fall 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Campus</th>
<th>Percentage</th>
<th>Campus</th>
<th>Percentage</th>
<th>Campus</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>DH</td>
<td>30.3%</td>
<td>Hayward/EB</td>
<td>12.5%</td>
<td>LA</td>
<td>10.1%</td>
</tr>
<tr>
<td>1993</td>
<td>DH</td>
<td>29.4%</td>
<td>Hayward/EB</td>
<td>13.0%</td>
<td>LA</td>
<td>9.7%</td>
</tr>
<tr>
<td>1994</td>
<td>DH</td>
<td>30.2%</td>
<td>Hayward/EB</td>
<td>13.3%</td>
<td>LA</td>
<td>9.7%</td>
</tr>
<tr>
<td>1995</td>
<td>DH</td>
<td>31.0%</td>
<td>Hayward/EB</td>
<td>14.0%</td>
<td>LA</td>
<td>10.2%</td>
</tr>
<tr>
<td>1996</td>
<td>DH</td>
<td>32.2%</td>
<td>Hayward/EB</td>
<td>14.6%</td>
<td>SB</td>
<td>10.2%</td>
</tr>
<tr>
<td>1997</td>
<td>DH</td>
<td>32.4%</td>
<td>Hayward/EB</td>
<td>15.1%</td>
<td>SB</td>
<td>10.3%</td>
</tr>
<tr>
<td>1998</td>
<td>DH</td>
<td>30.0%</td>
<td>Hayward/EB</td>
<td>14.9%</td>
<td>SB</td>
<td>10.3%</td>
</tr>
<tr>
<td>1999</td>
<td>DH</td>
<td>30.6%</td>
<td>Hayward/EB</td>
<td>15.1%</td>
<td>SB</td>
<td>10.9%</td>
</tr>
<tr>
<td>2000</td>
<td>DH</td>
<td>30.2%</td>
<td>Hayward/EB</td>
<td>14.9%</td>
<td>SB</td>
<td>11.4%</td>
</tr>
<tr>
<td>2001</td>
<td>DH</td>
<td>31.3%</td>
<td>Hayward/EB</td>
<td>15.5%</td>
<td>SB</td>
<td>11.8%</td>
</tr>
<tr>
<td>2002</td>
<td>DH</td>
<td>30.9%</td>
<td>Hayward/EB</td>
<td>14.3%</td>
<td>SB</td>
<td>12.4%</td>
</tr>
<tr>
<td>2003</td>
<td>DH</td>
<td>30.5%</td>
<td>Hayward/EB</td>
<td>13.5%</td>
<td>SB</td>
<td>13.2%</td>
</tr>
<tr>
<td>2004</td>
<td>DH</td>
<td>30.7%</td>
<td>Hayward/EB</td>
<td>13.8%</td>
<td>SB</td>
<td>13.2%</td>
</tr>
<tr>
<td>2005</td>
<td>DH</td>
<td>31.4%</td>
<td>Hayward/EB</td>
<td>14.4%</td>
<td>SB</td>
<td>13.3%</td>
</tr>
<tr>
<td>2006</td>
<td>DH</td>
<td>26.8%</td>
<td>Hayward/EB</td>
<td>12.3%</td>
<td>SB</td>
<td>11.7%</td>
</tr>
<tr>
<td>2007</td>
<td>DH</td>
<td>27.0%</td>
<td>Hayward/EB</td>
<td>11.5%</td>
<td>SB</td>
<td>12.0%</td>
</tr>
<tr>
<td>2008</td>
<td>DH</td>
<td>26.3%</td>
<td>Hayward/EB</td>
<td>12.4%</td>
<td>SB</td>
<td>11.8%</td>
</tr>
<tr>
<td>2009</td>
<td>DH</td>
<td>24.8%</td>
<td>Hayward/EB</td>
<td>11.1%</td>
<td>SB</td>
<td>11.1%</td>
</tr>
<tr>
<td>2010</td>
<td>DH</td>
<td>20.8%</td>
<td>Hayward/EB</td>
<td>9.8%</td>
<td>SB</td>
<td>9.8%</td>
</tr>
<tr>
<td>2011</td>
<td>DH</td>
<td>19.5%</td>
<td>Hayward/EB</td>
<td>10.5%</td>
<td>SB</td>
<td>8.6%</td>
</tr>
<tr>
<td>2012</td>
<td>DH</td>
<td>17.8%</td>
<td>Hayward/EB</td>
<td>10.9%</td>
<td>SB</td>
<td>7.9%</td>
</tr>
<tr>
<td>2013</td>
<td>DH</td>
<td>16.3%</td>
<td>Hayward/EB</td>
<td>10.4%</td>
<td>SB</td>
<td>7.2%</td>
</tr>
</tbody>
</table>

Note: California State University Dominguez Hills appears as DH in table; California State University, Hayward and California State University, Easy Bay appear as Hayward/EB in table; California State University, Los Angeles appears as LA in table; California State University, San Bernardino appears as SB. Data adapted from California State University Statistical Reports website.

In 1992, California State University, Dominguez Hill's Black enrollment was at 30.3%. California State University Dominguez Hills had their highest Black enrollment at 32.4% in 1997, when Prop 209 was implemented in the California State University system. From 1998 through 2005 enrollment fluctuated between 30% and 31%; however, in 2006 enrollment started declining. Enrollment data from fall 2008 to fall 2013 suggests California
California State University, Sacramento

State University, Dominguez Hill began a six year decline in enrollment (See Table 2). In 2006, their Black student enrollment was at 26.3%, and by 2013 enrollment had declined to 16.3%, illustrating a 1.7% decline a year, the largest in the California State University system.

California State University, Los Angeles was one of the campuses with the highest Black enrollment from 1992 to 1995, until California State University, San Bernardino took its place in 1996. In 1992, California State University, Los Angeles's highest Black enrollment was at 10.1% (See Table 2), but in 2013, it dropped to 4.7%. California State University, Hayward's highest Black enrollment was at 15.5% in 2001. From 2002 through 2005 California State University, East Bay's Black enrollment fluctuated between 13% and 14%. It declined in 2006 and in 2013, East Bay's Black enrollment was at its lowest at 10.4% enrollment.

At its highest in 2005, California State University, San Bernardino had 13.3% Black enrollment which stayed around 11% until 2007 when it started to decline. In 2008, California State University, San Bernardino's Black student enrollment was at 11.8%. By 2013, Black student enrollment had declined to 7.2%, reflecting a 0.8% decline per year (See Table 2). California State University, Bakersfield and California State University, Northridge both ranked number three with the highest Black enrollment in 2009 and 2010 with 7.4% Black students in 2009 and 7.3% enrollment in 2010. In 2013, California State University, Bakersfield was at 6.9% Black enrollment, and California State University, Northridge was at 6.1%.

California State Universities with Lowest Black Enrollment

Data from Table 3 suggests that several campuses struggle with structural diversity.
### Table 3. California State University Campuses with the Lowest African American Enrollment Percentages from Fall 1992 to Fall 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Campus</th>
<th>Percentage</th>
<th>Campus</th>
<th>Percentage</th>
<th>Campus</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>Chico</td>
<td>2.1%</td>
<td>Humboldt</td>
<td>2.1%</td>
<td>SLO</td>
<td>2.1%</td>
</tr>
<tr>
<td>1993</td>
<td>Chico</td>
<td>2.6%</td>
<td>Humboldt</td>
<td>2.0%</td>
<td>SLO</td>
<td>2.1%</td>
</tr>
<tr>
<td>1994</td>
<td>Chico</td>
<td>2.6%</td>
<td>Humboldt</td>
<td>2.1%</td>
<td>SLO</td>
<td>2.1%</td>
</tr>
<tr>
<td>1995</td>
<td>Chico</td>
<td>2.8%</td>
<td>Humboldt</td>
<td>1.9%</td>
<td>SLO</td>
<td>2.2%</td>
</tr>
<tr>
<td>1996</td>
<td>Chico</td>
<td>2.8%</td>
<td>Humboldt</td>
<td>1.9%</td>
<td>SLO</td>
<td>2.0%</td>
</tr>
<tr>
<td>1997</td>
<td>Chico</td>
<td>2.6%</td>
<td>Humboldt</td>
<td>2.0%</td>
<td>SLO</td>
<td>1.9%</td>
</tr>
<tr>
<td>1998</td>
<td>Chico</td>
<td>2.4%</td>
<td>Humboldt</td>
<td>2.1%</td>
<td>SLO</td>
<td>1.7%</td>
</tr>
<tr>
<td>1999</td>
<td>Chico</td>
<td>2.2%</td>
<td>Humboldt</td>
<td>2.4%</td>
<td>SLO</td>
<td>1.5%</td>
</tr>
<tr>
<td>2000</td>
<td>Chico</td>
<td>2.2%</td>
<td>San Marcos</td>
<td>2.6%</td>
<td>SLO</td>
<td>1.2%</td>
</tr>
<tr>
<td>2001</td>
<td>Chico</td>
<td>2.2%</td>
<td>Humboldt</td>
<td>3.1%</td>
<td>SLO</td>
<td>1.1%</td>
</tr>
<tr>
<td>2002</td>
<td>Chico</td>
<td>2.2%</td>
<td>C.I.</td>
<td>1.8%</td>
<td>SLO</td>
<td>1.0%</td>
</tr>
<tr>
<td>2003</td>
<td>Sonoma</td>
<td>2.0%</td>
<td>C.I.</td>
<td>1.9%</td>
<td>SLO</td>
<td>1.1%</td>
</tr>
<tr>
<td>2004</td>
<td>Chico</td>
<td>2.1%</td>
<td>C.I.</td>
<td>2.1%</td>
<td>SLO</td>
<td>1.1%</td>
</tr>
<tr>
<td>2005</td>
<td>Chico</td>
<td>2.2%</td>
<td>Sonoma</td>
<td>2.3%</td>
<td>SLO</td>
<td>1.3%</td>
</tr>
<tr>
<td>2006</td>
<td>Chico</td>
<td>2.0%</td>
<td>Sonoma</td>
<td>2.1%</td>
<td>SLO</td>
<td>1.1%</td>
</tr>
<tr>
<td>2007</td>
<td>Chico</td>
<td>1.9%</td>
<td>Sonoma</td>
<td>2.3%</td>
<td>SLO</td>
<td>1.2%</td>
</tr>
<tr>
<td>2008</td>
<td>Chico</td>
<td>2.3%</td>
<td>Sonoma</td>
<td>2.1%</td>
<td>SLO</td>
<td>1.1%</td>
</tr>
<tr>
<td>2009</td>
<td>C.I.</td>
<td>1.9%</td>
<td>Sonoma</td>
<td>1.7%</td>
<td>SLO</td>
<td>0.9%</td>
</tr>
<tr>
<td>2010</td>
<td>C.I.</td>
<td>1.6%</td>
<td>Sonoma</td>
<td>1.4%</td>
<td>SLO</td>
<td>0.7%</td>
</tr>
<tr>
<td>2011</td>
<td>Fullerton</td>
<td>2.6%</td>
<td>C.I.</td>
<td>1.8%</td>
<td>SLO</td>
<td>0.8%</td>
</tr>
<tr>
<td>2012</td>
<td>Chico</td>
<td>1.8%</td>
<td>Sonoma</td>
<td>1.9%</td>
<td>SLO</td>
<td>0.7%</td>
</tr>
<tr>
<td>2013</td>
<td>Chico</td>
<td>1.8%</td>
<td>Sonoma</td>
<td>2.1%</td>
<td>SLO</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Note: California State University, Chico appears as Chico in table; California State University, Humboldt appears as Humboldt in table; California State University, San Marcos appears as San Marcos in table; California State University, Sonoma appears as Sonoma; California State University, Fullerton appears as Fullerton in the table; California State University, Channel Islands appears as C.I. in the table; California State, University San Luis Obispo appears as SLO in the table. Data adapted from California State University Statistical Reports website.

Only one of the schools in Table 3 exceeds 3% Black enrollment. Since 1992, the California State University campuses with the lowest Black student enrollment have been California State University, Chico; California State University, Humboldt; California State University, San Luis Obispo; California State University, Fullerton; California State University, Sonoma; and, California State University, Channel Islands. California State University, Chico has been
one of the campuses with historically low Black enrollment in the California State University system (See Table 3). In 1992, Black enrollment at California State University, Chico was at 2.1%. Between 1993 and 2002, Black enrollment fluctuated between 2.8% and 2.2%. It dropped again to 2.1% in 2004 and then fluctuated in 2005 through 2008 between 2.3% and 1.9%. By 2011, the Black student enrollment at California State University, Chico had dwindled to a mere 1.8%, and it has maintained this percentage since 2013.

From 1992 to 2013, California State University, San Luis Obispo also experienced some of the lowest Black student enrollments in the California State University system. From 1992 through 1994, Black enrollment at California State University, San Luis Obispo was at 2.1%, but rose slightly in 1995 to 2.2% (See Table 3). From 1996 through 2008, Black enrollment continued to decrease and to fluctuate between 2.0% and 1.0%. In 2009, Black enrollment dropped to 0.9%, and from 2010 to 2013, the Black student population ranged from 0.7% to 0.8%. California State University, San Luis Obispo’s current Black student enrollment population remains at 0.8%.

California State University, Humboldt had a very low Black enrollment for nine years, with eight of them being consecutive. In 1992, the Black enrollment was at 2.1% (See Table 3). Enrollment fluctuated from 1993 to 1998 but stayed between 2.0% and 1.9%. Even though Black student enrollment increased to 2.4% in 1999 and to 3.1% in 2001, Humboldt continues to have one of the lowest Black student enrollment records in the California State University system.

In 2003, California State University, Sonoma, with its 2.0% Black student enrollment, was added to the list of California State Universities with some of the lowest Black enrollment figures in the California State University system (See Table 3). It was again added to the list when its Black enrollment wavered between 2.3% and 1.4% from 2005 to 2010. In 2012, enrollment was at 1.9% and 2.1% in 2013. Similarly, California State University, Channel Islands, which opened in 2002, made the list for lowest Black enrollment in 2002 with 1.8% Black students. Black student enrollment increased to 1.9% in 2003 and in 2004 to 2.1%. Even though Black enrollment fell back to 1.9% in 2009 and to 1.4% in 2010, it rose to 1.8% in 2011. California State University, San Marcos was on the list for having one of the lowest enrollment records of Blacks in 2000 when its Black student enrollment reached only 2.6% (See Table 3). In 2011, California State University, Fullerton also had one of the lowest enrollment rates for Black students at 2.6%.

California State University, Sacramento Enrollment

Given the fact that Sacramento is the capitol of California and is also one of the most diverse cities in the country (Stodghill and Bower 2002), it is important to
provide a comparison (Table 4) of the California State University, Sacramento Black Student Enrollment percentages from 1992 through 2013.

**Table 4. California State University, Sacramento African American Enrollment Percentages from Fall 1992 to Fall 2013.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Campus</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>Sac State</td>
<td>6.1%</td>
</tr>
<tr>
<td>1993</td>
<td>Sac State</td>
<td>6.4%</td>
</tr>
<tr>
<td>1994</td>
<td>Sac State</td>
<td>7.0%</td>
</tr>
<tr>
<td>1995</td>
<td>Sac State</td>
<td>7.4%</td>
</tr>
<tr>
<td>1996</td>
<td>Sac State</td>
<td>7.8%</td>
</tr>
<tr>
<td>1997</td>
<td>Sac State</td>
<td>7.8%</td>
</tr>
<tr>
<td>1998</td>
<td>Sac State</td>
<td>7.6%</td>
</tr>
<tr>
<td>1999</td>
<td>Sac State</td>
<td>7.4%</td>
</tr>
<tr>
<td>2000</td>
<td>Sac State</td>
<td>7.4%</td>
</tr>
<tr>
<td>2001</td>
<td>Sac State</td>
<td>7.0%</td>
</tr>
<tr>
<td>2002</td>
<td>Sac State</td>
<td>7.0%</td>
</tr>
<tr>
<td>2003</td>
<td>Sac State</td>
<td>7.0%</td>
</tr>
<tr>
<td>2004</td>
<td>Sac State</td>
<td>7.0%</td>
</tr>
<tr>
<td>2005</td>
<td>Sac State</td>
<td>7.6%</td>
</tr>
<tr>
<td>2006</td>
<td>Sac State</td>
<td>6.9%</td>
</tr>
<tr>
<td>2007</td>
<td>Sac State</td>
<td>6.8%</td>
</tr>
<tr>
<td>2008</td>
<td>Sac State</td>
<td>6.7%</td>
</tr>
<tr>
<td>2009</td>
<td>Sac State</td>
<td>6.6%</td>
</tr>
<tr>
<td>2010</td>
<td>Sac State</td>
<td>6.1%</td>
</tr>
<tr>
<td>2011</td>
<td>Sac State</td>
<td>6.2%</td>
</tr>
<tr>
<td>2012</td>
<td>Sac State</td>
<td>6.0%</td>
</tr>
<tr>
<td>2013</td>
<td>Sac State</td>
<td>5.7%</td>
</tr>
</tbody>
</table>

Note: California State University, Sacramento appears as Sac State in the table. Data adapted from California State University Statistical Reports website.

In 1992, the earliest year that the California State University system began recording ethnic percentages by campus, California State University, Sacramento had a 6.1% Black enrollment. The highest percentage that Black enrollment reached was in 1996 and in 1997 at 7.8%. This was the year before Prop 209 was enforced in the California State University system. From 1998 through 2004,
Black enrollment declined at California State University, Sacramento (See Table 4), but in 2005, it grew and reached 7.6%. However, it fell again in 2006 to 6.9% and had a steady decline until 2011 when Black enrollment rose by 1%. It continued to decline in 2012 until it reached 5.7% in 2013, reflecting a 0.31% decline rate each year and suggesting a seven-year decline in Black enrollment.

**Discussion**

As previously stated, California is one of the most diverse states in the United States, and Sacramento is one of the most diverse cities in the country (Stodghill and Bower 2002). Although this diversity is something to be celebrated, enrollment data from fall 1984 to Fall 2013 suggests the California State University system is losing some diversity. According to the data analyzed, Black enrollment percentages were higher before Prop 209 was implemented in the California State University system in 1997. This suggests that the banning of affirmative action in California has negatively affected Black enrollment in the California State University system and that Black students are slowly disappearing from the California State University system. This is a problem because if part of a school’s population is declining, the benefits that come with campus diversity may be negatively affected as well.

As a result of low Black enrollment, the California State University system currently has an initiative specifically for African Americans to “increase college preparation, enrollment, and graduation rates” (The African American Initiative 2014). Starting in 2005, the California State University system began partnering with churches that serve predominately Black congregations. Two events came out of this partnership: CSU Super Sunday and CSU Super Saturday (The African American Initiative 2014). CSU Super Sunday is an annual event occurring on Sundays in February where California State University representatives attend churches across the state. At these Sunday visits, University representatives inform the congregation about college preparation strategies and college access protocol (The African American Initiative 2014). Inspired by CSU Super Sunday, CSU Super Saturday was created. CSU Super Saturday is an outreach program for middle school students, high school students, and the general community. CSU Super Saturday is an annual college fair that aims to educate people about the campuses in the California State University system, as well as how to apply to the California State University system. Information on financial aid and other material relevant to admitted students is also shared (The African American Initiative 2014).

The California State University system also works with church representatives across the state through various meetings designed to inform them of the California State University system admission policies and application preparation,
including how to coordinate outreach for the Summer Math Academy for middle school students, as well as holding quarterly meetings to plan and evaluate activities for the African American Initiative (The African American Initiative 2014). Although the African American Initiative is a great effort for outreach to Black students, it may not be enough of an effort to get other Black students into the California State University system or to stay in the academic system. As previously mentioned, Black enrollment data from the California State University system suggests a five-year decline in Black enrollment starting in 2009. At California State University, Sacramento in particular, data suggests a seven-year decline in Black enrollment beginning in 2006, which was a year after the African American Initiative began. The California State University system may need to supplement the African American Initiative with consistent, long-term outreach efforts instead of brief, annual outreach efforts.

It is important to have consistent outreach so that students feel a connection to a college campus. Two major obstacles that tend to hinder Black students from wanting to continue their education are the lack of social support and feelings of isolation when they get to college (Winkle-Wagner 2009). This is in part due to the lack of Black faculty at many universities outside of Historically Black Colleges and Universities. According to data from The Digest of Education (n.d.), as of 2011, the United States had 41,649 Black full time faculty compared to 761,619 white full time faculty. To increase the number of Black faculty in the United States, there needs to be more Black students going into higher education and becoming professors. Black students should have Black faculty who can provide mentorship, support, and classes that give voice to their cultures and experiences. However, this cannot become a reality unless solutions are implemented to stop the decline in Black enrollment and to provide better methods of helping Black students get to college.

It is imperative that Black people have access to higher education because of its economic benefits. Although obstacles such as institutional racism and hiring discrimination still prevent Black people from achieving success, college degrees help Black people move away from the poverty line (Adams 2014). When Black men attain an undergraduate college degree, the unemployment rate compared to white men is at 5%; when Black women attain an undergraduate college degree, the unemployment rate compared to white women is at 3% (Adams 2014). This reduction in the unemployment rate shows that college degrees for Black people make a positive difference in job attainment.

The California State University system believes they have a duty to “serve students by better helping them finish college and to live full and productive lives” (Graduation Initiative n.d.). To better serve Black students, the California State University system should recognize the decline in the Black student enrollment in the California State University system. Future research could explore the results...
of short term outreach efforts to Black students compared to long-term outreach efforts. Although the decline in Black student enrollment has been gradual over the last five years, it would be wise to recognize this problem and create solutions before Black students are even more of a minority in the California State University system.
References


Anxiety of Female Authorship: Identity and Gender in Ann Radcliffe's *A Sicilian Romance* and Mary Shelley's *Frankenstein; or, The Modern Prometheus*

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**ABSTRACT**

While female writers dominated the publishing of English prose fiction in the 18th century, the tradition of the English novel was widely accredited to male authors. Some later literary mechanisms, such as the female gothic and frame narratives, allowed female writers to critique the socialization of women in literature while appearing to concede to the patriarchal structures. This paper argues that Ann Radcliffe’s *A Sicilian Romance* and Mary Shelley’s *Frankenstein; or, The Modern Prometheus* use the gothic paradigm and frame narratives to portray the psychological harm to female identity and women’s growing distrust of language to convey feminine desires in a patriarchal structure.

Gothic fiction’s association with the supernatural often damages the genre’s reputation because its play and oscillation between “the earthly laws of conventional reality and the possibilities of the supernatural” (Hogle 2002, 2) imply that it is not firmly positioned in reality and thus does not warrant scholarly analysis. However, since the late twentieth century, many scholars have successfully argued for the legitimacy of the gothic genre. According to Jerrold E. Hogle (2002, 2), gothic fiction takes place in “an antiquated or seemingly antiquated space,” in which secrets from the past haunt the characters either psychologically or physically. These hauntings take on many forms, but essentially the gothic novel forces the characters and by extension the audience, to face the repressed crimes or conflicts within a society (Hogle 2002).

Although his focus is on poetry, Harold Bloom’s (1997) theory of anxiety of influence similarly argues for the prominent influence of the past on the present. Bloom (1997, 5) analyzes the relationship between poets as they face inevitable influences on their work, and he claims that poetic history should be “held to be indistinguishable from poetic influence, since strong poets make that history by misreading one another, so as to clear imaginative space for themselves.” Fundamentally, Bloom’s anxiety of influence theory argues that poetic history
consists of “strong action and inevitable reaction” (Gilbert and Gubar 1979, xiii) and that these influences cause poets to experience anxiety in writing, or “the fear that he is not his own creator and that the works of his predecessors, existing before him and beyond him, assume essential priority over his own writings” (46). Thus, the poet’s goal, however unconscious, is to “engage in heroic warfare with his ‘precursor’” and therefore “create a place for himself in literary tradition by somehow invalidating his poetic father” (47). The need to destroy the precursor and the attempt to mimic or correct the precursor’s work, however, leads to inevitable influence on the poet. Bloom’s (1997) theory demonstrates the poet’s reliance on the precursor for meaning and explores the nature of their interactions.

Bloom’s (1997) meditation on poetry has also been reinterpreted to analyze women writers and the emergence of the gothic paradigm. Previous scholars have argued that the anxiety between the female author and male precursor illustrates how women attempted to create places for themselves within literary tradition as a reaction to the established patriarchal systems (Gilbert and Gubar 1979, 7). Diana Wallace (2013, 1) writes, “from the late eighteenth century, women writers, aware of their exclusion from traditional historical narratives, have used Gothic historical fiction as a mode of historiography which can simultaneously reinsert them into history and symbolize their exclusion”. Women writers have largely been excluded from literary history, and the literary canon and feminist critics have only insisted upon research over the last fifty years. Paula R. Backscheider (2000, 1) stresses the importance for scholarly research about early women writers, saying, “Students of the eighteenth-century novel must now ask if the early women writers should be treated as a rival or counter tradition or, apparently most difficult of all, as an integral part of the history of the ‘rise’ of the English novel”. As Backscheider argues, eighteenth-century male authors such as Samuel Richardson and Henry Fielding are celebrated for producing “individualized masterpieces of social observation and psychological depth” (2000, 1) which paved the way for the tradition of the modern novel.

Backscheider’s (2000) ideas build upon Sandra M. Gilbert and Susan Gubar’s (1979) feminist text *The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination*. Gilbert and Gubar (1979, 49) use Harold Bloom’s work to further theorize that female authors faced a unique strain of anxiety: the anxiety of authorship, or “a radical fear that she cannot create, that because she can never become a ‘precursor’ the act of writing will isolate or destroy her”. The following essay will use Judith Butler’s theories to question this approach on gender and identity; first, however, it is imperative to examine how Gilbert and Gubar’s (1979) influential text analyzes female authors’ fear of literary autonomy, how the perceived generative or male literary power causes psychological damage, and how they transcend these literary confinements. Gilbert and Gubar (1979) argued that female authors were trapped within a
literary structure, which as Edward Said observed, is embedded with “genealogical connections” under which “is the imagery of succession, of paternity, or hierarchy” (qtd. in Gilbert and Gubar 1979, 5). Gilbert and Gubar’s (1979) work made known the image of the madwoman as a covert feminist figure in which “madness signified anger and therefore, by extension, protest” (Caminero-Santangelov 1998, 2). Critics argue that Ann Radcliffe and Mary Shelley are two such female writers whose work exhibits the effects of writing within a patriarchal structure and tradition.

In Radcliffe’s *A Sicilian Romance* (1790), sisters Julia and Emilia live confined in an ancient castle near the straits of Messina. When their father, Ferdinando, the fifth marquis of Mazzini, returns to the island, they witness mysterious lights and sounds from the neglected southern tower of the castle. During this time, Julia falls in love with Count Hippolitus de Vereza, and when her father proposes a marriage of alliance to the vile Duke of Luovo, she runs away with Hippolitus. However, during their escape, the marquis’ men seemingly kill Hippolitus, leaving Julia to flee from her father and a life condemned to a loveless and unhappy marriage. As this study will show, Radcliffe’s (2008) heroine usurps the established patriarchal structures, symbolized by her father and the church, in her longing for a more equal companionate marriage, which makes this text optimistic. However, Radcliffe’s (2008) solution of a companionate marriage also illustrates how, as Christiane Makward argues, “women are resigning themselves to silence, and to nonspeech. The speech of the other will then swallow them up, will speak for them, and instead of them” (qtd. in Caminero-Santangelov 1998, 2). Even though there is love in a companionate marriage, which suggests the limited privilege of choosing a husband, wives are still subject to power and domination in their marriages. Thus, the optimistic view of companionate marriage fails to completely free women from patriarchal authority and allow them to express their experience. This motivated later women writers, such as Mary Shelley, to correct the failures of literary tradition. Both *A Sicilian Romance* and *Frankenstein; or, The Modern Prometheus* (1818) use the gothic paradigm and frame narratives, a literary technique in which an introductory narrative is used to highlight a second muted narrative is used to depict the psychological harm to female identity and women’s growing distrust of language’s ability to convey feminine desires that are caused by a patriarchal structure. However, Radcliffe’s (2008) use of the gothic paradigm to portray this psychological harm is more straightforward in its expression of female desire, demonstrated by the ways in which the heroine usurps the established systems and its use of one unified narrative compared to the several narratives in *Frankenstein*.

As opposed to Radcliffe, Mary Shelley (1992) uses the gothic paradigm and frame narratives to parody gender norms and identity. Judith Butler (2004, 120) characterizes gender “as a form of psychic mime that is the subject’s melancholic
response to the lost identifications it mimetically incorporates”. That is to say that seemingly intrinsic ideas about gender are actually enforced through acts of repetition. However, Butler (2004) then identifies how troublesome identifications, by not conforming to social standards, undermine the validity of the power that these gender identities claim to hold. In this same way, *Frankenstein’s* obscure treatment of feminine desire and identity illustrates how “the utterly constructed status of the so-called original” only “constitutes itself as the original through a convincing act of repetition” (130). In *Frankenstein*, an explorer named Walton encounters Victor Frankenstein and learns of his endeavor to create and animate a creature constructed from corpses. Frankenstein recounts his tale to Walton and describes how, upon his success, Frankenstein felt horror and disgust at the “monster” he brings to life. The monster, who is rejected by his maker for his grotesqueness and is denied human companionship, retaliates against Frankenstein by murdering his loved ones. As this author will argue below, Shelley uses the monster, which was created in the image of Frankenstein, to parody the male “claim to originality” (130).

Building on Gilbert and Gubar (1979), by using Butler (2004), one can see the importance of Shelley’s (1992) response to her forbearers. While these two female authors shared a desire to create a space for themselves in the literary tradition, they approached this task differently. Radcliffe (2008) offers an optimistic view of companionate marriage as a method of usurping the patriarchal structure in *A Sicilian Romance* but fails to accurately express the female experience. Shelley (1992) emphasizes how the exclusion of women writers from literary tradition signifies their classification as secondary or less valuable than male authors, who were prioritized for being authentic or original. While Radcliffe (2008) offers an optimistic view of companionate marriage, Shelley (1992) uses the monster in *Frankenstein* to illustrate the constructedness of gender and identity by masculinizing the female experience. The monster is an example of a “troublesome identification” (Butler 2004, 120) because he refuses (and is physically unable) to mimic Frankenstein and establish identity. Thus, the monster disrupts the notion of “singular and stable” (120) gender identities. By distorting the portrayal of gender, Shelley, according to Butler (2004, 128) demonstrates how “the entire framework of copy and origin proves radically unstable.” The monster demonstrates that gender or identity is not determined by sex, which questions the validity of a structure that derives its power from the performative constitution of gender. As Butler (2004, 128) observes, this inversion disrupts “the possibility of any stable way to locate the temporal or logical priority of either term.” By responding to her gothic forbears, as Bloom (1997) and Gilbert and Gubar (1979) suggest, Shelley’s *Frankenstein* highlights the failure of *A Sicilian Romance* and the patriarchal literary tradition by acknowledging the illusory nature of identity and disrupting the patriarchal structure’s claim to power and authenticity.
Ann Radcliffe is often referred to as one of the founders of the gothic tradition whose work was widely popular and influential to later generations of writers after the publication of her third novel in 1791. However, as Janet Todd (1989, 255) notes, Radcliffe’s conservative views of authorship support the traditional perception of a woman writer whose writing “could serve as an extension of her domestic social role.” Radcliffe’s view of writing as an extension of her social duty is based on the assignment of “the gothic to women writers as one of their appropriate provinces” as Betty Rizzo (2000, 102) argued in “Renegotiating the Gothic”. Radcliffe’s work not only represents her interactions with the precursory patriarchal literary tradition but also reflects how the social construction of femininity and gender roles in literature creates and enforces female identity. Feminist critics have explored the split identities of the traditional woman whose femininity was constructed by patriarchal cultural norms and “women’s subjective experience of gendered identity” (Guest 2000, 46). It has been argued that literary mechanisms, such as the female gothic, actually allowed female writers to critique the socialization of women in literature while appearing to concede to the patriarchal structures. Thus, Radcliffe’s (2008) work reflects the precursors’ traditional ideas of femininity while subverting those same ideas.

According to Miles (2000, 44), Gilbert and Gubar argue that the social oppression of women is evident in the female gothic paradigm in which women writers were devoted to expressing “the inexpressible in female experience”. They claim that the gothic paradigm allows women writers to express their own subjective female experience while contending to the patriarchal structure (Gilbert and Gubar 1979). Robert Miles (2000) argues that Radcliffe’s work serves as a representation of her own repressed female desires. He writes, “Radcliffe and her heroines are one, but not in any cryptic, biographical sense. Her heroines are the expression, the need itself in action, of Radcliffe’s requirement to create room for herself in the world” (Miles 2000, 46). While Radcliffe may have viewed her writing as an extension of her social duty, her work came to represent the standard plot of the female gothic that presented education as a method for women to usurp the patriarchal structure (Rizzo 2000, 62). In A Sicilian Romance, Ferdinand, the fifth marquis of Mazzini is a ruthless and tyrannical leader, and his only attention towards his daughters, Emilia and Julia, is focused on their education. Radcliffe (2008, 4) writes “[the marquis] paid an annual visit to the castle of Mazzinni,” but stayed “only to give such general directions concerning the education of his daughters, as his pride, rather than his affection, seemed to dictate”. Education balances out Julia’s “extreme sensibility [that] subjected her to frequent uneasiness” (4). Thus, Radcliffe (2008) uses the gothic genre to write female characters that went against gender norms. In particular, Julia goes against the established systems in her desire and pursuit of a companionate marriage with Hippolitus; she disobeys her father’s order to marry the Duke of Luovo, who was “a character very similar to that of the marquis” and
“delighted in simple undisguised tyranny” and would have been a much more lucrative marriage alliance (57).

Julia’s sensibility also indicates an awareness of her identity in a patriarchal structure when “she found it possible to be unhappy, though loved by Hippolitus” (Radcliffe 2008, 24). This moment, in which Julia is aware of her own unhappiness, indicates an understanding that she should and is expected to be happy with a domestic role. Julia’s realization of her subordinate and hopeless position in the monastery further suggests a lack of female satisfaction. Radcliffe (2008) writes:

> When madame related the particulars of the conference, Julia presaged from it only misery, and giving herself up for lost – she burst into tears. She severely deplored the confidence she had been induced to yield; for she now saw herself in the power of a man, stern and unfeeling in his nature: and from whom, if he thought it fit to betray her, she had no means of escaping. But she concealed the anguish of her heart; and to console madame, affected to hope where she could only despair. (128)

In this scene, Julia acknowledges not only her loss of confidence in the situation but also her unhappiness with having to yield it. She recognizes her position in the power of a man who is stern, unfeeling, and temperamental. Thus, Radcliffe (2008) presents Julia as a victim of patriarchal power.

Diane Long Hoeveler (1998, 6) argues that Radcliffe purposefully conveys her heroines as victims, or more precisely, conveys “women who ostensibly appear to be conforming to their acceptable roles within the patriarchy but who actually subvert the father’s power at every possible occasion and then retreat to studied postures of conformity whenever they risk exposure to public censure”. Radcliffe was in a position to write such heroines because, as previously noted, of the assignment of the gothic to women writers. Betty Rizzo (2000, 102-3) elaborates on how “what appeared to be, then, an acquiescence to the patriarchal assignment of reason to men and sensibility to women was in actuality the sturdy rebuttal, in which men often concurred, that both genders should strive to develop and express both intellect and the passions”. Because Radcliffe’s (2008) heroines are justified in their moments of perceived nonconformity, they demonstrate a mode in which women subvert the patriarchal authority. According to Radcliffe (2008), acknowledging oppression or the assignment of traditional roles undermines the power from the oppressor. Therefore, in an oppressive society, Radcliffe, like Bloom’s (1997, 21) poet, “chooses the heroic, to know damnation and to explore the limits of the possible within it”. Radcliffe (2008) demonstrates this subversion of the social power structures in Julia’s exchange with the priest, in which

> [The Abate’s] false aspersions roused in Julia the spirit of indignant virtue; she arose from her knees with an air of dignity, that struck even the Abate.
‘Holy father,’ said she, ‘my heart abhors the crime you mention, and disclaims all union with it. Whatever are my offenses, from the sin of hypocrisy I am at least free; and you will pardon me if I remind you, that my confidence has already been such, as fully justifies my claim to the protection I solicit.’ (132)

In this scene, Julia rightfully defends herself against the priest’s dramatic behavior. Thus, Radcliffe (2008) juxtaposes Julia’s virtue with the Abate’s irrational temper, which then justifies her boldness. Radcliffe’s heroines demonstrate the need to express the female experience. Specifically, Hoeveler (1998, xvii) interprets Radcliffe’s heroines as motivated by “a specifically female oedipal quest, a need to rewrite history from the vantage point of a beleaguered daughter intent on rescuing her mother – and by extension, her future self – from the nightmare of the alienating and newly codifying and commodifying patriarchal family”. Even unknowingly, Radcliffe’s (2008) heroines strive to save their mother from the oppression of their father. In doing so, they also save themselves by bringing forth what was once hidden. Thus, Radcliffe’s (2008) gothic fiction and heroines reflect her own anxious relationship with the precursor and her unhappiness with the established literary tradition.

Radcliffe’s *A Sicilian Romance* also uses the supernatural to “create ... an anxiety-producing atmosphere where uncertainty and suspense rule” (Cameron 2003, 21). The narrative structure’s absence of explanation and withholding of information creates what Radcliffe (2008) defined as “terror.” As Ed Cameron (2003, 21) describes, it is the ability “to thematically and subliminally point to [the narrative’s own] inability to ‘say it all’” that causes an anxious mental environment. Thus, terror is created when the characters’ experiences are left unexplained. For example, the characters investigate what they believe to be supernatural activity and “chilled into a silence, they listen and distinctly heard [a low hollow sound] repeated. Deadly ideas crowded upon their imaginations, and inspired a terror which scarcely allowed them to breathe” (Radcliffe 2008, 35).

This anxiety can then only be fixed through comprehension that is given at the end of the novel in which the strange sightings and sounds of the southern towers are explained by the revelation that Julia and Emilia’s mother, Louisa, had been imprisoned by the marquis. Cameron (2003, 20) argues that the mere presence of the supernatural “points to something unsatisfactory in the narrative, something the narrative is producing that is not perfectly adjusted to its story line”. Hence, the supernatural in *A Sicilian Romance* indicates a disturbance in the narrative that is not distinctly conveyed. Given that Radcliffe (2008) has chosen to depict her heroine as a “victim,” as Hoeveler (1998) suggests, it can be inferred that the supernatural is a manifestation of Julia’s anxiety and “discontent with her future domestic role” (Cameron 2003, 24) as represented by her mother’s imprisonment.

The castle, therefore, and its locked away sections and secret corridors can be seen as an extension of the repressed female desire and identity within language. Hoeveler
observes that, “as her heroines flee from towers to labyrinthine catacombs to rooms with trick locks, they seem to be running in quick sand.” In other words, the pace of the narrative mimics the human psyche and reflects the anxiety of the real terrors that Radcliffe’s readers face – the hopeless fortune of a loveless marriage or being forced into a convent, both options which imprison women under a patriarchal authority. Interestingly, it is the marquis – the symbol of the patriarchal household and supreme authority – who closes off the section of the castle, thus “[suturing] his hold over the domestic scene” (Cameron 2003, 25).

Furthermore, embedded narratives that explore repressed female desire and identity accompany Radcliffe’s (2008) use of the supernatural in *A Sicilian Romance*. For example, the pursuit of Julia in the novel is temporarily interrupted when the duke realizes that the young lady he chases is not Julia but is instead the daughter of a Sicilian nobleman, who had confined her to a convent. Like Julia, this woman “fled with the lover to whom her affections had long been engaged, and whose only fault, even in the eye of her father, was inferiority of birth” in order to escape from her father’s rule (Radcliffe 2008, 94). This break from the main narrative and plot line, as Gilbert and Gubar (1979, 225) claim, indicates a “voyeuristic method of exploring origins, explaining identity, and understanding sexuality”. This narrative was another way in which Radcliffe (2008) explored female identity and relationships and depicted a heroine who rebelled against the established system. Hoeveler (1998, 5) argues that contrary to the primary understanding of the female gothic genre before 1970, the gothic tradition “became a coded system whereby women authors covertly communicated to other women – their largely female reading audience – their ambivalent rejection of and outward complicity with the dominant sexual ideologies of their culture”. According to Hoeveler’s (1998) observation, the gothic paradigm was a way in which women attempted to express the female experience. Thus, the covertly embedded narratives in *A Sicilian Romance* encouraged women’s coded passivity.

However, as some critics have noted, Radcliffe’s (2008) optimistic view of the companionate marriage only offers a false sense of power. As Marta Caminero-Santangelo (1998, 3) argues, the images of the confined and imprisoned woman “offer the illusion of power, although she in fact provides a symbolic resolution whose only outcome must be greater powerlessness”. For even in a companionate marriage, women are still under the authority of their husbands, and in *A Sicilian Romance*, Julia moves from being under the authority of her father to being under the authority of Hippolitus (Radcliffe 2008). As Carol Margaret Davison (2009, 208) claims, “While companionate marriage, the new middle-class ideal, was based in theory on affection, mutual concerns, and sympathy, the wife remained subordinate to her husband under law. The romantic ideal treacherously disguised the existing reality where women remained powerless handmaidens to men”. Davison (2009) refers to the idea that a companionate marriage suggests the
privilege of choosing a husband, which then implies an attempt for selfhood. However, even though there is love in a companionate marriage, wives are still subject to the power and domination of their husbands. Therefore, male authority quickly suppresses any sense of individuality.

Contrarily, Mary Shelley (1992) uses the gothic paradigm and frame narratives to represent the inability to express identity. Shelley, the daughter of two very prominent literary figures, philosopher William Godwin and pioneering feminist Mary Wollstonecraft, anonymously published her novel *Frankenstein; or, The Modern Prometheus* in 1818. Shelley’s parentage and her love affair and marriage to Romantic poet Percy Bysshe Shelley had a large impact on her identity as a writer. Shelley, like many other Romantic authors, was familiar with the works of Ann Radcliffe, and many elements of *Frankenstein* stem from the tradition of the gothic novel. Like Radcliffe’s confrontation with a patriarchal society, Shelley faced the influences of a male-dominated literary tradition. Shelley (1992, 5) writes in the introduction of the 1831 edition of *Frankenstein*, “my dreams were at once more fantastic and agreeable than my writings. In the latter I was a close imitator – rather doing as others had done than putting down the suggestions of my own mind”. Tradition dictated Mary Shelley’s identity as a writer, and these influences led to tensions between herself as an author and her place in the long history of the novel. Shelley was immersed in the literary culture, and as Nora Cook (2000, 61) argues, her work “is not so much about a woman’s fear of breeding monsters as about masculine usurpation of the feminine”. What Cook (2000) suggests is that Shelley’s exposure and connection to literary figures calls for the need of a unique perspective when evaluating her work. Witnessing how literary figures attempted to establish their own identity by invalidating the precursor showed Shelley how identity “is always in the process of imitating and approximating its own phantasmatic idealization of itself” (Butler 2004, 128).

Thus, Shelley understood that the expression of identity was not based on any psychic core but is idealized and transitory in nature. Not only does the male author fail to establish his identity and superiority in concrete terms, but the need for this repetition also indicates the absence of a “psychic reality” that precedes the expression of gender and identity. Shelley’s skepticism at the attempts to express female desire and identity in literature, including Radcliffe’s (2008) solution of a companionate marriage, drives her to write *Frankenstein*.

This anxiety of influence is evident in both Shelley’s identity as an author and in *Frankenstein*’s multiple frame narratives. Robert Walton, the first narrator of the novel, is a failed poet who “imagined that [he] also might obtain a niche in the temple where the names of Homer and Shakespeare are consecrated” (Shelley 1992, 16). Like Shelley, Walton feels the influence and pressures of literary history and the desire to be considered a ‘precursor’ like Homer and Shakespeare. After he fails as a poet, Walton seeks that which has never been found, and strives to
"satiate my ardent curiosity with the sight of a part of the world never before visited" and “tread a land never before imprinted by the foot of man” (Shelley 1992, 16). Walton’s desire to carve his own place within history mirrors Shelley’s desires to take her place within literary tradition as demanded by her various points of influence. Shelley (1992, 5) writes about the frequently asked question “How [she], then a young girl, came to think of and to dilate upon so very hideous an idea?” That Shelley would dream of the “hideous” creation to come from a man’s romantic aspirations for grandeur justifies the inquiries into the origins of the story. Shelley (1992) describes how the story that would become Frankenstein stemmed from a dream. Mary Shelley accompanied her husband, Percy Bysshe Shelley, and other leading figures of the Romantic Movement, George Gordon Byron (commonly known as Lord Byron), and John Polidori during a stay at Geneva. During their stay, Lord Byron proposed that the four of them write ghost stories, and in the introduction of Frankenstein, Shelley (1992, 7) describes her anxiety of creating a story that would “rival those which had excited us to this task”. In order to do so, Shelley (1992, 6) admits to repressing the “suggestions of my own mind” in favor of the artistic norms and aesthetic standards of literary tradition. She also reveals her husband’s pressure to “prove [herself] worthy of my parentage and enroll myself on the page of fame” (7).

Under the tyranny of tradition, Shelley’s (1992) dreams and imagination, which she described as “my refuge when annoyed – my dearest pleasure when free” (5) emerged that night in an anxious and frightful vision of “the effect of any human endeavor to mock the stupendous mechanism of the Creator of the world” (9). Shelley’s dreams and imaginations can be considered a “troublesome identification” to the established patriarchal tradition and aesthetics (Butler 2004, 120). Thus, Shelley’s struggles with her own identity make it probable that she would understand how “the naturalistic effects of heterosexualized genders are produced through imitative strategies” and how “they imitate a phantasmatic ideal of heterosexual identity” (128). That is to say that ideas about gender are constructed through repetitions enforced by relations of power. Therefore, Shelley experiences first-hand how women writers were regarded as “derivative’ or ‘secondary’, a copy of an origin which is itself the ground of all copies, but which is itself a copy of nothing” (128). Butler (2004, 129) further argues, “that heterosexuality is always in the act of elaborating itself is evidence that it is perpetually at risk, that is, that it ‘knows’ its own possibility of becoming undone: hence, its compulsion to repeat which is at once a foreclosure of that which threatens its coherence”. Thus, Shelley (1992) illustrates the incongruity of a male-dominated literary tradition that is always at risk “of becoming undone” and excludes women writers and classified them as “secondary.”

Frankenstein’s embedded narrative serves as a cautionary tale for Walton and as a way for Shelley (1992, 128) to stop the “endless repetition” of gender and identity. When
Walton claims that “One man’s life or death were but a small price to pay for the acquirement of the knowledge which I sought for the dominion I should acquire and transmit over the elemental foes of our race”, Frankenstein responds, “‘Unhappy man! Do you share my madness? Have you drunk also of the intoxicating draught? Hear me – let me reveal my tale, and you will dash the cup from your lips!’” (29). Similarly, Shelley’s (1992) work condemns the egotistical patriarchal society (precursor) and demonstrates the illusory nature of gender and identity.

In *Frankenstein*, Victor often refers to himself as a god-like figure for which “life and death appeared to me ideal bounds, which I should first break through, and pour a torrent of light into our dark world” (Shelley 1992, 55). Frankenstein’s obsession with the creation of new life and the “deepest mysteries of creation” illustrates his egotistical attitude and his failure to consider the morality of his actions. His work requires the gruesome observation of “how the fine form of man was degraded and wasted” and “every object the most insupportable to the delicacy of the human feelings” (53) which ultimately isolates him from society. That is to say that Frankenstein becomes surrounded by death in his attempt to create life in his image. Therefore, Frankenstein’s obsession with making the monster in his image illustrates “a compulsion to repeat,” or complete his own identity which in turn suggests the transitory nature of identity (Butler 2004, 131). Butler (2004) concludes that the “need for a repetition at all is a sign that identity is not self-identical. It requires to be instituted again and again, which is to say that it runs the risk of becoming de-instituted at every interval” (131). Just as every author hopes to become a precursor and thus continue the repetition of identity, Frankenstein hopes that his “new species would bless [him] as its creator and source” (Shelley 1992, 55). However, when he finally succeeds in animating the dead, the monster represents the de-institution of identity because instead of revering his creator, the monster criticizes Frankenstein’s immorality. He exclaims, “Accursed creator! Why did you form a monster so hideous that even you turned from me in disgust? God, in pity, made man beautiful and alluring, after his own image: but my form is a filthy type of yours, more horrid even from the very resemblance” (133). Thus, the monster condemns Frankenstein for his inflated self-worth and audacity, illustrating how Shelley, as Crook (2000, 61) claims, uses the monster as “a critique of male mastery”. Furthermore, Frankenstein refuses to name the monster, which symbolizes patriarchy’s inability to acknowledge identity and desire through language. However, the monster uses his lack of identity to further criticize Frankenstein. He says, “I ought to be thy Adam, but I am rather the fallen angel, whom thou drivest from joy for no misdeed” (Shelley 1992, 103). The monster is denied his identity as “Adam,” just as female authors are not identified as contributors to literary history; women writers are then the “fallen angels” that are driven from the joy of expression in a male-dominated literary tradition. Crook (2000) further argues how, “in this scenario, Mary Shelley as author is a contrast to Victor as creator. He rejects, she cherishes,
the hideous progeny” (Crook 2000, 61) when she bids her novel “go forth and prosper” (Shelley 1992, 10).

Frankenstein’s treatment of women also demonstrates his sense of entitlement. While there are few female characters in Shelley’s work, all are portrayed similarly to Hoeveler’s (1998) model of “professional femininity,” or as the passive, docile, and victimized woman. Frankenstein describes Elizabeth, his adopted sister, as “a creature who seemed to shed radiance from her looks and whose form and motions were lighter than the chamois of the hills” (Shelley 1992, 37). Frankenstein perceives Elizabeth’s “perfection” because of his possessiveness of her. He says,

> [e]veryone loved Elizabeth. The passionate and most reverential attachment with which all regarded her became, while I shared it, my pride and delight. On the evening previous to her being brought to my home, my mother had said playfully, ‘I have a pretty present for my Victor – tomorrow he shall have it.’ And when, on the morrow, she presented Elizabeth to me as her promised gift, I, with childish seriousness, interpreted her words literally and looked upon Elizabeth as mine – mine to protect, love, and cherish. ... No word, no expression could body forth the kind of relation in which she stood to me – my more than sister, since till death she was to be mine only. (37)

Elizabeth sustains Frankenstein’s perception of her when she tells him, “I figure to myself that the task of attending on your sickbed has devolved on some mercenary old nurse, who could never guess your wishes, nor minister to them with the care and affection of your poor cousin” (65). Elizabeth maintains that only she would know how to fulfill Frankenstein’s needs, and she appeals to his ego and his perception of her as the perfect woman. However, while Elizabeth appears to be engaged and happy in a companionate relationship, like Julia with Hippolitus in *A Sicilian Romance*, Shelley (1992) emphasizes that Elizabeth is still being subverted – and denied expression of identity and desire – because of Frankenstein’s possessiveness and her incorporation of his identity.

Like Elizabeth, the unnamed monster’s narrative illustrates the inability to express gender and identity within language. Through his narrative, the reader learns that after his “birth,” the monster comes across a family living in a cottage (Shelley 1992). The monster’s knowledge of society is acquired by listening to the stories the family tells. Therefore, it is through his observation of this family that the monster “obtained a cursory knowledge of history and a view of the several empires at present existing in the world” which “gave [him] an insight into the manners, governments, and religions of the different nations of the earth” (Shelley 1992, 122). At first, the monster expresses wonder at the stories, but then he describes how
These wonderful narrations inspired me with strange feelings. Was man, indeed, at once so powerful, so virtuous, and magnificent, yet so vicious and base? He appeared at one time a mere scion of the evil principle, and at another as all that can be conceived as noble and godlike. ... For a long time I could not conceive how one man could go forth to murder his fellow, or even why there were laws and governments; but when I heard details of vice and bloodshed, my wonder ceased, and I turned away with disgust and loathing. (122)

It is only after the monster has spent time watching the family that he becomes disgusted by the horrible things that humans do to one another (Shelly 1992). Essentially, the knowledge of "vice and bloodshed" corrupts the monster and motivates him to reflect upon himself and his exclusion from society. He laments,

... I admired virtue and good feelings and loved the gentle manners and amiable qualities of my cottagers, but I was shut out from intercourse with them, except through means which I obtained by stealth, when I was unseen and unknown, and which rather increased than satisfied the desire I had of becoming one among my fellows. (123)

In realizing his rejection from civilization, the monster embraces his desire for revenge and murders Frankenstein's younger brother, William, and then blames it upon Justine Moritz, a young girl who was adopted by Frankenstein's family. The monster says, "The thought was madness; it stirred the fiend within me — not I, but she, shall suffer; the murder I have committed because I am forever robbed of all that she could give me, she shall atone" (145). The monster blames Justine, the "professional feminine," because he was "robbed of all that she could give me" and "the crime had its source in her" (145). Thus, Shelley (1992) represents women's hostility (represented by the monster) toward their passive and virtuous image (Justine Moritz) incurred by a patriarchal society.

As this study has shown, while Radcliffe presented the companionate marriage as a mode through which female characters usurped the established structures of power, Shelley masculinized the female experience and demonstrated its inexpressibility and to parody the male "claim to originality" (Butler 2004, 130). Shelley's (1992) use of the monster to masculinize the female experience demonstrates Butler's (2004) argument that

If gender is drag, and if it is an imitation that regularly produces the ideal it attempts to approximate, then gender is a performance that produces the illusion of an inner sex or essence or psychic gender core; it produces on the skin, through the gesture, the move, the gait (that array of corporeal theatrics understood as gender presentation), the illusion of an inner depth [emphasis added]. (134)

According to the patriarchal claim to originality, Frankenstein's identity as a male should not rely on the approximation of male identity but on a psychic reality. However, the monster's refusal (and physical inability) to resemble, and thus
imitate, his maker signifies that Frankenstein's sense of identity “is a performance that produces the illusion of an inner sex or essence or psychic gender core” (Butler 2004, 134). Thus, the monster subverts Frankenstein's claim to originality and power by disrupting the validity of his identity. Likewise, women can subvert the patriarchal structure, not through the expression of gender and identity but by disrupting the patriarchal claim to originality and power.

While Gilbert and Gubar (1979) argue for the emergence of a female literary subculture as a response to the patriarchal structure, Shelley demonstrates how “the entire framework of copy and origin proves radically unstable as each position inverts into the other and confounds the possibility of any stable way to locate the temporal or logical priority of either” male or female identity (Butler 2004, 128). Shelley does so by not simply inverting the male and female priority, as Gilbert and Gubar (1979, 220) argue in their reading of Frankenstein as a rewrite of “Paradise Lost so as to make it a more accurate mirror of female experience”. Instead, Shelley (1992) breaks down the structure of gender as psychic reality by exposing the repetitive nature of identity. Therefore, there can be no “female” literary subculture because “the psyche is the permanent failure of expression, a failure that has its values, for it impels repetition and so reinstates the possibility of disruption” (Butler 2004, 134). Shelley takes advantage of this “possibility of disruption” by masculinizing the female experience and illustrating how women writers could not reach literary autonomy in a patriarchal structure but would only gain this “illusion of inner depth” (134). The feminine rage, which suggests female dissatisfaction with literary tradition, does not allow women writers to achieve autonomy, as Gilbert and Gubar (1979) argue because there is no autonomy to achieve. Instead, it abandons the woman writer in the void between her anger at patriarchal structures and her hatred at the “imagination” that haunts her but never achieves a substantial identity. Therefore, the female experience can never be expressed in a male-dominated language, nor will women writers gain anything but an illusory sense of identity. Consequently, with Frankenstein, Shelley (1992) undermines the structure that patriarchal authority relies upon for its power and the optimistic method of usurpation that Radcliffe (2008) offers and thus presents alternative means for women to be free from a patriarchal society.
References


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Mammy Depictions in Film: Effects on African American Women’s Perceptions, Beliefs, and Eating Behaviors

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Abstract

One common stereotype to emerge from motion pictures is the mammy. For decades, the mammy role has been used to represent African American women in film. Mammies are often portrayed as overweight, desexualized, motherly figures. The purpose of this research is to examine participants’ perceptions about their bodies, self-esteem, and eating behaviors based on the mammy influence. A survey was conducted at a western university via an online format to determine if audiences are negatively affected by depictions of mammies in film. Results were discussed in terms of beliefs and behaviors among African American women compared to other demographic groups.

Mammy Depictions in Film:
Effects on African American Women’s Perceptions, Beliefs and Eating Behaviors

Mass media has the power to affect values, norms, and visual standards embraced by audiences in the United States (Harrison and Cantor 1997). One negative stereotype to emerge from motion pictures is the mammy. The mammy image originated in the southern United States and is one of the most pervasive images of African American women. Since the 1900s, mammies have been rampant in the film industry. The mammy is often portrayed as an overweight, large-breasted, motherly figure, who served Caucasian families in the South (Chen et al. 2012). In modern films, the mammy has shifted to add to comedic relief.

In early years, the mammy represented a good wholesome caretaker of Caucasian families, yet a mean spirited, insensitive woman toward her family (Dixon 2000). Today, mammy depictions are still shown in modern films such as The Help (2011), Madea Goes to Jail (2009), and Big Momma’s House (2000).

Over the years, the researcher has witnessed numerous films highlighting African American women in confining roles. Usually these roles offer a narrow scope of one particular illustration of African American women which fails to show them in roles that are more diverse. Because individuals receive countless messages through popular culture, it is important to show more than one representation of African American women instead of focusing on a particular era in time. Research
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has found that exposure to stereotypes can influence actions and behaviors that emulate a particular generalization from exposure to portrayals in film (Campbell and Mohr 2011). The purpose of this study is to determine if mammy depictions play a significant role in how African American women view themselves and how they feel others perceive them based on mammy portrayals in film. Do mammy portrayals in film affect the perceptions of African American women compared to other racial groups?

**Literature Review**

**Stereotypes**

Categorizations based on widely acceptable traits often determine how others are perceived. Hall (1997) states that roles of individuals are often assigned based on certain traits, which we associate with someone based on a particular role such as a parent or businessperson. Although stereotypes classify an individual, they do so by reducing a person’s value (Hall 1997). Stereotypes diminish individuals through simplified and exaggerated characteristics and insist that these traits are natural qualities.

Racial stereotypes in particular have been shown as determining factors in labeling someone. They emerged from mass media and film and have implications on audience members (Dixon 2000). Stereotypes are a range of traits, attitudes, behavioral tendencies, and goals connected to a particular member of a social category (Chen et al. 2012). The problem with stereotypes is that they allow individuals to make assumptions without substance.

For over a century African American women have been portrayed in film, but early depictions often showed African American women in confined roles. The roles given to African American women were almost exclusively mammys, and these stereotyped roles have run rampant in mass media since their inception (Chen et al. 2012). A mammy was a domesticated worker who was employed as a caregiver to Caucasian families (Chen et al. 2012). Researchers found that stereotypical mammy illustrations have been perpetuated by the media and spread throughout communities (Brown, Johnson, and Griffin-Fennell 2013). African American women were cast in real life as maids, which at first may have seemed a natural transition to film. However, a quick glance of Tyler Perry’s popular *Big Momma* franchise shows limited roles for African American women and continues to portray them mostly as only one type of character.

**Mammy**

One of the most frequent stereotypes to emerge from film is the mammy archetype (Chen et al. 2012). A mammy is one of many other stereotypes that organize developments of race (St. John 2001). In the film, *Gone with the Wind*
(1939), the mammy character is introduced to audiences and is played by Hattie McDaniel (Chen et al. 2012). African American women were often real-life caretakers of children, and they exhibited the qualities of a “grossly overweight, large-breasted woman who is desexualized, maternal, and nonthreatening to White people” (Fuller 2001; Hudson 1998; Jewell 1993 as cited in Chen et al. 2012, 116). Even to this day, mammy depictions in film are common. However, they limit African American women’s roles in society because the audience often makes generalizations based on what is shown in film (Chen et al. 2012).

Disappointingly, along with positive qualities of mammy stereotypes (loving caregivers of children) mammy images have always offered outwardly negative attributions of African American women, showing them as outside the female norms of thinness (Chen et al. 2012). This is especially the case for African American women in film who are typically depicted as heavier in comparison to other racial groups. Despite the fact that researchers have found that in the African American community, cultural factors may protect African American women from developing body dissatisfaction with being overweight (Lynch 2005) one wonders what the overall implications are for the female African American audience.

One study examined the influence of mammy characters on African American women’s views. In this study, participants were shown a three-minute clip of a mammy from the 1959 drama, *Imitation to Life* and were then asked to rate their perceptions on a scale ranging from 1 (*Strongly agree*) to 5 (*strongly disagree*) based on the movie clip (Givens and Monahan 2005). The film portrayed an African American woman as a servant in a powerless position. As hypothesized, the researchers found that participants associated the character with terms related to the mammy stereotype.

Over the years, the mammy in films has shifted to a comedic approach. Males portraying mammies have hit motion pictures (Domcoccaro 2007). Although White men have dressed as women in film, Milloy (2009) found that White males dressing up as Black women does not carry the same weight as African American males playing a mammy due to America’s history of humiliating persons of color. The trend of African American men dressing up in fat-suits has reinforced negative stereotypes in the African American community (Svetkey, Watson, and Wheat 2009). African American males mocking women in costume reinforces the stereotypical image of mammies being desexualized and unwanted.

A key example of the mammy stereotype’s earning power and potential audience influence is Tyler Perry’s *Madea* franchise which has made over $600 million worldwide (Box Office Mojo 2014). *Nutty Professor* movies have also been popular in entertainment culture making over $200 million (Box Office Mojo 2014). In the film, Eddie Murphy plays an overweight, nurturing mother, who cooks and offers advice to her son, Sherman Klump. According to critics, the
abundance of men dressing as excessively overweight Black women is due to a simple formula of entertainment that sells (Chen et al. 2012). Thus, these films demonstrate the power that the mammy archetype generates across popular culture while at the same time mammies are now largely being cast as the target of jokes. Mammies continue to have a strong presence in film; therefore, these representations need to be studied further.

Eating Behaviors
Images in film have been shown to impact the way audiences perceive themselves and may ultimately affect their behavior. In one study, nineteen adult consumers indicated how they thought seeing someone who is overweight would negatively influence their consumption of indulgent food (Campbell and Mohr 2011). If women viewed images of overweight mammies, they may alter their eating habits depending on how they view the mammy figure.

A study found that Black women’s perceptions have been influenced from both the small and big screens in different ways (Chen et al. 2012). Scholars point out that African American women’s fear of abiding to the mammy image may prompt them to excessively diet in attempts to distance themselves from the mammy archetype (West 2012). Research also suggests the opposite effect in that the exposure to an overweight character in film may lead to an increase in food consumption (Campbell and Mohr 2011). Women who view images of stout characters in film may become more inclined to eat more if the overweight character is viewed favorably (Campbell and Mohr 2011). In another study conducted by Harrison and Cantor (1997), they also found that eating behaviors are influenced by media consumption. Thus, film serves as a tool for individuals to receive messages and learn about how they should look and behave. The current research will analyze the impact of mammy representations on African American women compared to other races.

Self-esteem
Another area of research suggests that negative effects of stereotypical portrayals in media on self-esteem vary between racial groups. Comedies and dramas are still the genres used largely today to depict African American women (Sanders and Ramasubramanian 2012). Studies have found that African American roles in film have translated from the big screens into the minds of audiences. African Americans are depicted less favorably than their Caucasian counterparts (Mastro and Kopacz 2006). Consistent research has found that the images of African American women on the big screen affect how African American female audiences perceive themselves (Chen et al. 2012). Thus, in order to better understand the relationship between African American women viewing mammy stereotypes in film and potential negative implications for audiences, the following research questions are posed:
RQ1: How much exposure to mammy portrayals in film do African American women have compared to other racial groups?

RQ2: What are African American women’s perceptions of mammy portrayals in film in comparison to other races?

RQ3: How are African American women affected by mammy portrayals in movies?

METHOD

Design and Procedures
The study was a cross-sectional survey administered online through Surveymonkey.com. This study was approved by the Communication Studies Human Subjects committee of the western university. The purpose of this survey was to examine perceptions of African American women about bodies, self-esteem, and negative influence of mammy portrayals in film. These views were also compared to other racial groups. Other variables such as demographics were also collected.

Participants
Initially, the sampling procedure was purposive. A link to the online survey to African American sorority groups at a large, western university asking them to take the survey. The sample size was too small for inferential statistical analysis; therefore to increase the sample size, convenience sampling was used. Additional participants of various racial groups were recruited from a communication studies class for participation in the study. In exchange for their participation, students were given extra credit. These additional participants allowed for comparisons of African American women’s perceptions to those of other racial groups. Participants’ data remained confidential. All participants were given informed consent. Participants were of various backgrounds: 18.4% African American, 5.75% Biracial, 35.6% White, 1.2% American Indian, 6.0% Asian, and 26.4% were from multiple racial backgrounds.

Measures
The survey collected information about perceptions of self-esteem and negative influence of mammy in film. The main variables of interest will be explained. To measure perceptions about negative influence, the researcher created ten Likert-type items. Participants were asked to rate their agreement on a scale of one (strongly disagree) to four (strongly agree) to each of the ten items. Some of the items include: Do you view yourself negatively after watching films with mammy figures, and have you ever been negatively affected by images of mammy figures in film? (See Appendix). To create a negative influence scale, the ten items were averaged to determine if participants were negatively influenced or positively influenced.
Reliability rating was poor, so a factor analysis was conducted, resulting in a two-factor solution. The two factors were negative effect (a six-item solution) which included items such as: Do you feel negatively impacted by stereotypes, and do you think mammy portrayals in films affect the way others see you? The second scale was negative influence (a four-item scale) and it included questions like: Do you feel inspired by mammy portrayals in film (reverse coded)? Have you ever altered your eating habits?

To measure self-esteem, Rosenberg’s (1989) Self-esteem Scale was used. This is a nine-item Likert-type scale. Participants rated their self-esteem by agreeing to statements on a scale of one (strongly disagree) to four (strongly agree). Example items include statements such as: On the whole, I am satisfied with myself. I wish I could have more respect for myself (reverse coded).

Data on participants’ movie viewing habits were also collected. Questions included: How often do you go to the movies; how often do you watch films with mammy depictions; and have you seen three or more Tyler Perry movies in the last two years? Participants also rated their self-perception of body type (thin, average, overweight, very overweight). Another category of athletic body type was collected but deemed unusable in relation to the other four ratings because of its overlap with self-rated body type. Demographic data such as age, race, and sex were also collected and were used for analysis in answering research questions.

Results

RQ1: How much exposure to mammy portrayals in film do African American women have compared to other racial groups?

In order to answer RQ1, an independent samples t-test between African American/Biracial women and those who were not was conducted. Women who identified as African American or Biracial (African American/White) were combined to form a single group and then compared to those who identified as other racial and ethnic groups. Results show that on average over the past two years, African American/Biracial women watched no more mammy stereotypes in film ($M = 2.27$) than other racial groups ($M = 2.09$), $t(90) = 1.48, ns$. For further analysis, an examination was made of the amount of Tyler Perry movies specifically viewed among African American women. In this sample, most African American women had watched at least three Tyler Perry films over the last two years (See Figure 1). Thus, although there was no difference in viewing African American female stereotypical portrayals between racial groups, it is clear that most African American women have been exposed recently to stereotypes of African American women in film.
**RQ2**: What are African American women’s perceptions of mammy portrayals in film compared to other races?

To examine African American women’s perception of mammies in film, descriptive statistics were run. The measure rated women’s agreement on a scale of one (strongly disagree) to four (strongly agree). For these two measures, higher scores mean greater agreement with negative effects on African American female audiences. Among African American/Biracial women, the average score on Negative effects was ($M = 2.80$) with scores ranging $1.83-4.0$. The average negative perceptions score was ($M = 2.46$) also near the midpoint score of 2.5, with the range of negative perceptions scores 1.25-3.2. What this shows is that in general, African American women didn’t feel the mammy stereotypes affected the way they see themselves but that it did affect how others seen them. Interestingly, however, self-esteem average score was ($M = 1.48$), below the midpoint, indicating a low self-esteem.

**RQ3**: How are African American women affected by mammy portrayals in movies?

In order to explore relationships between African American women’s perceptions, correlations were used to assess the relationship between the variables: negative effects, negative perceptions, and self-esteem. For self-esteem, lower scores mean lower self-esteem. There were no statistically significant associations found between negative effect and negative perception $r(14) = .51$, $ns$, negative perceptions and self-esteem, $r(15) = .19$, $ns$, and self-esteem and negative effects, $r(15) = .38$, $ns$.

Overall, the results show no difference in the amount of films with mammy portrayals viewed by African American women compared to other racial groups.
There were no significant associations found between the variables of interest, negative effects, negative perceptions, and self-esteem.

**CONCLUSION**

This study sought to understand African American women’s perceptions of mammy depictions, body satisfaction, and negative influence in comparison to other racial groups. It is apparent that African American women’s self-esteem scores were slightly lower than the scale mid-point, but the connection with exposure to mammies in film deserves more attention. Although the two findings were non-significant, the ratios are worth further study to determine the effect of mammy portrayals on African American women compared to other racial demographics.

Stereotypical images in mass media can influence one’s perceptions and views about themselves and others. Mammy depictions in film do not help break barriers between races because they only focus on one specific era in time. When contributions of African American women are constantly portrayed in subordinate positions, this does not help in diversifying images to audience members. Because one common way that individuals learn is through mass media, audiences’ perceptions about others may be limited when a particular stereotype is constantly displayed. Additionally, depictions of mammies reinforce to African American women that they are limited to the constraints of being a servant, maid, or in a powerless position. African American women reported watching many Tyler Perry films, and they scored moderately low on the self-esteem measure. The connection between stereotype exposure and low self-esteem is not clear however. Nonetheless it demands further investigation.

With this information, we can learn to diversify representations in order to break away from common portrayals in film such as the mammy. When audience members are constantly bombarded with repetitious characters, audience members may develop an understanding that anyone of that particular racial group acts like the character illustrated in a movie. It is important to understand that the mammy is not an equal representation of the contributions of African American women.

Some limitations may have hindered the findings. There was a small sample size of African American participants when conducting the survey which limited inferential statistical analysis. Attempts were made to recruit additional participants and thereby allow comparisons with other racial groups. Still, such a small sample limits the power to find statistically significant results. In addition, because students were offered an extra credit incentive there was a possibility of response bias. Future research should examine the scope of why there are still constant media portrayals depicting historical elements of time.
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Appendix

Online Survey
The purpose of the study is to examine people's perceptions of mammy depictions in movies. There will be no risks to you participating in the study and no direct benefits to you. Your participation is voluntary and you may drop out at any time.

Are you at least 18 years of age?

Do you watch a lot of movies?

How many movies have you watched in the last two years that depicted African American women as mammys?

A mammy is defined as an overweight, large breasted African American woman. She is often maternal and desexualized. The mammy figure often wears clothes suitable for domestic duties.

List the titles of the movies you have seen with mammy portrayals?

Do you feel negatively impacted by stereotypes depicted in film with mammy characters? I feel...

Do you feel negatively impacted by stereotypes depicted in film with mammy characters? I feel...

Have you seen any Tyler Perry movies depicting mammys?

Have you seen at least 3 Tyler Perry films depicting mammys?

Do you feel positive after watching movies with overweight, African American women?

Have you been negatively affected by mammy depictions in films?

Do you think mammy characters in film affect the way others perceive you?

I feel that I have a number of good qualities.

On the whole, I am satisfied with myself.

At times I think I am no good at all.

I am able to do things as well as most other people.

I feel I do not have much to be proud of.

Do you think movies like Norbit, Madea Goes to Jail and Big Momma's House poke fun at African American women?

All in all, I am inclined to feel that I am a failure.

I certainly feel useless at times.

I wish I could have more respect for myself.
I wish I could have more respect for myself.
Do you feel inspired after watching mammy characters?
I take a positive attitude toward myself.
Have you ever altered your eating habits after viewing movies with mammy depictions?
Have you experienced negative treatment after watching a movie with a mammy depiction?
Do the images in film affect your views about yourself?
I feel that I’m a person of worth, at least on an equal plane with others.
Do you think comedic films with mammy portrayals setback African American women?
What is your age?
Are you White, Black or African-American, American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific islander, or some other race?
What is your sex?
How do you perceive your body type? Check all that apply.
For extra credit purposes only, write your name. This information will not be shared with anyone other than the instructor and will not be connected to your answers.
The Development of Trust
African Americans and the U.S. Government

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Abstract
This researcher explores the development of trust within the African American population and between the African American population and the government. Historically, African Americans have experienced inequality and maltreatment in society from state and federal governments. A lack of trust in the government has resulted from these experiences. Through the analysis of selected events instrumental to African American history this researcher has developed a theoretical study to look at increasing and decreasing levels of trust by African Americans toward the government.

Introduction
Political trust is developed and strengthened through four components: mutually-serving goals, proven loyalty and consistency, risk, and communication (McEvily, Perrone, and Zaheer 2003). Trust within the African American population becomes stronger or weaker as its components develop through historical experience. African Americans share historical experiences of resistance and achievement which have played a major role in shaping their understanding of trust and society as a whole (Nunnally 2012).

As the population sought methods to assist them in overcoming negative experiences and adapting to society, trust among African American people grew stronger. Increasing involvement with politics was one method that produced times of political victories and increased trust among the African American population, and also between the African American population and the government. Some of these victories included receiving the complete chance to vote prohibiting any type of voter discrimination in 1965 and the election of the first African American United States President in 2008. These victories came as a result of the continuous pursuit of the goal for equality, which politically empowered the population. However, patterns of broken promises made by the government, marginalization, and limitations placed on equal opportunities for advancement have impacted the amount of trust the African American population has in the government.
In *Race Rebels: Culture, Politics, and the Black Working Class*, Robin Kelley (1996) considers the inner-city and working class African American population from the height of segregation in the mid-twentieth century to the more recent times of Gangsta Rap and the development of Hip Hop in the early 1990s. Kelley (1996) illustrates the various experiences of African American oppression through job discrimination, trouble with public transportation, labels of inferiority, police brutality and an overall lack of equality as a result of domination from the government and European American people. Kelley (1996) studies the different forms of resistance African Americans used to escape the ridicule and humiliation of oppression, and points out the infrapolitics between the African American population and the European American society by whom they were being oppressed. Infrapolitics concerns the politics of oppressed groups that occur outside of the mainstream (Kelley 1996). For example, in *Race Rebels* Kelley (1996) reflects on his McDonald’s work experience and how he and his African American coworkers found ways to compensate for the mistreatment they received by taking their time when mopping floors to speak with their friends and altering their uniforms by adding adjustments and accessories. Oppressed groups have developed alternative ways of understanding and viewing politics, which is why Kelley (1996) intentionally examines the African American population. This particular population has formed different understandings and methods of developing political values and attitudes as a result of their historical experiences in an imbalanced society. In his attempt to understand the infrapolitics of African Americans, the author takes an economic and cultural perspective in viewing the population.

Kelley’s (1996) economic perspective investigates the working-class portion of the African American population. Due to the discrimination occurring among African Americans, it was historically very unlikely for men or women to find a job decent enough to provide for themselves and their families. Unfortunately, the ones who were able to find “good jobs” were never paid as much as their European American counterparts. The requirement of wearing a uniform made working conditions even worse for African Americans. Despite the fact they were being paid for their labor, the uniform symbolized ownership, and that someone without a uniform had power over those who wore a uniform. It symbolized times when enslaved people were property of slave masters and not free, individual, hard-working men and women. The uniform was a virtual form of reliving experiences the population had already escaped (Kelley 1996).

Along with a working-class perspective, Kelley (1996) uses a cultural lens in an attempt to understand the population. Kelley (1996) argues that because of the capitalist system’s set up, working class African Americans had less access to resources in society. The wealthier a person or group, the easier it was to obtain status and power. African Americans lacked adequate resources that
would increase their wealth, so as a population they had to empower themselves alternatively through culture and Kelley (1996) attempts to understand this cultural development.

Unlike European Americans, African Americans lacked governing institutions sufficient enough to empower themselves. Kelley (1996) argues that difficulty lies in the attempt for the population to develop and advance because of the middle and upper classes weighing them down. Kelley (1996) argues that to understand African Americans as a political population, you first have to understand them as a culture. Maintaining ignorance among European Americans regarding African American culture serves as a form of resistance and thereby empowers the African American population.

Resistance was a response to the oppression experienced by African Americans and this response came in multiple forms (Kelley 1996). One of these forms was regaining the humanity that was lost with the dehumanization of oppression. Dealing with the hardship of discrimination, African Americans were determined to find their own ways to enjoy life and take advantage of depressing situations (Kelley 1996). Church was a way of bringing the community together outside of work through faith, communication, and shared experiences. African Americans turned segregation into congregation as part of their separation from European American society. Resistance was also expressed through desired clothing worn by African American men and women which allowed them to establish a personal identity outside of the workplace. Kelley (1996) also takes a look at Malcolm X and his methods of resistance, which partially came from his being a “hustler” as a young man. Malcolm X pimped and sold drugs in pursuit of individual success since most jobs available to African American men were low-paying and subservient labor.

More recently, in the late 1980s and early 1990s, music was also a form of resistance with artists like Ice Cube and Ice T using the art to directly express their feelings about government, law enforcement, politics, and the conditions of the African American community through explicit lyrics (Kelley 1996).

Kelley (1996) argues that the stronger resistance became within the community, the stronger the community grew and the more the community lacked trust in the government and society as a whole. Segregation from European American society strengthened resistance because it strengthened trust within the African American population. Nonetheless, “African Americans wanted more space for themselves, they wanted to receive equitable treatment, they wanted to be personally treated with respect and dignity... and above all, they wanted to exercise power over institutions that controlled them or on which they were dependent” (Kelley 1996, 75). Resistance was a response to the lack of equality encountered by African Americans on a daily basis. Kelley (1996) discusses how African Americans found “creative ways to resist and survive in the South” (77). From the African American population’s perspective, the motives and intentions
of European Americans crippled any chance for advancement in society from limiting transportation, employment and black housing opportunities.

A majority of the time, the way a person or group votes reflects their political views or the political views closest to their own. Considering Democrats and Republicans are the two major parties in the United States, this research investigates why African Americans tend to favor one party over the other. A large number of African Americans tend to have more support for Democratic candidates despite having some views and attitudes consistent with those of Republicans. Democrats have a liberal philosophy that promotes collectivity and argues citizens should share economic burdens. Democrats also believe in a strong government that takes care of the citizens. Unlike Democrats, Republicans believe that it is the duty of the citizens to run the government. The conservative philosophy of the Republican Party promotes individuality and believes that individuals determine their own destiny. Whether or not someone sides with one party over the other highly depends on income and political views. A reason most African Americans associate themselves with Liberals is because the Democratic Party is historically involved with progressive causes such as welfare and equality which are perceived to be of more central importance to African Americans (Wallace et al. 2009). Historically, unity has been an aspect of African American culture that prioritizes the community. With this prioritization, one can make the connection the African American population has with the Democratic Party which values diversity among equality, and most importantly working together for the welfare of the community or the benefit of the collective.

Focusing on the United States Supreme Court’s decision in Bush v. Gore, 531 U.S. 98 (2000), Avery (2007) examines racial differences among African Americans and European Americans in political trust. In the case concerning the two presidential candidates, after overturning the Florida Supreme Court’s order of manual recounts in some Florida counties, the U.S. Supreme Court ruled the “recount was not treating all ballots equally, hence in violation of the constitution’s equal protection and due process guarantees” (Avery 2007, 330). Most of the recounts had taken place in communities that were predominantly African American (Avery 2007). Bush won the election and according to Avery (2007, 330) the case also provides “excellent context for investigating inter-racial differences in political trust.”

Avery (2007) argues that political mistrust among African Americans indicates a more foundational dissatisfaction with the European American political system. Further, that dissatisfaction is a major component of unhappiness with the continued racial discrimination and racial inequality in political and economic power. With the understanding of the African American struggle throughout history, one can comprehend why there was so much discontent and mistrust with the outcome of cases like Bush v. Gore, 531 U.S. 98 (2000). African
Americans will continue to build levels of mistrust with the government until there is change significant enough to take away from that mistrust (Avery 2007). Unfortunately, even when significant change is in place, the level of mistrust will not decrease as quickly as change occurs. The election of the United States’ first African American President, Barack H. Obama, may or may not be a short-term political factor—depending on the critique of his two terms—that gives hope to the African American community until they once again realize which population is dominant.

In *African American Politics*, King (2010) scrutinizes the components from which African American voting behavior is developed. The author initially defines political behavior as “the study of the rational actions and decisions of individuals and/or groups to determine their beliefs and opinions about a variety of personal and public policy issue items...as well as the role of the government in responding to or resolving such issues” (King 2010, 43). According to King (2010), African American political behavior was never correctly and thoroughly documented because their right to vote has always been manipulated by the systems of segregation, racism, and Jim Crowism. Despite a distorted right to vote among African Americans, there have been political leaders such as Frederick Douglas, Harriet Tubman, W.E.B. Du Bois, and Mary McLeod who have pushed the European American political system for equality, freedom, and liberty. Fortunately, now that the African American population has a solid, equal right to vote, it is not as complex to investigate the underlying foundation of their political behavior.

Quoting Dr. Hanes Walton Jr., King (2010, 45) defines African American political behavior as the “sum total of a variety of factors and influences that shape the community’s political perceptions and realities”. This idea includes systems of separation, economic policies, and living conditions. According to Walton (2010), this definition can be applied in understanding the political behavior of all groups in the United States. Further, it can be applied to societal issues such as public education and healthcare that impact the African American community the same way they impact the European American community. Certain issues will positively or negatively impact each community because each community has a distinct culture and set of collective experiences. While Walton’s definition for political behavior can be applied to different groups, he is mistaken in believing that both the European American and African American communities are impacted in the same way (King 2010).

King (2010) later defines African American political behavior as African American collective thought and decision-making related to politics and public policy and claims group consciousness, linked fate, and black utility as three main indicators of African American political behavior. She argues that African Americans have higher levels of political activity compared to other
disadvantaged groups because of the population's self-awareness in being a discriminated and disadvantaged group in society. To completely understand the political behavior, one must understand the political culture of African Americans. Political culture is made up of the attitudes and beliefs that form the collective political experiences and thoughts of African Americans in America. The population's collective experience makes up the values of the culture, and most importantly, their level of trust in the politics and government of a European American society. After 1965, there has been an increase in the number of African American elected officials, voters, and a greater effort from political leaders to reach out to the African American community to get the people to vote. The election of President Obama further indicates the African American population along with the government is progressing in their attempt at transformative change (King 2010).

Lawson (2003) describes the Black Power Movement of the 1960s as the end of the Civil Rights era. According to Lawson (2003, 230), the existence of spontaneous protests “suggested that a shift was taking place away from the traditional civil rights goal of equal access and toward demands for a redistribution of economic and political power.” Before the Black Power Movement, nonviolence had become a standard in African American social protest. The methods of civil disobedience promoted by Dr. Martin Luther King, Jr. and others have proven to be ineffective (Lawson 2003). The nonviolent sit-ins, praying, and singing by protesters left them subject to police brutality, attacks with fire hoses, incarceration, and fines. The acts of civil disobedience were subsequently replaced with anger and rioting, two strategies that became most prevalent following Dr. King’s assassination.

According to Ongiri (2010), civil disobedience and community were considered core values of the Civil Rights Movement kept alive by Dr. King. These same core values were pronounced dead after Dr. King’s assassination, which caused an uproar of anger from the African American community. Ongiri (2010) argues that the death of a major African American leader such as Dr. King was a large trigger for the Black Power Movement. What arose was a combination of disorder, violence and chaos; that combination was a struggle of power from the population. The movement was also being referred to as the “Post Civil Rights Era”, and the phrase “Black Power” symbolized methods and forms of action from the community (Ongiri 2010). Power was now desired instead of equality with European Americans.

The Black Panther Party founded by Huey Newton and Bobby Seale in 1966 gained recognition for their involvement in the Black Power Movement. According to Muse (1968), the Black Panther symbolized an all-negro political movement for power. Before his death, Dr. King did not support the idea of using violence in the Black Power Movement; he thought using the term Black
Power to be an unfortunate concept. Dr. King’s philosophy on Black Power was that power should not be exclusively sought out for black people but shared with European Americans instead. “Black Power” was a concept intended to promote self-reliance in the Negro (Muse 1968). Further, those who created the term meant it as a way to stimulate and encourage learning about African American history and culture, and the development of pride in négritude (the self-affirmation of black people). The Black Power Movement also featured the involvement of African American youth. For a variety of causes ranging from free speech to dormitory conditions, young African Americans took part in the riots and demonstrations. The number of riots reached a peak in 1966; in that year, riots were reported in over 113 cities nationwide. Poverty, frustration, and helplessness found within the population were contributing factors to the riots and the Black Power Movement as a whole (Muse 1968).

**Methods**

This researcher looked at how African American trust in the government and how political trust within the African American population has developed over a course of events essential to African American history in the last 50 years. According to McEvily, Perrone, and Zaheer (2003) trust is made up of four components: communication, proven loyalty and consistency, risk, and mutually serving goals. Culture is drawn from generalizations of people and a sufficient understanding of culture is necessary to understand the development of trust. After gaining some understanding of the African American population’s culture, this researcher looked at the development of trust’s components through a number of selected events: the Civil Rights Movement, the Black Nationalist Movement, early Hip Hop and Gangster Rap, and the first election of Barack Obama.

While researching trust to build this theoretical model the following are the definitions that best allowed this researcher to look at how trust develops over the course of an event. This researcher looked at McEvily, Perrone, and Zaheer’s (2003) four components of trust in each of the selected events, emphasizing the most prominent component of each event. For the purpose of this theoretical study, communication is the expression of the population’s attitude toward the government. People express satisfaction and dissatisfaction through verbal and nonverbal methods. Verbal methods include speech, slogans, and music. Nonverbal methods include sit-ins and peaceful boycotts. Proven loyalty and consistency are demonstrated through what this researcher perceived as continuous dedication and support toward the greater good of the African American population. Risk is the willingness to expose oneself to the possibilities of negative consequences in pursuit of the greater good for the population. For example, Dr. Martin Luther King Jr. accepted risk as he led his community despite the threats that came his way as a leader of the Civil Rights Movement.
Mutually-serving goals and intentions are the collective interests and aspirations of the African American population. For example, Barack Obama’s goal to be the first African American president matched the population’s goal to elect the first African American president; therefore, African Americans showed their support by voting for him, and Obama and the voting public shared this mutually-serving goal.

In the Civil Rights Movement and the Black Power Movement, the prominent component of trust is proven loyalty and consistency. Both events require this component from the population to keep the movements alive and effective. Communication is the most prominent component of trust when looking at early Hip Hop and Gangster Rap during the 1990s. This form of music is explicit and aggressive in words. It communicated to the government and law enforcement the frustration and distrust felt by the African American population. The population used this form of music as a voice. President Obama could also be considered the voice of the population by some. Looking at the first election of President Obama, mutually-serving goals and intentions of the population is the most prominent component of trust.

Limitations in researching and understanding the development of trust in African American political behavior include events and information that may have been historically distorted. It is also possible that those who do not vote have strong distrust in the government of European American politics and thus take action by staying inactive. It may be that the reported percentage of African Americans who do not vote illustrates their distrust in the government in general, also demonstrated by their inactivity.

Analysis

Trust within the African American population is developed and strengthened through four components: mutually-serving goals, proven loyalty and consistency, risk, and communication (McEvily, Perrone, and Zaheer 2003). The development of trust within the African American population is critical and influential when it comes to mainstream politics. Studying the subject of political trust within the African American population requires an examination of how trust can be developed and the population’s culture and history. Trust within the African American population becomes stronger as its components develop through particular events instrumental to African American history; the amount of trust the population has in the government is influenced by their historical experiences. According to Kelley (1996) culture is derived from shared experience and one of the best ways to look at African American political behavior is through a cultural lens. Being a marginalized population, African Americans attempt to empower themselves through cultural development – emphasizing and practicing their
cultural values and traditions – because they lack the governing institutions that would enable them to do so (Kelley 1996).

Attempting to overcome institutional racism and discrimination has positively influenced the level of trust of the African American population in other people and in the government (Nunnally 2012). People are less interested in voting for representatives who are related to the maltreatment they receive (Wallace et al. 2009). As an oppressed group, African Americans looked to break down discrimination laws and practices to advance in society. African Americans are capable of building culturally-based institutions such as churches but because of the political system’s structure, they are unable to develop governing institutions. Governing institutions come with an influence over public policy, which is an advantage for European Americans. This influence comes from the resources and decision-making power that enables the implementation of policy and the power to take political action. Governing institutions also serve as mediators among the population. African Americans lack this assistance from a mediator so instead they are required to communicate and consult among themselves, which in turn strengthens the population (Kelley 1996). The lack of a governing institution in this case is an advantage to the African American population because it helps strengthen their understanding of trust (King 2010). The absence of a governing institution also makes it necessary for people to work closer with one another, further strengthening the components of trust within the population: proven loyalty and consistency, communication, mutually-serving goals, and risk.

Proven loyalty and consistency within a group, in addition to having the capacity to trust others, are major components in developing trust. Communication is essential and must be open at all times. Further, a person’s intentions, actions or mission must be mutually-serving rather than self-serving. Mutually-serving goals illustrate unity within the collective. Self-serving goals would indicate one has his or her own agenda and goals rather than working with the population to achieve the population’s goals. Risk is an important component in developing trust (McEvily, Perrone, and Zaheer 2003). To gain trust from a group, one must be willing to constantly take risks for the well-being of the collective, thus proving loyalty and consistency to the group. It is more likely for a person to be trusted by a group if she or he has shared experiences within the collective.

For those considered outsiders of the collective, gaining the population’s trust may be difficult or may never occur at all. For the government, gaining trust from the African American population is not as much a concern as it is for African Americans to trust the U.S. government. From the marginalized population’s point of view, the politics and intentions of the government are rarely in their favor (Kelley 1996). According to Avery (2007), the population lacks a great amount of trust in the predominantly European American government when it comes to politics. Avery (2007) argues that political trust results from factors
such as "evaluations of the president, Congress, and the policy outputs and outcomes (i.e., the health of the national economy) they produce" and that "there is reason to expect political mistrust among African Americans it is at least partly a function of their unhappiness with racial inequality and discrimination in the political and social system" (328). The African American population's concept of trust is also deeply entrenched within their understanding of life in the U.S. and their culture. Considering the struggle of their history, the development of trust is crucial to the population's stability (King 2010).

Civil Rights Movement
The Civil Rights Movement had great potential for increasing the amount of trust African Americans had in the government. The movement featured a series of events and cases during the 1950s and 1960s tackling segregation and inequality for African Americans in areas concerning freedom of speech, discrimination and livelihood, voting, and education (LBJ Library Archives Staff n.d.). The goal of this movement was for African Americans to obtain equality in society. If the Civil Rights Movement was effective enough to produce that equality it would mean a number of things for African Americans. They would have fair opportunities to live and thrive in society without the interference of government that brought upon segregation and institutionalized racism. Yes, there would still be obstacles and yes, the adjustment would take time but the fact that the government is helping instead of hindering or prohibiting African American people would make them more trustworthy. As a component of trust, proven loyalty and consistency were essential among members of the African American population and between the population and the government.

In order to effectively work together, people have to trust one another. African Americans participating, planning, executing and overall supporting the Civil Rights Movement in the name of equality proved they were of the same goal. Influential leaders of the Civil Rights Movement include Dr. Martin Luther King Jr., Jesse Jackson, John F. Kennedy and Rosa Parks among other notable figures. Jesse Jackson alongside Dr. Martin Luther King Jr. worked through speech and civil disobedience to gain equal rights for African Americans through employment. Rosa Parks was among other African Americans who experienced segregation in public places and sparked movements aimed toward dismantling the system of segregation in the south (Hartford n.d.). Most African Americans used nonviolent approaches to achieve positive change for the population and were consistent in using different methods which showed their efforts would not be exhausted. If sit-ins were ineffective at the time and place, protests and marches would be an alternative, further illustrating that the population as a whole was pushing to see a change in the system. Collectively, attempting a variety of methods showed the government that African Americans had options when it came to civil disobedience. Loyalty and consistency from African Americans
were impactful enough to draw the attention of government officials such as
President John F. Kennedy and President Lyndon B. Johnson. Following the
assassination of President John F. Kennedy, Lyndon B. Johnson was sworn in as
the 36th U.S. president. As a representative of the government, Johnson showed
his support by simply listening to the African American people and going as far as
passing legislation to help the cause. Johnson signed the Civil Rights Act of 1964,
which included provisions protecting voting rights guaranteeing access to public
accommodations, and withholding federal funds from programs administered
in a discriminating fashion. Johnson also contributed to the fight for equality by
helping pass laws that would help end segregation in schools, jobs, restaurants,
theatres, and other public vicinities of everyday life (LBJ Library Archives
Staff n.d.). Here the government is proving their loyalty through consistent
support of the Civil Rights Movement. The goal of this movement was to obtain
equality. With the support and commitment of political figures ranked as high
as president, obtaining this goal would be a trusted collaborative effort. Further,
it means that the government along with the African American population is
striving to obtain that equality, and with the same goal in mind there is more trust
in the government.

Although it was a long and tenuous process, these small efforts were enough
to produce improvements and more equality. Efforts between the government
and the social movement of African Americans, proved loyalty and consistency
towards attaining the mutual goal of justice and equality were successful. The
1965 Voting Rights Act was written into legislation during this time following the
Civil Rights Act of 1957, 1960, and 1964 along with the 24th Amendment (LBJ
Library Archives Staff n.d.).

**Black Power Movement**

Like the Civil Rights Movements, proven loyalty and consistency was the
prominent factor among African Americans in the Black Nationalist Movement
of the 1960’s. Further, the goal of this particular movement was to obtain power
for African American people. The Civil Rights Movement was not progressing
quickly enough for some African Americans. After the assassination of Dr. King,
the Black Nationalist Movement emerged as an alternative for those who wished
to express their distrust in the government in a manner more extreme than what
was common during the Civil Rights Movement. Unfortunately, the assassination
of Dr. King sparked the Black Nationalist Movement’s separation from the idea
of equality in society. The assassination of an African American leader negatively
impacted whatever trust was being built between African Americans and the
government during the Civil Rights Movement. This was now a time of radical
change that reached its peak in the middle of the 1960s and illustrated distrust
in the government. Government distrust is a value of African American culture
(Kelley 1996). Government distrust has brought African Americans closer
together. Being dehumanized and considered inferior leads African Americans to work together to make lives for themselves and fight for what is right. Government distrust is an aspect of African American culture that brings value to determination and goals in life. The population’s strong distrust of government and authority stems from the inequalities experienced by African American people dating back to periods of enslavement (King 2010). With leaders like Malcolm X and groups like the Black Panther Party, there were a large number of African American people who followed the Black Nationalist Movement in favor of power instead of equality. This movement left behind methods of civil disobedience and took on more radical forms compared to sit-ins and protests. The diminishing trust in the government was illustrated by the riots and radical protests that would emerge due to unrest. Increasing numbers of African Americans participated in the Black Nationalist Movement. This increase meant that black power was being favored over dreams of societal equality that might as well have been assassinated alongside Dr. King. Increased participation by African Americans especially the youth, showed even more consistency and loyalty from the population. More importantly, it strengthened the population when it came to depending on themselves and each other. Power for African American people was the main goal of the Black Nationalist Movement; attaining this goal would serve the African American population regardless of whether members of the population supported or opposed the movement. Proven loyalty and consistency strengthened trust among the African American population and also promoted unity giving them a better opportunity to organize and execute effectively. Unity promoted effective communication and understanding among the population. Further, it created stronger ties within the population and bonded those involved in the Black Nationalist Movement increasing trust among the African American population and moving away from the government.

**Hip Hop & Gangsta Rap**

In more recent times, during the 1990s, Hip Hop and Gangster Rap music generated an uproar in African American communities (Kelley 1996). Communication from African Americans to the government and communication among African Americans was the most prominent element of trust surrounding this era of music. Gangsta Rap is an element of Hip Hop music born out of South Central Los Angeles that thrived following the riots of the Rodney King beating. Kelley (1996) argues that lyrics were misinterpreted as advocating gang violence and criminality. He makes sure to state that gangsta rap did not celebrate gang violence and that lyrics connote the playful use of language. Nonetheless, African American people were outraged and some voiced that outrage through music. Rappers such as Ice T and Ice Cube (member of rap group NWA (Niggas With Attitude)) produced music with lyrics explicitly stating how upset these artists were with the government and authority. For example, in N.W.A’s song
“Fuck tha Police”, rapper Ice Cube says, “Fuck the police comin straight from the underground/A young nigga got it bad cause I’m brown/And not the other color so police think/they have the authority to kill a minority” (Fuck Tha Police Lyrics n.d.). Many African American communities were experiencing maltreatment and police brutality rappers talked about (Kelley 1996). Hip Hop and Gangster Rap were capable of communicating these brutal experiences of injustice through means that would reach the masses.

Through music videos and radio, people – more importantly, the government – could hear and see the frustration depicted by rappers. Lyrics not only explained what was happening in African American communities they also went after “law enforcement agencies, their denial of unfettered access to public space, and the media’s complicity in equating black youth with criminals” (Kelley 1996, 185). Aggressive lyrics were enough to communicate how unhappy African Americans were with the government and how far away they were from trusting the government with the well-being of their lives. Clearly, these experiences were significant enough for artists to make them the main content of their music and present those experiences to a mass audience. It was another voice for the African American population. Through this music and the voice of these rappers, a lack of trust was communicated from the African American population to the government.

Distrust was also communicated among the population. The messages in Gangsta Rap music communicated a shared experience among African American people; what was happening in their communities or what could happen. The more the music spread the more African American people talked about their experiences which eventually lead to formulation of popular opinion. With similar opinions and perspectives comes similar distrust towards the government.

**First African American President**

In August of 2006, Barack Obama gave a speech at the University of Nairobi in Kenya about honest government and said, “If the people cannot trust their government to do the job for which it exists – to protect them and to promote their common welfare – all else is lost.” (Obama, 2006). Barack Obama is the first president of African descent in United States history. After undergoing enslavement, segregation, and institutionalized racism, Obama’s election could be considered one of the proudest achievements for African American people. Mutually-serving goals and intentions among African Americans and between the African American population and the government is the most prominent component of trust during Obama’s first presidential election. For the United States, President Obama stands for change and progression. For many African American people, President Obama symbolizes change for the better of the population in terms of employment, education, and overall quality of African American life.
Obama’s 2008 presidential campaign heavily featured the words “hope” and “change.” As the first president of African American descent, Obama could be that change American citizens have been waiting to see. Given the history of slavery and segregation, the United States has a slight racist image. Electing an African American man as president helps get rid of the image and establish an image of real change and hope from society. Simultaneously, Obama brings change for the African American population as they also make history with one of their own in the highest political office. Further, this change brings hope for continued change among the African American population. By voting and supporting Obama, the population communicated to the government that serious efforts are still being put forth to obtain equality and power in society by voting for Obama. According to the U.S. Census Bureau (2012), voter turnout increased by 5 million in the 2008 presidential election. This major increase included 2 million African American citizens varying in age (U.S. Census Bureau 2012). The 2008 presidential election is the first time we see a difference (2.6%) between African American voters and all citizens where African Americans out voted the other citizens (U.S. Census Bureau 2012). These statistics are an indication that increased trust in the government could be more likely with a representative of the African American population running for office. It was believed that African Americans would be better represented with a leader who shared the same historical experience and struggle as the African American population (Nunnally 2012). Here the mutual goal is change. As a representative of the government Obama worked to be elected as president to bring about this change and American citizens supported him in his efforts by voting and campaigning. As a result Obama was elected as president and faces the challenge of meeting these goals not only for himself and the African Americans who supported him but the rest of the American citizens who supported him.

Voting for Obama shows African American support for the federal government. Although there was a significant increase in the number of African Americans who voted, there was still a portion that failed to cast their votes. Staying loyal to this mutually-serving goal for so long demonstrates a stronger sense of trust among the population. Further, the African American population is trusting President Obama to bring about positive changes for the future. Based on this component of trust and voter statistics, the election of President Obama brought about an increase in trust in the government from African Americans.

**Conclusion**

The selected events show how trust develops and how it is capable of increasing or decreasing. The goal of the Civil Rights Movement was to move African Americans toward assimilation and equality. The Civil Rights Movement advocated trusting and working with the government. Unfortunately, the efforts
of the Civil Rights Movement were exhausted and ceased after the assassination of Dr. King. This assassination sparked the Black Nationalist Movement, in which African Americans advocated for black power and separation. There was strong distrust during this time and, also during the rise of Gangsta Rap. With the election of President Obama and during his first term in office trust increased and so did African American voter turnout (U.S. Census Bureau 2012). How Obama's presidency will influence future African American trust in the government has yet to be determined. Future research could consider how the performance of the first African American head of state may change the views of African American voters when it comes to the government.
References


Comparison Between Collagenase Adipose Digestion and StromaCell Mechanical Dissociation for Mesenchymal Stem Cell Separation

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Abstract

Traditional collagenase adipose digestion for mesenchymal stem cell (MSC) separation may leave foreign protein residuals that could be harmful to the patient. As a result of the extensive manipulation, the FDA regulates these stem cells as a drug. An alternative non-enzymatic method of isolating these cells is simple centrifugation of lipoaspirate, which is considered to be minimal manipulation and therefore regulated under the practice of medicine. The StromaCell is a centrifuge apparatus developed by MicroAire Aesthetics, Charlottesville, VA to employ a non-enzymatic centrifugal method for MSC isolation. The researcher compared StromaCell to collagenase digestion for the four main contributing factors for MSC separation: including processing time, total numbers of cells recovered, and the ability to characterize MSC in extracted fraction. The total number of cells was measured by live-dead fluorescent detection on the NC-3000 Image Cytometer, and MSC characterization was measured by phenotypic labeling with fluorescently tagged monoclonal antibodies using a Becton Dickinson Accuri flow cytometer. The results demonstrated that both methods produce significant quantities of mesenchymal stem cells and that the collagenase digestion provides a more abundant yield.

Mesenchymal stem cells (MSCs) are specific cell types that are able to differentiate into multiple but limited cell lineages and have the potential to self-replicate (Orbay, Tobita, and Mizuno 2012). Their potential to differentiate into different cell types such as fat cells (adipocytes), cartilage cells (chondrocytes), and bone cells (osteocytes), makes them a great source for stem cell therapy (Halleux et al. 2001). This ability makes MSCs a remarkable tool for tissue repair and regenerative medicine. Stem cells reside in several locations, such as bone marrow, skin, tendon, and adipose tissue (Orbay, Tobita, and Mizuno 2012). The stem cells that reside in a mature organism have been termed adult stem cells. Stem cells come from two sources, such as embryonic stem cell and adult stem cell. Embryonic stem cells (ESCs) originate from the inner mass of a blastocyst and are able to self-regenerate and differentiate into the three germ layers that
include the endoderm, ectoderm, and mesoderm (Orbay, Tobita and Mizuno 2012). The middle layer or mesoderm layer gives rise to bone, muscle, cardiovascular tissue, and connective tissue, from which MSCs support and maintain a homeostatic function. Adult stem cells share the same self-regenerative capability that ESCs express but have some differentiation restrictions. The ability to give rise to only specific cell lineages makes them multipotent stem cells (Orbay, Tobita, and Mizuno 2012). Studies have shown that you could extract MSCs from mesodermal tissue such as bone marrow, muscles, and adipose tissue (Francis et al. 2010). Isolating and characterizing MSCs is very important in regenerative medicine and tissue engineering, thus leading to a growing field for research.

Mesenchymal stem cells have shown promising results in entering the clinical field. As of January 2014, 374 clinical trials have administered mesenchymal stem cells for therapeutic applications. The Stem Cell Rejuvenation Center, located in Phoenix, Arizona has been working with autologous stem cells and platelet rich plasma treatments for about ten years (Stem Cell Rejuvenation Center 2011). As of May 2015, the center will display twenty-two different treatments that include degenerative conditions, autoimmune conditions, viral conditions, muscular injuries, skeletal injuries, and cosmetic conditions. MSCs have also been used as a trophic mediator such as intracellular signaling and cell secretion of a fundamental agent (Caplan and Dennis 2006). MSCs have been found to secrete trophic molecules that promote cell-cell connection and reduce inflammation, apoptosis, and fibrosis of damaged tissues, while stimulating tissue regeneration (Sharma et al. 2014). Tang et al. (2004) have studied the trophic effects of MSCs implantation into ischemic myocardium and have found that there was a stimulation of vascular endothelial growth factor (VEGF), increased vascular density and blood flow, and decreased apoptosis (Tang et al. 2004). The reaction was due to the secretion of bioactive molecules from MSCs to increase vascular density and caused the blood flow to the myocardium to return to normal. MSCs also hold great potential for tissue engraftment because of the differentiation potential of mesodermal tissue. In Sharma et al. (2014) reviewed 121 MSC clinical trials from 2012 that are found in the Clinical Trial Data Base (2014). They found that the average clinical dose of MSC ranged from 0 to MSCs per kg body weight of recipient. An adequate separation of MSCs is critical to reach this range.

The discovery of MSCs in bone marrow has been studied for many years now; however, the limited isolation and culturing has led researchers to find new forms for harvesting. The other mesodermal lineage that researchers have looked at for MSCs harvesting is adipose tissue. Adipose tissue is easily accessible and an abundant source of MSCs (Harasymiak-Krzyanowska et al. 2013). Rodbell (1964) initiated the investigation for separation of adipose tissue using a collagenase digestion. His methods were very time consuming and consisted of fat digestion, a washing step to remove red blood cells, incubation for digestion, and
centrifugation (Rodbell 1964). Rodbell’s (1964) success came from separating adipocytes from dense cellular tissue. He concluded by terming this separation stromal-vascular fraction (SVF). This fraction revealed fibroblastic connective tissue cells, mast cells, and macrophages (Rodbell 1964). Using Rodbell’s (1964) technique for collecting the SVF, Van et al. (1976) expanded and cultured the fraction to further analyze the cells. They found that the cells collected from the SVF had the ability to differentiate into lipid-filled cells or adipocytes (Van et al. 1976). He termed these kinds of cells pre-adipocytes (Van et al. 1976). Hauner et al. (1987) colleagues expanded upon the SVF and found that the fraction contained progenitor populations that were limited to the adipocyte lineage (Hauner et al. 1987). Zuk et al. (2001) suggested that the cells from the SVF related to the adipose stem cell populations. Their work consisted of isolating cells from human liposuctions. This fraction that contained the isolation of dense cellular tissue and the stroma was termed processed lipoaspirate (PLA). With further analysis, they found that the cells had the potential to undergo differentiation into adipogenesis, osteogenesis, chondrogenesis, and myogenesis in vitro (Zuk et al. 2001). Furthermore, Zuk et al. (2001) suggested that the SVF does not only have lineage-limited pre-adipocytes but are also multipotent stem cells.

Collagenase from Clostridium histolyticum was first discovered by Mandl et al. (1953) and was made commercially available by Worthington Biochemical Corporations in 1959 (Worthington Biochemical Corporations n.d.). They focused on using the bacteria Clostridium histolyticum for collagenase extraction because the enzyme attacks more sites along the helix region of collagen (Mandl et al. 1953). Collagen is made up of three parallel polypeptide chains and consists of a triple helix stabilized by interchain hydrogen bonding and inter- and intermolecular cross-links (Harrington 1996). There are approximately nineteen collagen types in humans that differ in the triple-helical domains and length (Harrington 1996). The differences in the collagen types are specific for certain tissue types in humans. Clostridium histolyticum produces two types of collagenase: collagenase 1 (clostridiopeptidase A) and collagenase 2. Pure collagenase isolated from the bacterium are inefficient in dissociating tissues due to the high concentrations of non-collagen proteins and other macromolecules found in the extracellular matrix of connective and epithelial tissues (Worthington Biochemical Corporations n.d.). A crude collagenase is used to dissociate tissues. This collagenase is made up of multiple enzymes such as collagenase 1, proteases, polysaccharidases, and lipase (Worthington Biochemical Corporations n.d.). This cocktail allows the dissociation of collagen, fibers, proteins, polysaccharides, and lipids. Mesenchymal stem cells are surrounded by a connective tissue matrix that is composed of adipocytes, nerve tissue, stromovascular cells, and immune cells (Kershaw and Flier 2004). The addition of crude collagenase has been used to dissociate mesenchymal stem cells from adipose tissue.
Shah et al. (2013) demonstrated a simple method of washing adipose tissue that can be used to isolate adipose stem cells. The authors characterized the cells and compared their method with the enzymatic procedure in terms of processing time, stem cell yield, differentiation potential, and immunophenotype. In this work, the authors were focused on recovering adipose stem cells from the fat tissue fragments in the lipoaspirate by centrifugation without the use of collagenase. Independent of the isolation procedure, the resulting passage of adipose stem cells was comparable based on immunophenotype, adipogenic, and osteogenic differentiation potential. The average adipose stem cells yield, after culturing for about six days, consisted of a nineteen-fold difference when compared with traditional collagenase method (Sharma et al. 2014). The authors concluded that an alternative, non-enzymatic method could have utility for the isolation of adipose stem cells, particularly when processing large volumes for autologous use.

Yoshimura et al. (2006) were the first to show that the liquid fraction of tumescent fluid contained adipose-derived adherent stromal cells (ASC). Tumescent fluid is made up of saline solution, anesthetics, and adrenaline for vasoconstriction (Bieback et al. 2008). In this study, they isolated cells from the fluid portion of liposuction aspirates by centrifugation and designated the cells as liposuction aspirate fluid (LAF) cells. The investigators’ main motivation was to pursue a treatment for patients with minimally manipulated fresh cells. The LAF cells were prepared from the fluid portions of the liposuction aspirates by centrifugation. The nucleated cells were further purified for research studies by using ficoll density gradient. The LAF cells were compared to cells prepared by digestion with collagenase. The LAF cells had a greater number of blood leukocytes than the PLA. The two had equivalent abilities to differentiate into adipocytes, chondrocytes, and osteoblasts. The immunophenotypic profile for the cultured cells had the same profile consistent with MSCs. The number of adherent cells using the collagenase method was approximately three-fold greater than the LAF method. The authors concluded that a significant amount of ASC could be harvested from the liquid portion of the lipoaspirate.

Chapman et al. (2013) have been studying the use of a mechanical device that separates the stromal vascular fraction (SVF) that contains mesenchymal stem cells directly from liposuction extractions without the use of any enzyme. Chapman et. al (2013) engineered a StromaCell device to specific dimensions in order to isolate a SVF that contains many cell types such as, MSCs, red blood cells, and white blood cells. The device filled with adipose tissue was compared to bone marrow aspirate using the colony forming unit-fibroblast (CFU-F) method. The method consists of using serial dilutions and plastic adherent flasks to determine how many colonies form from a single cell in high dilutions. The results would estimate the amount of colony-forming unit per mL of tissue that
would have been separated upon extraction. They showed that bone aspirate
separated CFU-F per mL and StromaCell using adipose tissue with a CFU-F per
mL (MicroAire Surgical Instruments 2013). They concluded that StromaCell
processing of adipose tissue was superior to bone marrow aspirate as a source of
MSC. Therefore, StromaCell is a promising device for the separation of MSCs.
The main focus for engineering this device was to provide a means for generating
autologous mesenchymal stem cells without the use of any enzymes.

**STATEMENT OF PURPOSE**

The purpose of this study was to compare mesenchymal stem cell separation
through the use of collagenase digestion and StromaCell mechanical cell separator.
StromaCell was developed by MicroAire Aesthetics and invented by Dr. John
Chapman. It was created for the purpose of providing a fast, biologically autologous
and enzyme-free device. For this reason, this research hypothesizes that StromaCell
mechanical dissociation of adipose tissue for mesenchymal stem cell separation
will be a better, alternative method for regulatory reasons when compared to the
collagenase adipose digestion method. This research will look at the number of cells
extracted per milliliter of fat, time of procedure and MSC characterization.

**METHODOLOGY**

**Human Adipose Tissue Sample**

Aspirated adipose tissue was collected from patients that underwent liposuction
surgery. Upon extracting this portion, the product was named tumescent fluid. The
liposuction was donated for the use of stem cell research under informed consent.

**StromaCell: Tissue Processing**

The adipose tissue and tumescent fluid were processed on the same day at room
temperature. The lipoaspirate combination was processed using a single-use
StromaCell canister (See Figure 1). The canister was filled to approximately the
400 mL mark, located on the canister, with 200 mL of tumescent fluid and 200mL
of adipose tissue. This was done using the suction ports of the canister. The filled
canister was centrifuged for ten minutes at 1,000xg. During this step, cells having a
density of greater than 1.03-g/cm3 traveled out of the top reservoir chamber
(500 mL capacity) and into a second bottom chamber (15 mL capacity). After
centrifugation, a 35 mL syringe was used to re-suspend and aspirate the lipoaspirate
blood-fraction cell concentrate that was collected in the bottom chamber known as
the SVF. 1mL of SVF solution was collected in a 1.5mL Eppendorf tube to be
further analyzed for cell counts and cell surface marker analysis.
Figure 1. StromaCell Suction Canister/Cell Separation Apparatus

Note: This figure shows the process of loading, centrifuging, and harvesting of the MSCs using the StromaCell cell separation.

Collagenase: Tissue Processing
A sample of lipoaspirate fat was transferred into a 250mL conical tube under a sterile hood. A one to one (1:1) dilution of fat to phosphate buffer solution (PBS) was used to wash the fat two times. For each wash, the fat was spun at 1000xg for five minutes. After the last wash, the fat was weighed and recorded to estimate a 0.2% gram of Sigma-Aldrich crude collagenase (Sigma Prod. No. C0130) to fat dilution. The total weight of the fat was divided in half to get the amount of PBS needed for future collagenase dilution. The half volume was multiplied by
0.2% to calculate how many grams of collagenase were needed for a full digestion. The crude collagenase was added to the 250 mL conical tube for digestion and incubated in a 37 incubator with 5% CO2, for one hour and thirty minutes. A manual circular movement was made every 15 minutes to homogenize the collagenase mixture. After incubation, the digested fat was transferred into 50 mL conical tubes and spun at 1000x g for ten min. The supernatant was aspirated and 15 mL of D10 media was added to each 50 mL conical tube to stop the enzymatic activity. One milliliter of SVF solution was collected in a 1.5 mL Eppendorf tube to be further analyzed for cell counts and cell surface marker analysis.

Viability and Cell Count Assay

Each run was analyzed individually using the NC-3000 image cytometer. 80 of solution 17 (red cell lysis buffer, 4',6-diamidino-2-phenylidole, and Acridine Orange) and 20 of extracted sample. This mixture was then incubated at 37 using a heating block for 10 minutes. After incubation, 19 of the mixture was pipetted into the first well of a two-well glass slide. The slide was then placed into the NC300 and analyzed using the Nucleoview NC-3000 Software. Name, experiment type, and experiment number were used to mark each experiment. A scatter plot was produced by the Nucleoview NC-3000 software and graphing cell area vs. fluorescent intensity. To isolate the cell population, a gate was set by circling the top portion of the graph manually as shown in Figure 2. The same gates were used during each run to keep the runs consistent.

Figure 2. NC3000 Scatter Plot Software

Note. Manually setting the gates on a scatter plot using the NC3000 software.
Cells were grown in T75 flasks up to three passages to obtain a pure sample of adhered cells. Cell media was aspirated and washed with five mL PBS. Three mL of were used to detach the adhered cells, and then the fluid was pipetted into a 15 mL conical tube. The tube was then centrifuged at 1000X g for five minutes. The supernatant was then aspirated and subsequently washed with 10 mL of Staining Buffer at 1000X g for five minutes. One mL of BD PharmingenTM staining buffer (Cat. No. 554656) was added to the pellet. The cell concentration was calculated using a hemocytometer to insure a 5x10^6 cells per mL of cell concentration. If needed, a buffer solution was added to reach a total concentration of 5x10^6 cells per mL of cell suspension. Four Eppendorf tubes were then prepared with 100 μL of the cell suspension each. The panel of antibodies was then added to each tube as shown in Table 1. The cells were then incubated on wet ice for thirty minutes in the dark.

Using the BD Accuri C6 software, cell debris waste was eliminated by gating on intact cells based on dot plots of forward scatter versus side scatter. Fluorescence analyses in the form of histograms were analyzed to determine the percentage of cells staining positive and negative for each monoclonal that was antibody employed. Each fluorescent marker used was plotted using different fluorochrome detectors as shown in Table 2. The surface markers CD73, CD90, CD105, and CD44, are cell surface markers to identify MSCs from a diverse population (Kern et al. 2006). Staining for these CD markers should indicate positive if there are any MSCs present.

**Table 1. Panel of Antibodies and Volumes**

<table>
<thead>
<tr>
<th>Tube</th>
<th>Add (1 Test Size)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FITC Mouse Anti-Human CD90 (5μL)</td>
</tr>
<tr>
<td>2</td>
<td>PE Mouse Anti-Human CD44 (5μL)</td>
</tr>
<tr>
<td>3</td>
<td>PerCP-Cy5.5 Mouse Anti-Human CD105 (5μL)</td>
</tr>
<tr>
<td>4</td>
<td>APC Mouse Anti-Human CD73 (5μL)</td>
</tr>
</tbody>
</table>

Note. The table shows the antibodies used in correlation to the tubes during the experiment.

**Table 2. Fluorochromes detected by the BD Accuri C6**

<table>
<thead>
<tr>
<th>Detector</th>
<th>Fluorochromes Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL1</td>
<td>FITC</td>
</tr>
<tr>
<td>FL2</td>
<td>PE</td>
</tr>
<tr>
<td>FL3</td>
<td>PerCP-Cy 5.5</td>
</tr>
<tr>
<td>FL4</td>
<td>APC</td>
</tr>
</tbody>
</table>

Note. Table shows the detectors used in correlation to the fluorochromes used.
Results

Nucleated Cell Numbers

Cell viability and viable cells per mL of fat were two factors obtained when using the NucleoCounter NC-3000 image cytometer. Table 3 shows the raw data that was collected in comparing each method. The experiments were labeled by researcher’s name, type of experiment, and the corresponding experiment number, e.g., AS1 is Alberto, StromaCell, Experiment 1. Volume of SVF and wet fat (the amount of fat used before separation) were needed to calculate the amount of cells per unit fat that can be separated using each method as shown on Table 3 also shows the cell viability per each run, with an average of 87.3% for StromaCell and 74.5% for collagenase.

Table 3. Nucleated cell numbers expressed using the NC-3000

<table>
<thead>
<tr>
<th>Experiment Name</th>
<th>Viability [%]</th>
<th>Viable Cells [cells/mL]</th>
<th>Volume of SVF fraction [mL]</th>
<th>Total cells in SVF fraction [Cells]</th>
<th>Wet Fat Volume [mL]</th>
<th>Cells Per unit fat [cells/mL Fat]</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS1</td>
<td>79.0</td>
<td>2.35E6</td>
<td>15 mL</td>
<td>3.525E7</td>
<td>200 mL</td>
<td>1.76E5</td>
</tr>
<tr>
<td>AC1</td>
<td>74.1</td>
<td>1.56E6</td>
<td>30 mL</td>
<td>4.68E7</td>
<td>100 mL</td>
<td>4.68E5</td>
</tr>
<tr>
<td>AS2</td>
<td>83.3</td>
<td>1.87E6</td>
<td>15 mL</td>
<td>2.805E7</td>
<td>200 mL</td>
<td>1.4E5</td>
</tr>
<tr>
<td>AC2</td>
<td>50.2</td>
<td>9.52E5</td>
<td>30 mL</td>
<td>2.856E7</td>
<td>100 mL</td>
<td>2.85E5</td>
</tr>
<tr>
<td>AS3</td>
<td>99.7</td>
<td>1.41E6</td>
<td>15 mL</td>
<td>2.12E7</td>
<td>200 mL</td>
<td>1.06E5</td>
</tr>
<tr>
<td>AC3</td>
<td>99.3</td>
<td>1.17E6</td>
<td>30 mL</td>
<td>3.51E7</td>
<td>100 mL</td>
<td>3.51E5</td>
</tr>
</tbody>
</table>

Note. The table represents how many cells per unit of fat was extracted per experiment

NucleoCounter NC-3000 Image Cytometer: Cell Numbers

In order to compare the two methods, a scatter graph model was used to establish a comparison as shown in Figure 3. This model represents individual experiments (runs), which contain a StromaCell and collagenase trial. In three runs, the nucleated cell count mean for StromaCell was 140,666, and the mean for collagenase was 368,000. The graph represents that collagenase adipose digestion represents a mean difference of 2.6 cells/mL of fat when compared to StromaCell mechanical separation.
**Figure 3. Scatter Plot of Cells per Unit Fat**

![Scatter Plot of Cells per Unit Fat](image)

Note. Figure 3 shows a cell number comparison between StromaCell and Collagenase using NC-3000. Same fat samples represent individual runs. Each dot represents cells per unit fat [cells/mL fat] for StromaCell, which is in red and squared and Collagenase, which is in blue and diamond shaped.

**Flow Cytometry: Characterization of MSCs Derived from StromaCell and Collagenase Treatments of Adipose Tissue**

After three passages in culture, cells were stained and analyzed by flow cytometry for phenotypic analysis. The forward scatter versus side scatter plot of flow cytometer revealed two general populations of cells that are present in the blood fraction of the StromaCell and collagenase output as shown below in Figure 4 and Figure 5. The plots show that StromaCell and Collagenase both were MSC positive using CD 90, CD 44, CD 105, and CD 73, as the unstained samples showed that the cells were negative for the four markers.
Figure 4. StromaCell: Flow Cytometry Results

Note. The scatter plot of cell count versus fluorescent intensity was used to represent a MSC population. The left column represents an unstained sample and the right side represents CD marked cells. CD 90, CD 44, CD 105, and CD 73, is shown from top right to bottom right.
Figure 5. Collagenase: Flow Cytometry Results

Note. The scatter plot of cell count versus fluorescent intensity was used to represent a MSC population. The left column represses an unstained sample, and the right side represents CD marked cells. CD 90, CD 44, CD 105, and CD 73, is shown from top right to bottom right.
A non-enzyme MSC separation method has been studied to find an adequate way for isolating MSCs without using any enzyme. The comparison between StromaCell mechanical dissociation and collagenase adipose digestion is important to see if it is possible to replace the use of an enzyme for MSC separation from adipose tissue. StromaCell was developed by Dr. John Chapman to be fast, autologous, and minimal manipulation; therefore, the researchers looked at time, cell viability, cell numbers, and MSC characterization for a comparison with collagenase method. Procedural time was significant during this research because in a therapeutic environment, it is important to obtain a fast turnaround for point of care clinical applications.

Sharma et al. (2014) review of the amount of MSCs needed per therapy was a range of 0 to $1 	imes 10^6$ MSCs per kg body weight of recipient for systemic effects. It would be expected that local effects could be achieved with lower cell dosages. In the present study, the researcher found that StromaCell fraction produced 2.6 fold less cells per mL of fat. This result for the increased of cell numbers in collagenase was expected because collagenase and other enzymes combined to cleave the ECM and release the MSCs. Even though the study did not culture cells and instead counted them, the initial cell number per fraction was only 2.6 fold different.

Analyzing the surface markers that flow cytometry expressed for MSCs fraction from both collagenase and StromaCell, showed similar sets of surface antigens, such as CD90, CD44, CD105, and CD73. Furthermore, they are positively stained for the identity of human MSCs. The comparison between the two shows no significant difference, and therefore the cells isolated using StromaCell show the same characteristics as the traditional collagenase method. The difference in phenotypic analysis may reflect differences in rate of growth of the cells in culture.

Overall, StromaCell has been shown to extract cells faster, with a high viability, MSC positive but extracts lower cell numbers. Therefore, the enzyme method is superior to simple centrifugation for cell isolation when viewed only from a scientific standpoint. However, the regulatory status of enzymatically treated cells being viewed as a drug makes their clinical use problematic. The use of centrifugal separation therefore is a more practical alternative for MSC separation. In a clinical environment, the fast, easy method of centrifugal separation provides a practical method of isolating stem cells for clinical use under the practice of medicine.

Future Directions

Based on the findings of this experiment, a future study should focus on expanding the amount of experimental runs to establish a more reliable comparison. This would give the researcher a better representation of the
mean amount of cells extracted per fraction and cell viability. With a better representation of these two results, the researcher would be able to make a statistical analysis of the observed differences.

A comparative study of differentiating both collagenase and StromaCell isolated MSC into the three known cell types of cell lineages (adipocytes, osteocytes and chondrocytes) would also expand this research to find out if there is a difference in the isolated cells in the differentiation potential.
References


Mandl, Ines, John D. MacLennan, Edward L. Howes, Robert H. DeBellis, and Arthur Sohler. 1953 Isolation and Characterization Of Proteinase and


How School Diversity, Peer-Relations, and Ethnic Identity Shape Ethnocultural Empathy Among Latino and Asian American Students

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Dr. Greg M. Kim-Ju, Faculty Mentor

Abstract

As a result of the shifts in the ethnic composition of the U.S., public schools are becoming more culturally diverse, making culture-related issues more salient (Santos et al. 2007). The current study examined ethnic differences in school diversity (diversity), proportion of cross-race friendships (peer-relations), ethnic identity, and ethnocultural empathy (empathy) among a sample of 97 college students (77 Asian/Pacific Islanders and 20 Latinos). Additionally, diversity, peer-relations, and ethnic identity were examined in relation to empathy. Results indicated that there were ethnic differences among each study variable except for peer-relations. Also, ethnic identity was positively associated with empathy. Considering that the Asian American and Latino populations are the two fastest growing ethnic groups in the U.S. (U.S. Census Bureau 2012), the current findings are important for shedding light on ways to possibly increase positive attitudes towards members of different ethnic groups among incoming college students.

With the United States population becoming increasingly ethnically and racially diverse, culture, race, and ethnicity have become more salient in the lives of ethnic minority and white American individuals alike. The U.S. Census Bureau (2012) estimates show that ethnic minority group members are projected to make up about half of the U.S. population by 2050. As a result of the growing ethnic minority population and its implications for public schools, interests in examining the positive shifts of culture-related factors among ethnic minority students has become more important (Chang and Le 2010; Santos et al. 2007). Accordingly, many more researchers have begun examining social context variables, such as school diversity and residential segregation, in relation to the psychological and social experiences of people, especially ethnic minority group members. For instance, Chang and Le (2010) found that attending a multicultural school predicted more favorable perceptions of teachers promoting racial harmony, opportunities to learn about diverse cultures by incorporating multiculturalism into the academic curriculum, and ethnocultural empathy. They also found that ethnocultural empathy, defined as empathetic feelings towards members of ethnic groups different from their own (Wang et al. 2003), positively mediated the relationship between multiculturalism and academic
achievement for Asian American and Hispanic American students (Chang and Le 2010). Studies have also shown that attending a diverse school provides students with many opportunities to form cross-racial friendships and discuss different perspectives and experiences regarding their social interactions and cultural upbringings (Graham, Munniksma, and Juvonen 2013). The exposure to and formation of friendships between members of different ethnic groups can be related to individuals’ psychological processes, including their social identities (e.g., ethnic identity).

There is a large body of research examining the pivotal role of friendships in the development of elementary and adolescent students (Newcomb and Bagwell 1996; Parker et al. 1995; Sullivan 1953) and that classroom diversity can increase the likelihood of forming cross-ethnic relations (Khmelkov and Hallinan 1999). For example, past researchers have found that for students attending a diverse school campus, cross-ethnic friendships (but not same-ethnic friendships) were uniquely associated with positive outcomes. Some positive outcomes were increases in peer support; pro-social behavior; leadership skills; empathy; and awareness of and sensitivity to different races (Hunter and Elias 1999; Kawabata and Crick 2008; Kawabata and Crick 2011) as well as less prejudice and less stereotyping in the face of negative peer experiences (Aboud, Mendelson, and Purdy 2003; Killen 2007). Yet studies have not explained the underlying mechanisms of how these cultural factors change throughout this process.

While studies support the association between social context, ethnic identity, and ethnocultural empathy, there appears to be gaps in the research literature examining how school diversity, friendships, and ethnic identity work together to potentially predict ethnocultural empathy. Accordingly, the present study will explore the relationships between school diversity, same-race and cross-race friendships, ethnic identity, and ethnocultural empathy among Latinos and Asian Americans/Pacific Islanders (AAPI).

Literature Review

Social Context
Within the last decade, the U.S. population has become more racially and ethnically diverse; the ethnic minority population has increased by 28.8%, while the white American population has increased by 1.2% respectively (U.S. Census Bureau 2012). In addition, the Asian and Latino populations grew by 43.3% and 43%, respectively, accounting for the biggest increases among all ethnic groups between the years 2000 and 2010 (U.S. Census Bureau 2012). As a result of the growing ethnic minority population, school campuses are also becoming more culturally diverse, potentially making culture-related issues, such as ethnic identity and cross-ethnic relations more salient (Santos et al. 2007) than in previous
years. Building on this research, studies have found positive links between school diversification, acceptance and empathic feelings towards members of different ethnic groups, and academic achievement (Chang and Le 2010).

Since students spend most of their time inside a classroom for much of their early life, classroom diversity becomes an important situational factor in socializing students’ social and cultural attitudes and beliefs. For example, studies have found that classroom diversity increased the likelihood of creating positive cross-ethnic relationships (Kawabata and Crick 2011; Khemlkov and Hallinan 1999). Although individuals, including children and adults, are more likely to form friendships with others who are similar to themselves along racial, social, and cultural, as well as individual factors (Aboud and Mendelson 1998; see for a review), there are many benefits that are exclusive to forming cross-ethnic friendships. For example, among ethnically diverse children, forming cross-ethnic friendships (but not same-ethnic friendships) was associated with being viewed as more popular and more well-liked among peers (Lease and Black 2005). Cross-race friendships also exclusively predicted positive associations with pro-social behavior and leadership skills, social skills, and an awareness of and sensitivity to ethnicities different than one’s own (Hunter and Elias 1999; Kawabata and Crick 2008). Forming cross-race friendships produces more opportunities for individuals to discuss different beliefs, attitudes, and experiences from a different perspective than their own. Within these friendships, members from different ethnic groups are able to recognize similarities that they may have overlooked had they not formed these friendships. Rather than allowing each other’s race or ethnicity to act as a psychological barrier to companionship, research shows that cross-race friendships allow individuals to form positive thoughts and feelings toward members of different ethnic and racial groups (Hunter and Elias 1999; Kawabata and Crick 2008). It appears that the newly established positive thoughts may ultimately be generalized to the entire ethnic group as a whole, leading to greater acceptance and harmony.

Social Context and Ethnic Identity

Ethnic identity refers to people’s commitment or sense of belonging to their ethnic group and the extent to which they explore and seek experiences relevant to their ethnicity (Phinney and Ong 2007). Ethnic identity can play a central role in the development of ethnic minorities’ psychological experiences (Phinney 1990). Ethnic identity is similar to other group identities in the sense that it is not hard-wired within an individual; rather it is dynamic and can fluctuate depending on one’s experiences and environment (Phinney and Ong 2007). With school campuses becoming increasingly more ethnically diverse, students are likely to encounter a variety of people from different ethnic groups on a daily basis. The constant exposure of members from different ethnic groups is likely to shape their ethnic identities. For example, studies have found that students’
perceptions of a multicultural campus—operationally defined as a campus where students perceived cultural diversity to be valued by peers and teachers—were predictive of ethnic identification (Chang and Le 2010). Past research has also suggested that ethnic identity can be shaped by different social contexts, such as families, schools, peers, and neighborhood segregation (Altschul, Oyserman, and Bybee 2008; Chang and Le 2010; Nishina et al. 2010; Yip 2009; Yip, Seaton, and Sellers 2010.)

Linville’s (1987) social complexity theory has played a foundational role in the body of literature related to the association between social context and psychological processes. Specifically, he stated that one’s self-representation is made up of multiple self-aspects, with each self-aspect being associated with its own specific set of cognitive elements, such as social roles, types of relationships, types of activities, and superordinate traits. With every event, the self-aspect most relevant to the immediate context becomes salient, thus producing thoughts and feelings associated with the corresponding self-aspect. More recently, researchers have built on Linville’s early theoretical framework. For instance, current findings suggest that identity salience can influence ethnic identification depending on the social settings and interactions (Yip 2009; Yip et al. 2010). Specifically, Yip (2009) found that regardless of the strength of Chinese American students’ ethnic identities, their ethnic identification shifted between Chinese and American depending on whether they were around their friends or family members. Building on past research, Yip et al. (2010) also found that for black students in racially diverse schools, having more black friends was associated with maintaining a stable ethnic identity. Conversely, black students who had minimal contact with other black students were more likely to report identity change. Also, black students in predominantly white schools were less likely to change their ethnic identity status if they had few white friends. It appears that both contact with in-group members and an environment rich with members of one’s in-group serve as protective factors for maintaining a strong ethnic identity. Building on this research, Wright and Littleford (2002) found that positive interracial experiences fostered a stronger sense of belonging to individuals’ ethnic groups. Collectively, these studies suggest a positive and strong ethnic identity is associated with greater psychological well-being (Phinney and Kohatsu 1997).

Ethnocultural Empathy

As noted above, shifts in the U.S.’s ethnic makeup have increased daily exposure and contact between members of different ethnic groups, especially those attending public schools. Since the U.S. population will continue to become more ethnically diverse, it is important that members from different ethnic groups learn to tolerate, understand, and accept each other’s different cultural upbringings and traditions in order to promote harmonious and peaceful environments. Researchers have developed the term ethnocultural empathy,
which is synonymous to positive multicultural attitudes and cultural competence (Wang et al. 2003). While there have been additions to the psychological literature attempting to conceptualize the definition of ethnocultural empathy (Rasoal, Eklund, and Hansen 2011; Wang et al. 2003), there have been few studies examining correlates of ethnocultural empathy.

Although not directly investigating the relationship between context and ethnocultural empathy, limited research has shown that youth who are exposed to diverse social contexts are more accepting of different ethnic group members (Duncan et al. 2003). Building on this research, Nesdale et al. (2005) found that greater ethnocultural empathy was significantly related to greater liking for different out-groups. More recently, researchers have found that perceived school multiculturalism predicted ethnocultural empathy, which in turn was predictive of subjective happiness for African American and Asian American middle school students (Le, Lai, and Wallen 2009). While it appears that ethnocultural empathy serves as a pivotal underlying factor for promoting positive and harmonious social environments, there is still much to be learned regarding the development and outcomes of ethnocultural empathy.

The Present Study

Based on previous research findings, the researcher hypothesized that school diversity, the proportion of cross-race friendships, and ethnic identity would be positively related to ethnocultural empathy. Building on past research that examined the relationships between students’ perceptions about school multiculturalism (Le, Lai, and Wallen 2009) and ethnocultural empathy, the researcher focused on school diversity by using demographic data obtained from participants’ high school accountability reports. Additionally, since Asian Americans are typically socialized to be more interdependent than other ethnic groups (Okazaki 1997), it was hypothesized that the diversity of high schools, the percentage of cross-race friends, ethnic identity, and ethnocultural empathy would differ between Asian American/Pacific Islanders (AAPI) and Latinos.

Method

Participants

A sample of 101 participants (32 males, 69 females) who were engaged in community service-learning opportunities voluntarily participated in either an online or pencil-and-paper survey. All participants were undergraduate students at a large Northern California State University. The participants’ ages ranged from 18 to 36 years of age ($M = 19.07$, $SD = 2.84$), and most of them were first-year college students (75.4% 1st year; 4.3% 3rd year; 13.0% 4th year; 7.2% 5th year). The participants’ races, which were determined by asking them to check one or more of
the predetermined options (Latino; Asian American/Pacific Islander), included 81 Asian and Pacific Islanders (80.2%) and 20 Latinos (19.8%).

Procedure
Participants were recruited through community service-learning programs from their respective university. At the beginning of the semester, students were asked to voluntarily participate in the research study. Participants completed questionnaires, either online or through pencil-and-paper surveys. It is important to note that students who participated in the online survey reported a significantly higher percentage of cross-race friends $F(1, 98) = 7.55, p < .001, \eta = .07$, and also attended significantly less diverse high schools $F(1, 99) = 13.37, p < .001, \eta = .12$, than did students who participated in the pen-and-paper surveys. Participants did not receive any compensation for participating in this research.

Measures

Ethnic Identity
The Multigroup Ethnic Identity Measure-Revised (MEIM-R) developed by Phinney and Ong (2007) was used to assess ethnic identity. The MEIM-R measured participants' sense of belonging and attachment to their group identity (e.g., “I feel a strong attachment towards my own ethnic group”) and the extent to which participants seek information and experiences relevant to their group identity (e.g., “I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs”). Participants completed the subscales using response scales ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate stronger levels of ethnic identity ($M = 3.97, SD = .70, \alpha = .89$).

Cross-race friendships
Participants were asked to report the number of close friends they had from each of the following specific ethnic or racial groups: African American, Asian American/Pacific Islander, White (non-Latino/a), Latino/Latina, Native Indian/Alaskan Native, Arab American, and Multiracial from zero to six or more. To control for friendship network size, a proportion of cross-race friendships variable was developed by dividing the number of cross-racial friendships by the total number of friendships they reported. Reflecting the diverse campus, 60% of the listed friends were rated as belonging to a different ethnic group, on average ($M = .60, SD = .22$).

High school diversity
Participants were asked to report each high school that they had attended, along with the number of years they had attended each school. All participants attended public California high schools. Most students had only attended one
high school throughout their high school career; if they attended more than one high school, the high school they attended for the longest duration was used. Student ethnic demographic data from the year that the students were in the 12th grade, which were available through the California Department of Education (CDE), were used to calculate high school diversity. Some ethnic groups were combined to better parallel the ethnic groups in the current study’s demographic sheet. There is a notable difference between CDE data and the current study’s demographic sheet: CDE treats Asians, Pacific Islanders, and Filipinos as three separate groups, whereas Asian Americans and Pacific Islanders were categorized as one ethnic group in the current study. As a result, Asians, Pacific Islanders, and Filipinos were identified as a composite Asian American ethnic group when calculating school diversity.

The ethnic diversity \((D_s)\) of each of the schools was computed with Simpson’s diversity index (1949):

\[
D_s = 1 - \sum_{i=1}^{g} p_i^2
\]

where \(p\) is the proportion of students in the school who are in ethnic group \(i\). The proportion is squared \((p^2)\), summed across \(g\) groups, and then subtracted from 1. The measure gives the probability that any two students randomly selected from a school will be from different ethnic groups. Values can range from 0 to approximately 1 \((M = .36; SD = .17; \text{ ranged from 0 to } .94)\), where higher values indicate greater diversity (i.e., more ethnic groups that are relatively evenly represented and a higher probability that two randomly selected students will be from different ethnic groups).

**Ethnocultural empathy**

The Scale of Ethnocultural Empathy (SEE) developed by Wang et al. (2003) was used to measure culturally-specific empathy \((M = .36; SD = .17, \alpha = .87)\). Specifically, it measured empathic feelings and sensitivity toward members of ethnic groups different from one’s own (e.g., “I seek opportunities to speak with individuals of other racial or ethnic backgrounds about their experiences”). The participants completed the subscales using response scales ranging from 1 (strongly disagree that it describes me) to 6 (strongly agree that it describes me). Several items were reverse coded, and all items were summed and then averaged across thirty-one items. Higher scores indicated higher levels of ethnocultural empathy, while lower scores were indicative of less empathic feelings and sensitivity towards members of ethnic groups different than one’s own.
Results

Preliminary Analysis
Results are organized in the following manner: preliminary and descriptive analyses are presented first, followed by hierarchical regression analysis. Preliminary analyses with demographic variables were conducted. The researcher used bivariate correlations to examine the associations among the study variables and analysis of variance (ANOVA) to examine differences by ethnicity.

Bivariate correlations
Correlations between high school diversity, proportion of cross-race friendships, ethnic identity, and ethnocultural empathy are displayed in Table 1. Interestingly, the correlations among the study variables were not statistically significant except for the positive relationship between ethnic identity and ethnocultural empathy. Specifically, higher levels of ethnic identity were correlated with higher levels of ethnocultural empathy.

Table 1. Bivariate Correlations among Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity</td>
<td>-.13</td>
<td>.10</td>
<td>.06</td>
</tr>
<tr>
<td>Proportion cross-race friendships</td>
<td>___</td>
<td>-.17</td>
<td>-.03</td>
</tr>
<tr>
<td>Ethnic identity</td>
<td>___</td>
<td>___</td>
<td>.47**</td>
</tr>
<tr>
<td>Ethnocultural empathy</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

Note: ** p < .01

Several one-way between-subjects analyses of variance (ANOVA) were performed to explore possible ethnic differences among all study variables. Descriptive statistics for all study variables, which are organized by ethnicity, are displayed in Table 2. The results indicated that the mean differences by ethnicity were statistically significant for each study variable except for the proportion of cross-race relationships, with the $\eta^2$ values ranging from .04 to .23. Specifically, findings showed that Latinos attended significantly more diverse schools than did Asian American/Pacific Islander (AAPI) participants. Contrary to the researcher’s expectations, there were no significant differences in the proportion of cross-race friendships; however, there was a trend, with AAPI participants having a higher proportion of cross-race friendships than Latinos ($p = .08$). Furthermore, Latino participants reported significantly higher levels of both ethnic identity and ethnocultural empathy than did AAPI participants.
Table 2. Ethnic Differences among Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Latino M (SD)</th>
<th>AAPI M (SD)</th>
<th>F ratio (η2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Diversity</td>
<td>.52 (.24)</td>
<td>.31 (.11)</td>
<td>28.80*** (.23)</td>
</tr>
<tr>
<td>Proportion cross-race friends</td>
<td>.52 (.24)</td>
<td>.62 (.21)</td>
<td>3.25† (.03)</td>
</tr>
<tr>
<td>Ethnic identity</td>
<td>4.27 (.64)</td>
<td>3.90 (.70)</td>
<td>4.53* (.04)</td>
</tr>
<tr>
<td>Ethnocultural empathy</td>
<td>5.06 (.62)</td>
<td>4.49 (.55)</td>
<td>16.59*** (.14)</td>
</tr>
</tbody>
</table>

Note: *p < .05; ** p < .01; ***p < .001; † = .08

Predictive Analysis

A four-stage hierarchical linear regression analysis was used to test the hypotheses that school diversity, the proportion of cross-race friendships, and ethnic identity would be positively associated with ethnocultural empathy. In the first block, ethnicity was entered as a predictor variable to control for ethnic differences; in the second block, school diversity was entered as a predictor variable; in the third block, the proportion of cross-race friendships was entered into the model; in the fourth and final block, ethnic identity was entered as the primary variable of interest.

Results of the hierarchical regression analysis are shown in Table 3. The results of the first step of the hierarchical regression, with ethnicity entered into the model, indicated that there were significant ethnic differences among ethnocultural empathy, $F(1, 98) = 16.41, p < .001, R^2 = .14$. Specifically, Latino participants reported higher levels of ethnocultural empathy than did AAPI participants; thus ethnicity was entered into the first block to control for ethnic differences.

Although the second block, with school diversity entered into the model, was statistically significant because of the effects of ethnicity, $F(3, 96) = 9.37, p < .001, R^2 = .16$, it did not account for a significant amount of change in shared variance, $F_{change}(1, 97) = 2.13, p > .05, R^2_{change} = .02$. When the proportion of cross-race friendships variable was added into the third block, the prediction model still statistically significant, $F(3, 96) = 6.26, p < .01, R^2 = .16$ due to the strong ethnic difference. However, again, the third block did not account for a significant amount of change in shared variance over and above the previous blocks, $F_{change}(1, 96) = .11, p < .05, R^2_{change} = .00$. After controlling for ethnic differences, the results of hierarchical regression analysis suggested that neither
school diversity nor the proportion of cross-race friendships were predictive of ethnocultural empathy.

**Table 3. Hierarchical Regression Results (N = 101)**

<table>
<thead>
<tr>
<th>Block</th>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>R²</th>
<th>Δ R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ethnicity</td>
<td>.29</td>
<td>.07</td>
<td>.38***</td>
<td>.14</td>
<td>.14***</td>
</tr>
<tr>
<td>2</td>
<td>Ethnicity, Diversity</td>
<td>.35</td>
<td>.08</td>
<td>.45***</td>
<td>.16</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Diversity</td>
<td>-.56</td>
<td>.39</td>
<td>-.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ethnicity, Diversity, Cross-race friends</td>
<td>.35</td>
<td>.08</td>
<td>.46***</td>
<td>.16</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Diversity</td>
<td>-.56</td>
<td>.39</td>
<td>-.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cross-race friends</td>
<td>.09</td>
<td>.26</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ethnicity</td>
<td>.28</td>
<td>.08</td>
<td>.37***</td>
<td>.33</td>
<td>.16***</td>
</tr>
<tr>
<td></td>
<td>Diversity</td>
<td>-.51</td>
<td>.35</td>
<td>-.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cross-race friends</td>
<td>.25</td>
<td>.24</td>
<td>.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ethnic identity</td>
<td>.37</td>
<td>.08</td>
<td>.42***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *p < .05; **p < .01; ***p < .001

Lastly, when ethnic identity was added into the fourth and final block, not only was the model statistically significant, $F(4, 95) = 11.52, p < .001, R^2 = .33$, but ethnic identity accounted for a significant proportion of variance in ethnocultural empathy, over and above the previous three blocks, $F_{change}(1, 95) = 23.10, p < .001, R^2_{change} = .16$. Although school diversity and the proportion of cross-race friendships were not statistically significant in the model, ethnic identity was positively associated with ethnocultural empathy, even after controlling for statistically significant ethnic differences. With all other variables in the analysis statistically controlled, it appears that those who were more in touch with their ethnic identity also reported higher levels of ethnocultural empathy.

**Discussion**

In the present study, the researcher sought to test whether school diversity, the ethnic makeup of one’s friends, and ethnic identity were positively related to ethnocultural empathy. It was hypothesized that there would be ethnic differences among each study variable and that school diversity, the proportion of cross-race friendships, and ethnic identity would be positively related to ethnocultural empathy. Collectively, the results provided partial support for the
hypotheses, with ethnic identity being positively associated with ethnocultural empathy across ethnic groups. It appears that having a stronger ethnic identity (i.e., greater sense of belonging and attachment to one’s ethnic group) fosters more positive, sensitive, and empathic feelings towards members of ethnic groups different from one’s own (Wang et al. 2003). Although the findings do not speak directly about social context, the present study does shed light on ways to possibly increase positive attitudes towards members of different ethnic groups among incoming college students, which is increasingly important due to the fast growing ethnic minority population and enrollment in public universities (U.S. Census Bureau 2012). The main findings speak to the value of promoting a diverse K-12 curriculum and campus and community activities which allow individuals to learn more about and explore their ethnic identities. Having a stronger ethnic identity can enhance ethnocultural empathy, perhaps by helping individuals place a greater value on culture, learning their ancestral history, gaining a better understanding of their ethnic group’s racial struggles, and applying that knowledge to members of ethnic groups different from their own. Considering that higher levels of ethnocultural empathy are related to academic success for Hispanic and Asian American students (Chang and Le 2010), ethnic identity could potentially act as a moderator of academic success among this population as well; however, this can only be speculated based on the scope of the current study.

Interestingly, inconsistent with past research (Duncan et al. 2003; Hunter and Elias 1999; Kawabata and Crick 2008), there was not a significant relationship between school diversity, proportion of cross-race friendships, and ethnocultural empathy among this sample of participants. It is important to note that the participants in the current study were conveniently recruited from ethnic minority group members involved in service-learning opportunities on campus, which primarily focuses on awareness and appreciation of culture-related issues. Considering that the current study was focused on culture-related issues, it is likely that the results would differ if participants were recruited from the general public or student pool. The participants in the current study also had relatively high levels of ethnocultural empathy ($M = 4.6, SD = .61$), with an average mean score of 1.6 points higher than the midpoint of 3 on the scale (possible score ranged from 1-6). The high levels of ethnocultural empathy may also be attributed to the fact that all participants attended public high schools in California, which is relatively more ethnically diverse than most states. To obtain more robust findings, future research should control for service-learning effects by including a sample of both service-learning and non-service-learning students in geographical locations that are not as ethnically diverse as California.

Since there were ethnic differences in school diversity, ethnic identity, and ethnocultural empathy among the Latino and Asian American/Pacific Islander
(AAPI) participants, there could also be differences among white or African American participants as well. Each of these ethnic groups have their own unique cultural upbringing and beliefs, thus future studies should consider obtaining a more representative sample by also recruiting white and African American participants. Overall, the present findings underscore the importance of ethnic identity as a component of ethnocultural empathy. Looking beyond ethnic differences between Latino and AAPI college students, the current study suggests that being more in touch with one’s ethnic identity may be related to empathic feelings and sensitivity towards members of ethnic groups different than one’s own. These findings suggest that encouraging students to explore their ethnic identity may foster a more harmonious campus climate, along with more positive attitudes towards different ethnic groups.


*Current Directions in Psychological Science* 16: 32-36.


The Indian Child Welfare Act of 1978: Communication and Collaboration Between Tribes and the County

Erika Salinas
Dr. Annette Reed, Faculty Mentor

Abstract

The purpose of the Indian Child Welfare Act (ICWA) of 1978 is to protect Native American children and uphold tribal sovereignty. This can be achieved through effective communication and collaboration between tribal and county governments. However, evidence in literature on this topic has shown a disconnection between the two government entities. The researcher conducted four interviews with tribal ICWA social workers by asking a set of 18 questions used to analyze the tribal ICWA worker’s relationship with the county. The results from this study found that communication and collaboration are good with county supervisors; however, they can be improved when dealing with county workers. Recommendations on how to sustain and/or improve the relationships between tribes and the county to maximize the effectiveness of the ICWA are identified.

Introduction

The Indian Child Welfare Act of 1978 is a federal law that is aimed at preserving cultural and familial ties among Native American children and families while encouraging respect for tribal authority in decisions concerning the placement of Native American children in foster care. It also limits states’ powers regarding Indian children and imposes specific procedural requirements on state courts and state child welfare agencies in the removal and placement of Indian children (Brown et al. 2002). A need for this law became apparent after a 1976 study by the Association on American Indian Affairs. The findings reported that 25% to 35% of all Indian children were being placed in out-of-home care (Unger 1977). Of those children being placed in out-of-home care, 85% were being placed in non-Indian homes or institutions (Unger 1977).

Sources that have researched compliance with The Indian Child Welfare Act of 1978 focus on the county. However, not much research has been conducted on the tribal perspective. As active sovereign entities, tribes have designated ICWA representatives who assist in receiving notice from state child welfare agencies and
state courts where an Indian child welfare case has been filed to ensure that the tribe is informed and can respond to the notice. It is important to acknowledge the issues and concerns that tribes have with regard to how the county deals with their children when they enter the system because these children are members of their sovereign nations. This information is essential to research because in order to understand the gaps between communication and collaboration with child welfare agencies, both sides (county and tribal) must be examined. Previous research focuses more on the counties when it should also take the tribes into account. For the purpose of this article, the terms Indian, Native American, and American Indian are used interchangeably to refer to Native American people.

This study will explore the research question of “How do tribal Indian Child Welfare Act (ICWA) social workers define their level of communication and collaboration with the county?” The relationship formed between the two governments is necessary for the best outcomes of the child who falls under ICWA. This will help the child to maintain connection with their tribe, culture, and traditions- all rights they have as granted by their membership in their respective tribes.

**Literature Review**

*Before the Implementation of the Indian Child Welfare Act of 1978*

The National Indian Child Welfare Association (1997) reported that in 1819, the United States government passed legislation to establish the Civilization Fund, the first federal policy to directly affect Indian children. It provided grants to private agencies, primarily churches, to establish programs to “civilize” the Indian. In a report to Congress in 1867, the Commissioner of Indian Affairs declared that the only successful way to deal with the “Indian problem” was to separate the Indian children completely from their tribes, resulting in complete absence of culture and identity (National Indian Child Welfare Association 1997). This policy led to the creation of boarding schools that utilized military type discipline. Throughout the remainder of the 19th century, boarding schools became more oppressive, eliminating the use of native language and cutting the children’s hair. To Native Americans, the cutting of hair was a sign of mourning or shaming (National Indian Child Welfare Association 1997). In addition, school officials gave the children more Christian names, thus the names their parents or family had given them were eliminated. Furthering the assimilation process, officials banned the practice of any Native American ceremonies or rituals, declaring that children only learn Christianity (National Indian Child Welfare Association 1997). In 1910, bonuses were used to encourage boarding school workers to take leaves of absence and forcibly gather as many students as possible from surrounding reservations (National Indian Child Welfare Association 1997).
Aside from boarding schools, other federal practices encouraged the displacement of Indian children from their families and communities. In 1884, the “outing” system placed numerous Indian children on farms in the East and Midwest in order for the children to learn the “values of work and the benefits of civilization” (National Indian Child Welfare Association 1997, 1).

Throughout the 1950s and ’60s, the adoption of Indian children into non-Indian homes, primarily within the private sector, was widespread. In 1959, the Child Welfare League of America (CWLA), which was the standard-setting body for child welfare agencies, in cooperation with the Bureau of Indian Affairs (BIA), initiated the Indian Adoption Project. In the first year of this project, 395 Indian children were placed up for adoption with non-Indian families in eastern metropolitan areas (National Indian Child Welfare Association 1997, 2). Later, in 2001, Shay Bilchik, the president and CEO of the CWLA, made a public apology on the League’s behalf. A portion of the apology read “In many instances, [the children] were deprived of their culture, their language, connections to their families, their tribe, and in many instances it caused such hurt and sorrow and deprived them of so much happiness in their lives” (Tribal Successful Transitions for Adult Readiness [STAR] 2009, 26). This apology was recognition of how the CWLA did not act in the best interest of tribes or the children and acknowledged the negative impact that the Indian Adoption Project had on the lives of these children.

A 1976 study by the Association on American Indian Affairs found that 25% to 35% of all Indian children were being placed in out-of-home care (Unger 1977). Eighty-five percent of those children were being placed in non-Indian homes or institutions (Unger 1977). Congress found these statistics to be shocking, and because of these findings, Congress saw a need for reform. Specifically, in California, it was found that over 90% of California Indian children subject to adoption were placed in non-Indian homes and that Indian children were more than eight times as likely as non-Indian children to be placed in adoptive homes. Overall, one of every 124 Indian children in California was in a foster care home, compared to a rate of one in 367 for non-Indian children (Broadhead et al. 1976).

In a response to the overwhelming evidence from Indian communities that the loss of their children meant the destruction of Indian culture, Congress passed The Indian Child Welfare Act of 1978.

**The Indian Child Welfare Act of 1978**

In 1978, Congress signed The Indian Child Welfare Act (25 U.S.C 1901 et seq.) into law, and it is regarded as the most significant piece of federal legislation affecting American Indian families (Brown et al. 2002, 7). Congress prefaced the Act by stating,

There is no resource more vital to the continued existence and integrity of Indian tribes than their children... [A]n alarmingly high percentage of Indian families
are broken up by the removal, often unwarranted, of their children from them by non-tribal public and private agencies and that an alarmingly high percentage of such children are placed in non-Indian foster and adoptive homes and institutions; and that the States have often failed to recognize the essential tribal relations of Indian people and the cultural and social standards prevailing in Indian communities and families (Indian Child Welfare Act 1978).

“The ICWA includes provisions that require the following: 1) identification of Indian children by the state and subsequent notification to the child's parents and the child's tribe of their rights to intervene in state child custody proceedings; 2) the use of tribal courts by way of requests for transfer of jurisdiction; and 3) procedural requirements for child custody proceedings that remain in state courts, including tribal intervention, standards of proof, and placement preferences” (Brown et al. 2002, 9). The ICWA applies only to child custody proceedings: foster care placement, termination of parental rights, pre-adoptive placement, and adoptive placement (25 U.S.C. § 1920 [1]). Furthermore, the ICWA may only apply to an Indian child, defined under the law as any unmarried person who is under age eighteen and is either a) a member of an Indian tribe or b) is eligible for membership in an Indian tribe and is the biological child of a member of an Indian tribe (Sec 1903, 4).

“ICWA creates the following two-part requirement for states to remove an Indian child from his/her home: 1) proof that active efforts have been made to prevent the breakup of the Indian family and that these active efforts have proved unsuccessful; and 2) a court finding supported by clear and convincing evidence that the continued custody of the child by the parent or Indian custodian is likely to result in serious emotional or physical damage to the child” (Brown et al. 2002, 9). When removed, the law states that preference shall be given to the child’s placement with one of the following, in descending priority order: 1) a member of the child’s extended family, as defined in Section 1903 of the Indian Child Welfare Act (25 U.S.C. Sec. 1901 et seq.); 2) a foster home licensed, approved, or specified by the child’s tribe; 3) An Indian foster home licensed or approved by an authorized non-Indian licensing authority; or 4) an institution for children approved by an Indian tribe or operated by an Indian organization which has a program suitable to meet the Indian child’s needs (25 U.S.C Chapter 21).

Once a state court has determined that a particular child custody proceeding is governed by ICWA, the court must adhere to multiple requirements in order to comply with the act. To protect the interests of tribes, ICWA requires states to provide notification to the tribe at least 10 days in advance of pending involuntary child custody proceedings (25 U.S.C. § 1912 [a]). Delivery must be made by registered mail with a return receipt requested to the parent(s) and/or Indian custodian(s), as well as the child’s tribe (25 U.S.C. § 1912 [a]).
The ICWA and California

In 2006, the California Legislature passed Senate Bill 678, and it was signed into law by Governor Arnold Schwarzenegger in 2007 (Geary & Radoff, 2007). SB 678 is the uniform application of The Indian Child Welfare Act in California. Changes in the federal law to fit California standards allow participation of non-federally recognized tribes, on request and at the discretion of the judge in the dependency matter. This difference expands the option and availability of culturally appropriate services to children from non-federally recognized tribes. SB 678 encourages the courts and counties to work with an Indian child’s family and tribe to ensure that the child’s emotional, political, and spiritual well-being is promoted by fostering strong connections with the child’s extended family, culture, ancestral homeland, and tribe (Geary & Radoff, 2007). Tribal Successful Transitions for Adult Readiness [STAR] (2009) reported that “Tribal youth who maintain connection to their families and culture demonstrate better outcomes; that the ‘Tribal’ as identified in the Act itself does not match being ‘Tribal’ in a historical context; that many ‘Tribes’ are unrecognized yet still function as Tribes, maintain their own culture, ceremonies, language, traditions, and systems of government” (p. 46).

In regards to the placement preferences outlined in ICWA federal law, SB 678 codified placement preferences into California state law, indicating that California has an interest in:

- protecting the essential tribal relations and best interest of an Indian child by...
- placing the child, whenever possible, in a placement that reflects the unique values of the child’s tribal culture and is best able to assist the child in establishing, developing, and maintaining a political, cultural, and social relationship with the child’s tribe and tribal community (California Indian Legal Services 2012, 15).

The most significant change made by SB 678 was the new exception to termination of parental rights. The new exception applied where termination of parental rights would be detrimental to an Indian child, including but not limited to cases where 1) termination would substantially interfere with the child’s connection to his or her tribal community or the child’s tribal membership rights; or 2) the child’s tribe identifies guardianship, long term foster care with a fit and willing relative, tribal customary adoption, or another permanent plan (California Indian Legal Services 2012). This exception recognizes that the severing of the legal relationship of a parent and child is not a concept that is culturally recognized by most Indian tribes, which ultimately reorients social services agencies away from the narrow view that conventional adoption is always the best placement for the child (California Indian Legal Services 2012).
Studies of Compliance of the ICWA in California

In 2006, a thesis titled "Federal Indian Policy and the Indian Child Welfare Act of 1978: An Exploratory Study on ICWA Compliance Among CPS Workers in Sacramento County," written by Roche and Kloh at California State University, Sacramento looked to gather demographic information on American Indian youth in dependency systems at Child Protective Services (CPS) in order to discover what barriers may exist among county workers in their efforts to comply with the ICWA in Sacramento county. Statistics that sparked this study showed that in 2005 alone, there were seventy-two unpublished ICWA cases that were reversed, in whole or in part, because of failure to follow the ICWA statute. The research done by Roche and Kloh (2006) had six major findings:

1) The majority of respondents have received some training on the ICWA, but most respondents have not read the legal guidelines necessary for understanding the spirit of the law (meaning inclusion of non-federally recognized tribes), as well as implementing the substantive and procedural provisions of the ICWA;
2) there appears to be little communication with tribes and involvement of the extended family of the Indian child in case planning;
3) there is an underutilization of American Indian resources in serving Indian children;
4) there is a lack of familiarity with the procedural and substantive provisions of the ICWA;
5) more than half of the respondents did not apply all of the requirements of active efforts to reunify American Indian families; and
6) unless placed with extended family, Indian children generally were not placed into American Indian foster homes (113).

Roche and Kloh (2006) state that with regard to training and familiarity with the ICWA requirements, over half to nearly all of the respondents in their study indicated that they were only somewhat familiar to not familiar at all with the ICWA requirements, despite the fact that nearly all had attended at least one ICWA training (114). Based on their findings, the authors had several recommendations in order to improve ICWA compliance in Sacramento County (Roche and Kloh 2006). One recommendation was for Sacramento County to hire Native American caseworkers or caseworkers who are knowledgeable of and involved with the local Native American community as well as creating an "Indian unit," meaning social workers who specialize in handling ICWA cases, who understand Native American families, and who are involved with the Indian community (Roche and Kloh 2006, p. 119). Finally, the last recommendation from Roche and Kloh (2006) was that Sacramento County should implement an ICWA advisory board from local Indian community representatives who could help the county evaluate their ICWA policies and practices (120). None of these recommendations have been implemented since the completion of the study.

The Roche and Kloh (2006) study was important because it found that county social workers need further education about the ICWA, as it is critical when
working with members of Native American tribes as well as the ICWA workers. Also, it found that many county social workers have not read the ICWA law in its entirety; therefore, county social workers may not understand why the law was passed and the necessary steps in placing Native American children if they have not even read the law (Roche and Kloh 2006).

Interpreting the law into county policy, “from 2008 to 2010, a California Breakthrough Series Collaborative (BSC) addressed the disproportionality of African American and American Indian/Alaska Native (AI/AN) children in public child welfare services” (Lidot, Orrantia, and Cchoca, 65). The Continuum of Readiness was to be utilized by California counties looking to make strategic decisions in order for compliance with ICWA and in addressing disproportionality through collaboration with tribes and urban Indian communities. The study reported many successes by California counties while applying the Continuum of Readiness to their practices (Lidot, Orrantia, and Cchoca 2012). This approach implements a simple assessment that determines the top priorities of interested counties in the following areas:

1) creating awareness of culturally-relevant resources to support addressing disproportionality (clinics, ICWA services, American Indian and tribal services, Tribal TANF, etc.); 2) awareness of American Indian culture, history, and values that can increase culturally responsive social welfare practice; 3) establishing relationships with American Indian agencies, community members, community leaders, and providers that serve youth in the system; 4) providing support for developing realistic and achievable goals and/or objectives in the county System Improvement Plan, which includes American Indian/tribal stakeholders; 5) improving ICWA compliance; 6) providing technical assistance and support for future or existing coalitions that are working to address gaps and challenges faced by county child welfare systems and local American Indian ICWA service providers; and 7) dealing with “other” self-identified efforts that must be clearly related to supporting collaboration with tribes and AI programs (Lidot, Orrantia, and Cchoca 2012, 71)

These different approaches are important because they promote cultural competency within the Native American community and create a working relationship between tribal and traditional agencies.

The BSC (2012) research documented the achievements of several counties that utilized the Continuum of Readiness. For example:

Alameda County strengthened its collaboration with the Bay Area Collaborative of American Indian Resources (BACAIR), a collaborative that unites services for AI/AN tribal youth in ICWA. Alameda also implemented a concentrated effort to ensure proper identification of AI/AN youth. Fresno County strengthened its communication and relationships with local tribal ICWA designated agents. In
addition, the county established additional linkages between tribal representatives and multiple county departments and revised their ICWA policies and procedures. Placer County established a Native Family Services Team to manage ICWA cases, including ICWA related policies and procedures; the county also established additional linkages between tribal representatives and multiple county departments including the courts. San Diego County developed a collaborative team called the Seventh Generation and supported the development of Club 7, a support group for American Indian foster youth and friends. San Diego also filmed a video, *A Parent’s Guide to Child Welfare Services and the Juvenile Court: ICWA Version*, which is still used as an engagement tool to increase the reunification of Native American parents and their children involved in the child welfare system. San Diego County was also able to reduce disproportionality from 1.2% in 2007 to 0.9% in 2010 (81).

The California Breakthrough Series Collaborative (2012) study was important because it produced the Continuum of Readiness, which allowed for a reciprocated relationship between counties and tribes. The Continuum of Readiness was tested, and the tests showed improvements in communication and collaboration, which is important when working with two sets of governments. There are significant differences between Native American culture and Western society; the California BSC study creates a functional way for them to understand and be able to work with one another.

**ICWA Focused Organizations and Conferences**

Based on my research, there is only one national organization dedicated to the well being of American Indian children and families: The National Indian Child Welfare Association (NICWA). Originally the Northwest Indian Child Institute, NICWA was founded in 1983. NICWA offers many services to tribes and those working in Indian child welfare. One service they offer is the Tribal Child Welfare Worker Certification which serves as an effective way for highly qualified child welfare workers to demonstrate their professional proficiency in the field of tribal child welfare, to tribal communities and child welfare programs, and to the Native American families they serve (Tribal Child Welfare Worker Certification, 2014). Another service they provide in the capacity of ICWA is that for the past 32 years, NICWA has held an annual conference based on Indian Child Welfare and, more specifically, focuses on the Indian Child Welfare Act. This conference is attended by individuals such as social workers, tribal leaders, judges, service providers, and concerned community members.

Specifically in California, Tribal STAR has made an enormous impact in the region of Southern California. Tribal STAR is a program of the San Diego State University School of Social Work, Academy for Professional Readiness (Tribal
Tribal STAR’s mission is to improve collaboration efforts that ensure Tribal foster youth are connected to culture, community and resources throughout their transition to adulthood by providing training and technical assistance to communities and organizations that serve Tribal foster youth with the goal of increasing positive outcomes during their transition to adulthood (Tribal [STAR] Successful Transitions for Adult Readiness 2010).

Tribal STAR is utilized by tribes and agencies in Southern California as a resource for topics pertaining to ICWA. This program provides trainings to county social workers, tribal ICWA social workers, foster family agency social workers, child welfare programs, etc., at no cost to the attendee (Tribal [STAR] Successful Transitions for Adult Readiness 2009). This program has been vital to the Native American community located in Southern California, and it has played a role in helping the Native families and children in that area.

Finally, there is an Annual California State ICWA Conference that has been held for the past twenty-one years. Each year, different California tribes offer to host this event, alternating between Southern California and Northern California. This conference focuses solely on ICWA and how to increase knowledge and skills for service providers, agencies, leaders, legal practitioners, and judges. This event is open to anyone who is interested in attending.

There are many efforts being made to expand the knowledge of the ICWA and to provide services to tribes, counties, and service providers to understand the purpose of the ICWA and how beneficial it is to Native American children. With the absence of the ICWA, many Native American children were displaced out of their tribal communities, and both the children and tribes have experienced the negative effects of this. The creation of these organizations and the services they provide create a huge impact within the communities they serve and have become a step in the right direction towards a positive future.

**Methodology**

This study consists of cross-sectional qualitative research that explores the question: How do tribal Indian Child Welfare Act (ICWA) social workers define their level of communication and collaboration with the county? The researcher conducted interviews with four different tribal ICWA social workers that represented both Southern and Northern California tribes. Prior to beginning the study, the Institutional Review Board at California State University, Sacramento approved this research.
Sample and Procedures
The tribal ICWA social workers who agreed to take part in this research read and signed a consent form that stated the research question, the purpose of the study, the tribal ICWA social worker’s involvement, and how any identifying information will be omitted. The researcher conducted qualitative research using phenomenology which focuses on obtaining detailed descriptions of the participants’ experiences (Creswell 2009). This was done through interviews with the four tribal ICWA social workers using a list of eighteen questions (see Appendix). The interviews were recorded and then transcribed.

Measures
The first six questions explored the tribal ICWA workers’ interpretations of the ICWA. Specific questions included: “How do you interpret the Indian Child Welfare Act of 1978?” and “What are the strengths and weaknesses of ICWA?” Questions seven through twelve asked about the effect that the ICWA has on Native American people and the tribe itself. Specific questions included: “Do you feel that you have a strong relationship with the county when dealing with ICWA cases?” and “Do you feel as if the county has a strong sense of cultural competency when dealing with your tribe?” Questions thirteen through eighteen asked about the tribal ICWA social workers’ feelings on the communication and collaboration that they have with county Child Protective Services workers. Specific questions include: “In your experience as a tribal ICWA social worker, how do you feel about the communication with the county?” and “In your experience as a tribal ICWA social worker, how do you feel about collaboration with the county?”

Analysis
After the face-to-face interviews were completed, the researcher transcribed the interviews, read the transcripts, and identified commonalities from all four interviews. Reviewing the transcripts, the researcher looked at how the information obtained best answers the research question: How do tribal Indian Child Welfare Act (ICWA) social workers define their level of communication and collaboration with the county?

Results
After conducting the interviews, the researcher separated the participants from Southern California tribes and Northern California tribes. This allowed for comparing and contrasting based on geographical location of the tribes, as well as different strategies each region took on dealing with the county. The transcripts revealed the similarities and differences between the experiences by the Southern California and Northern California participants.
Southern California Tribes

Three of the four participants are tribal ICWA social workers employed by Southern California tribes. With over half of the participants representing Southern California, it allowed the researcher to relate the participants’ answers and gain a better understanding of the resources available to them. Analyzing the content of the interviews, the researcher was able to identify positive and negative areas of communication and collaboration with the county.

One positive outcome is that all three tribal ICWA social workers were pleased with the work of the regional heads and supervisors of the Child Protective Services units. All three tribal ICWA social workers have good working relationships with those in higher positions and feel that it makes a difference when working on the ICWA cases. In responding to the question “Do you feel as if the county has a strong sense of cultural competency when dealing with your tribe?” Participant 2 stated, “The specific units... they have ICWA units now, but overall, the head people do. They know what needs to be done. Sometimes, it’s just getting that information down to the new workers...” Participant 1 answered the same question as,

I think the regional head, I know, culturally, has what she needs. If there’s anything I need, I can take it to her and she will hear any of my complaints. It’s a hard one because I’ve come across social workers who they don’t know a lot but they respect her and they work well with me. And we work well together.

Participant 1 followed up by answering “Do you have any recommendations on how to improve communication and collaboration between the county and tribal ICWA social workers?” by stating,

...we created a relationship to where I have direct access to the regional head. So, I’m having a problem with a rogue CPS worker who doesn’t want to listen to ICWA or who doesn’t want to listen to me, I can make that one phone call and she can fix it...And it’s one thing to have a relationship with the CPS worker but when you can go straight to the supervisor and say ‘Hey I’m having problems,’ it really makes things so much easier for everyone involved.

In addressing the same question, the Participant 3 was able to express the importance of developing relationships with supervisors and that the participant’s professional relationship with the supervisor of the ICWA unit has been instrumental in the successes of communication and collaboration with the county.

On the other hand, one area of frustration for the majority of participants is the lack of communication and collaboration by counties outside the area in which the tribe resides. Participant 1 answered “When dealing with the county, do you feel as if the county fully understands ICWA and why it is important to tribes?” by stating,
I know when we were in San Diego County, they don’t even want to acknowledge us. So when we’re there with our attorneys, and myself, they didn’t acknowledge us until they absolutely had to acknowledge us so I think it really depends on what county you’re in. I think our home county, where the tribe is located—yes. They have a good understanding, but some of the outside counties, we’ve had our struggles.

In addressing the same question, Participant 3 credited the competence of their county on understanding ICWA by going through Tribal STAR training. Tribal STAR has made a big impact on tribes and counties in Southern California. The programs and trainings that they offer call for effective communication and collaboration between these two agencies regarding ICWA.

Aside from communication and collaboration with the county, Participant 3 expressed frustration over the lack of funding while answering the same question. Tribes who are able to own and operate their own casinos are able to distribute funds to child welfare services, while other tribes who lack funds and/or who have a contract with a casino are unable to distribute money to their child welfare services programs. This leaves tribal ICWA social workers in a predicament because they lack an adequate number of staff to take on the number of cases with which they are faced. Also, with the lack of funds, tribal ICWA social workers are unable to provide trainings on ICWA and associated topics to Native American people and tribes.

Northern California Tribes

Participant 4 is a tribal ICWA social worker employed by a Northern California tribe. This participant was able to express both frustration and praise over communication and collaboration with the county. When asked “Do you feel that you have a strong relationship with the county when dealing with ICWA cases?” Participant 4 expressed a good working relationship when it comes to the county; however, the participant noted that inexperience amongst the newer county social workers plays a role in hindering these relationships. In answering same question, Participant 4 stated in the interview,

When it comes to the actual department itself.... Some of the members I do have a pretty good relationship with. What I’ve noticed lately... Sometimes I think that they’re not all knowledgeable about ICWA. I had one social worker...she told the foster family, ‘well you know, the county is up here and ICWA is down here...’ what she was telling this foster family is that the county is of a higher place than the tribe was and I completely disagree with that. I feel that we’re equal.

As stated above, the participant expressed a good working relationship with the county. However that was not always the case. Initiative taken by the tribes is what helped these relationships unfold. In answering the question “In your experience as a tribal ICWA social worker, how do you feel about collaboration with the county?” Participant 4 stated,
We’ve made a lot of headway. We used to have a lot of problems with the county but now with three tribes, everyone is actively getting involved. I think we have a pretty good working relationship with them, a really good open relationship… they have really tried to work with us, but whether they really mean it, I don’t know.

Even though the working relationship is good, the participant expressed a need for better communication. In answering the question, “In your experience as a tribal ICWA social worker, how do you feel about the communication with the county?” Participant 4 stated:

Depending on the social worker… sometimes they forget to communicate with us… if I don’t hear anything, of course I’ll go to their supervisor… or I will CC the county’s counsel and he will get right back to me… there definitely is a lack of communication.

Participant 4 expressed good communication and collaboration with the county’s counsel. Participant 4 feels that the county’s counsel has a better understanding of ICWA and is empathetic to the tribes’ needs and wants. In answering the question, “Do you feel that you have a strong relationship with the county when dealing with ICWA cases?” Participant 4 stated

I do have a great relationship with the county counselor… [The county social workers] put a very good front on and they really want to work with us but… I don’t think the county really gets [ICWA], I don’t think they really understand as far as the social workers…Sometimes I don’t really think that they care… They’re just trained to follow policies and I don’t think they’re educated in aspects of ICWA...

Overall, Participant 4 feels that the level of communication and collaboration “depends on how involved the tribes are in the county.” Similar responses were given throughout all interviews conducted. All participants felt the importance of creating a close relationship with the county because it creates an easier way for communication and collaboration.

Recommendations

Each participant stated their recommendations on how to improve communication and collaboration between the county and tribal ICWA social workers when answering the question of “Do you have any recommendations on how to improve communication and collaboration between the county and tribal ICWA social workers?” The first recommendation would be for tribes to create a relationship with the Child Protective Services department, or the ICWA department if the county has one implemented. This would allow for the tribes to become familiar with the county social workers and the supervisors that they will be dealing with whenever an ICWA case is received. Participant 1 from Southern California stated
I would recommend starting with [a] meeting... Your tribe decides ‘who do we want at the table.’ When you have those people together, you figure out who those supervisors are, you get them to lunch, you provide a luncheon for them, and then you just talk about things- ‘How can we work well together?’...Developing, laying the foundation, developing relationships and true collaboration. I understand its difficult when you have those people who want to block you, who don’t want to work with you, just find out who their higher up is, get them involved, find the sympathetic ear that’s willing to work with you and then move forward on that. That would be my suggestion.

Participant 3 recommended bringing in Tribal STAR, including the schools and looking at student attendance review boards, and working with the Child Protective Team (CPT) so that they are able to intervene before the child is removed. It is apparent that these tribal ICWA social workers make a point to initiate these relationships with the county. They push for communication and collaboration because the children of those tribes depend on it. The better the communication and collaboration is between the two groups, the better the outcomes.

As stated above, Southern California has a tribal alliance that allows for county and tribal governments to get together to discuss tribal child welfare; however, this is something the Northern California tribe lacks within their county. The positive impact that this group has brought to tribes in Southern California is needed in Northern California. For example, Participant 2 discussed the positivity in this group stated

I think that with the model they’ve done down here with the tribal alliance meetings and the collaborating with getting together with the different workers and the judges and the county officials... it’s worked so well and I know that the caseloads have gone down.

A collaborative group that could be created in counties within Northern California would help tribes create a relationship with the county and encourage communication between the two groups. Participant 4 stated

I think one thing that could work is some sort of collaborational meeting whether it’s monthly; I think a monthly one would be wonderful... I think that would be great... there could be constant communication on what’s good, what’s not good, what’s new, are there any new all-county letters coming out... communication is the key... having a meeting monthly or quarterly... I think that definitely would be a step.

This collaborative group would allow for tribal ICWA workers in the same county and/or surrounding counties to be more involved with the county to create an environment that would collaborate in the best interest of the Native American child.

Another recommendation was to provide training to county workers and educate them on ICWA and tribal involvement. The participants had similar frustrations
with the county in that the county workers feel as if ICWA creates more of a burden on their workload. However, the tribal ICWA social workers feel as if the procedures of ICWA call for a more collaborative effort, something the county social worker may not see upfront. The Northern California participant explained how newer county social workers do not seem familiar with ICWA and tribal governments. Requiring training on working with tribes and ICWA would allow the county social workers to gain the skills and knowledge necessary for better outcomes in working with tribal ICWA social workers while maintaining cultural competency. The lack of cultural competency creates a divide, and eliminating that divide would allow for a more open relationship between counties and tribes to work together.

In regards to communication, one recommendation that the Northern California tribal ICWA social worker had was, “I would love to have some sort of agreement with [the county] saying that any time that they get in contact with our [tribal] member they are to call us immediately and we will pick the child up.” This would allow for the county to keep the tribes involved from the beginning of the case and, in turn, the tribes would feel as if the county is making more of an effort to communicate and collaborate with them. The better the communication is between the two entities, the better the outcome for the child.

Limitations
The biggest limitation was the number of participants. With the time constraint, it was difficult trying to recruit tribal ICWA social workers who were willing to participate in the timeframe given. Still, the researcher was able to gather one participant from a Northern California tribe and would have liked to interview more participants from Northern California. Another limitation was that the central region of California was not represented in this sample. With participants from central California, the research study would allow for input from tribes from each region of California.

Further Research
The researcher would like to expand this research study and interview more tribal ICWA social workers from both Southern and Northern California to make the findings stronger. Also, this researcher would like to include tribal ICWA workers from central California to provide a more complete representation from across the state. Another aspect of research would be to focus on each specific county in California in an effort to improve communication and collaboration between these tribal and traditional governments.
Communication and collaboration between the county and tribes are vital when looking to achieve the best outcomes of ICWA. The relationship between these two entities is necessary when working in the best interest of the child. Failure to acquire these relationships can result in negative outcomes for the child. The participants within this study have made it a point to create these relationships with the county in order to create a better working relationship between the two. They push for that communication and collaboration because the children of those tribes depend on it. The better the communication and collaboration is between the two groups, the better the outcome.

Recommendations have been made by all participants in hopes to strengthen the relationships with the counties they come into contact with. These relationships are needed to create an outcome in the best interest of the child. Although ICWA has been enacted for thirty-six years, there are still social workers who have no knowledge about the law or who are uncertain about procedures of the law. Coming up with a way to create communication and collaboration between tribal ICWA social workers and the county is one step to upholding the ICWA and creating the best outcomes for Native American children.
References


Tribal [STAR] Successful Transitions for Adult Readiness. 2009. The Collaborative: Creating Connection for Tribal and Non-Tribal Directors, Managers,


Appendix

Interview Questions for Tribal ICWA Social Workers

How do you interpret *The Indian Child Welfare Act* (ICWA) of 1978?
How does *The Indian Child Welfare Act* impact Indian people?
What is your role as an ICWA social worker?
How well has ICWA worked for Indian children and families?
What are the strengths and weaknesses of ICWA?
How does ICWA affect this tribe in regards to adoption and/or foster care?
Do you feel that ICWA has been beneficial in helping children within your tribe?
Is there an ICWA committee with this tribe? How many members are on the committee? How is it decided that they are part of the committee?
If there is a committee, what is the function of the committee?
Once the tribe is informed about an ICWA case, what are the steps that you, as an ICWA social worker, take?
Do you feel that you have a strong relationship with the county when dealing with ICWA cases?
Do you feel as if the county has a strong sense of cultural competency when dealing with your tribe?
When dealing with the county, do you feel as if the county fully understands ICWA and why it is important to tribes?
In your experience as a tribal ICWA social worker, how do you feel about the communication with the county?
In your experience as a tribal ICWA social worker, how do you feel about collaboration with the county?
Does the county ever reach out to your tribe to create some type of relationship?
Do you have any recommendations on how to improve communication and collaboration between the county and tribal ICWA social workers?
Any additional comments or concerns?
The Choice of an Exchange Rate Regime and Economic Growth

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Abstract

Using a sample of 150 diverse countries, the research examines the relationship between economic growth and the choice of an exchange rate regime from 1980 to 2010. The study revisits the debate on whether the choice of exchange rate regime affects economic growth by employing regression analysis. The dependent variable is economic growth and the exchange rate regime is one of the independent variables. Based on the results in this paper, there is no significant statistical relationship between the choice of an exchange rate regime and economic growth in both industrialized and non-industrialized countries. In other words, there is no causal relationship between an exchange rate regime and economic growth. The results are consistent with the DeVita and Kyaw (2011) who found that the choice of exchange rate regime does not affect economic growth in industrialized and non-industrialized nations. However, the results are not consistent with Levy-Yeyati and Sturzenegger (2003) who reported that the choice of an exchange rate regime only affects non-industrialized countries.

Introduction

The objective of this research is to examine whether the choice of an exchange rate regime influences the rate of economic growth as measured by changes in the gross domestic product (GDP) in industrialized and non-industrialized countries for the period 1980-2010. The terms industrialized and non-industrialized are used interchangeably along with developed and developing, respectively. Fixed and floating exchange rate regimes have been of concern for countries around the world; most industrialized countries have floating exchange rates, while developing countries tend to adopt fixed exchange rates, and others adopt a regime that uses an intermediate or in some occasions called managed floating exchange rate regime. Developing economies usually peg or fix their currency to a currency of an industrialized nation such as the U.S. dollar or British pound. A question that economists often ask is what are the consequences of choosing either one in terms of growth? The main reasons why developing nations choose to have fixed exchange rates are to avoid excessive inflation, output instability, and
policy autonomy to respond to external economic shocks. Research on this topic is important because it provides non-industrialized and industrialized nations with an analysis of the pros and cons of adapting fixed exchange rates or floating exchange rates, as well as knowledge of the consequences of adopting fixed or floating exchange rates in terms of economic growth.

A major part of examining this topic involves determining which variables beyond the choice of exchange rate regime influence the rate of economic growth, inflation, and output volatility. The literature provides possible explanations of causes of instability when developing countries decide not to have floating exchange rates. This study examines 150 countries that have fixed, floating and intermediate exchange rates and it relates this to changes in Gross Domestic Product (GDP) per capita. This research examines the role of exchange rates on economic growth of GDP through a series of regressions with the following explanatory variables: exchange rate regime, population, population growth, geographic location, and education.

All explanatory variables are discussed in the methodology and models section of this article, but prior to introducing the exchange rate regime as one of the main independent variables of interest, it is important to offer an explanation of how this variable is defined and used in the research. There are two ways of organizing the exchange rate regime variable: a de facto classification used by the International Monetary Fund (IMF) and a LYS de jure classification from Levy-Weiss and Sturzenegger (2003). Based on the results in this study, there is no significant statistical relationship between the choice of an exchange rate regime and economic growth in both industrialized and non-industrialized countries. The idea that non-industrialized and industrialized countries display relatively poor performance when they have fixed exchange rate is tested, compared to countries with floating exchange rates.

The article is organized as follows: The literature review section introduces a survey of relevant literature with a focused review of the Purchasing Power Parity (PPP) and exchange rate determination theories. The article also includes a methodology and models section with regression models. There is a results section that provides a discussion of the results and finally a conclusion.

**Literature Review**

Arnold, MacDonald and De Vries (2012) have argued that volatility is not altered by the transition from fixed to floating exchange rates, and that variables such as income and money supply are roughly unchanged. Their observation is contradicted by the experiences in Mexico and Poland. These two countries experienced short-run increased instability, an increase of output volatility, and reductions in economic growth (Obstfeld and Rogoff 1995). Edwards (2002)
reported that as Mexico transitioned from a fixed to floating exchange rate, it experienced both exchange rate regimes with varying degrees of success and failure in stabilizing output and money supply. Levy-Yeyati and Sturzenegger (2003) report negative economic growth and fixed exchange rates in emerging economies, and find no relationship in industrialized countries with floating exchange rates.

Exchange rate volatility and output volatility have been subject to extensive research beginning with Friedman (1953) and in recent years Tsangarides (2012). The choice of exchange rate regime is often considered to have an impact on economic growth and the volatility of output. Most of the research has three classifications of the exchange rate regime: the exchange rate is pegged (fixed) to a Euro or British pound or a vehicle currency such as the U.S. dollar, intermediate flexibility or managed float meaning that the exchange rate may only be partially fixed or partially floating, and a floating exchange rate. In the literature, countries are often categorized based on economic development: developing countries, emerging market economies (EMEs), and industrialized nations or advanced economies (Levy-Yeyati and Sturzenegger 2003).

The role of exchange rate regimes on economic growth has produced mixed results. De Vita and Kyaw (2011) report mixed results about exchange rate regimes on growth and output, while others have found that exchange rate regimes are irrelevant to output and growth. Edwards (2002) also reports that the results are mixed, partly based on researchers employing different methods or using cross sectional data and panel data while others have focused on only one country over time. Based on the literature, it is necessary to categorize each country by the exchange rate regime and whether the country under study is industrialized or non-industrialized. In addition, it is common to use more than one classification of the exchange rate regime such as a *de facto* classification for both the exchange rate regimes and each country studied (Levy-Yeyati and Sturzenegger 2003).

There are two common classifications—fixed and floating exchange rate regimes. However, intermediate exchange rate regimes also exist. Countries that claim to have a floating exchange rate regime, yet still use some kind of method to intervene in the exchange rate of the domestic currency despite having claimed their official classification as floating are considered to have an intermediate exchange rate classification. The most difficult part of categorizing exchange rates is the intermediate exchange rate because data are more difficult to find and as a result, the literature often includes a specific classification of an exchange rate regime for each country (Levy-Yeyati and Sturzenegger 2003).

Edwards (2002) found that the collapse of a fixed exchange rate in Argentina had negative consequences on output and inflation volatility. He also noted that most studies conducted with a large group of countries from different backgrounds
often yield similar results. Tsangarides (2012) points to studies that include a group of countries that have specific characteristics such as emerging market economies (EMEs). The most important differentiation between the countries is the three classifications mentioned above; non-industrialized, emerging market economies (EMEs), and industrialized nations. The research focuses only on countries categorized as industrialized and non-industrialized.

Tsangarides (2012) states that an understanding of how the exchange rate regime affects growth is still debatable in the literature. Some authors have obtained results where they claim to have a clear causal relationship between fixed exchange regimes and growth in developing nations (Levy-Yeyati and Sturzenegger 2003). Other researchers such as De Vita and Kyaw (2011) report that there is no relationship between a fixed exchange rate regime and growth in non-industrialized nor industrialized nations. Most scholars agree that floating exchange rates have a positive correlation with growth in developing nations, and that fixed exchange rates are better when it comes to absorbing shocks to the economy of a country after currency markets earthquakes; countries can usually maintain a stable currency aftershock by fixing their currency. The question that remains is: Does exchange regime choice has a significant impact on growth or not?

Tsangarides (2012) highlights the importance of the time period examined as there could be different growth rates due to a recession and that does not necessarily imply a general effect on growth and output volatility, but fluctuations in the financial channels. In this study, the years of the recession are included along with the past thirty years. Studies that examined the long-run effects also appear in the literature by using data obtained since the post Bretton Woods period 1974-2000 (Levy-Yeyati and Sturzenegger 2003). It is important to reach the right conclusions by looking at data from different periods of time to see the long run effects on economic growth. A majority of studies employ Ordinary Least Squares (OLS) regressions since the results lend themselves to straightforward interpretation, controlling for all other independent variables.

Levy-Yeyati and Sturzenegger (2003) results are widely accepted across the discipline because they took an innovative approach to the exchange rate regime classification. Instead of only using the standard and sometimes widely questioned *de jure* exchange rate classification by the IMF, the authors created their own *de facto* exchange rate classification (LYS) and used it along with the IMF classification and compared the results. The LYS *de facto* classification is now widely accepted and used in other studies such as in De Vita and Kyaw (2011). The way the LYS classification is determined is by examining each specific country and its behavior in the financial sector rather than what the countries report. The classification is based on three observations: the volatility of the exchange rate relative to the relevant anchor currency, the volatility of the exchange rate changes, and the volatility of reserves. Their approach enables them to determine
whether a country actually adopts the regime they claimed to have adopted. The authors then used both the LYS and IMF classification in their study and compared the results.

Their findings are more complex because they conducted regressions of both the IMF and LYS classifications and industrialized and non-industrialized countries. They found that for developing countries, a less flexible exchange rate regime is associated with slower growth, and yet for industrialized countries, the choice of exchange rate regime has no significant impact on growth (Levy-Yeyati and Sturzenegger 2003).

On the other hand, De Vita and Kyaw’s (2011) results are opposite to the Levy-Yeyati and Sturzenegger’s (2003) results. Using a sample of only seventy developing countries and panel data, Levy-Yeyati and Sturzenegger (2003) find that the exchange rate regime has no direct effect on growth in developing countries for the period 1981-2004. They used the same exchange rate regime classification as Levy-Yeyati and Sturzenegger (2003) and added an extra classification by Reinhart and Rogoff (2004) (hereafter RR) classification. The classification looks into other aspects of the financial channels such as episodes of high inflation and periods of black market exchange rate regime. This research does not use the RR classification since black market exchange rate data is difficult to obtain even for developing countries given financial liberalization during the period covered in this article. De Vita and Kyaw (2011) find that with all three classifications (IMF, LYS, and RR), the fixed exchange rate regime variable effects on economic growth was not statistically significant.

**Economic Theory**

The theories employed in this research are the purchasing power parity (PPP) and the exchange rate determination. These predict the exchange rate value, but do not predict the choice of an exchange rate regime. Economic growth is related to the financial and currency stability of countries around the world. In a world where international trade is crucial for countries to maintain stable growth rates, financial stability of the country is important for imports and exports. For major industrialized countries, a floating exchange rate regime ensures financial stability as the currency is likely to be stronger relative to that of a non-industrialized country. As mentioned above, non-industrialized countries choose to adopt fixed or intermediate exchange rates because their currencies are vulnerable to speculative attacks. The debate of the exchange rate regime is common because countries choose either one to achieve success in their financial system. Chang and Velasco (2000) argue that in the near future, all countries will have floating exchange rate regimes given increasing globalization and financial integration of economies.
In the early 2000s Argentina, an emerging economy, had a currency board. That is, they had a fixed exchange rate regime that did not fluctuate. It was during this time that Argentina’s financial system collapsed. According to Edwards (2002), Argentina experienced devaluation, the government defaulted on its external debt, and its deposits were frozen. The situation in Argentina is a clear example of a fixed exchange rate regime failure. On the other hand, China has maintained a fixed exchange rate regime and has experienced high growth rates and financial stability. China provides an example of a successful fixed exchange rate regime; even though inflation has been relatively high, this has not undermined its rates of economic growth (Chang and Velasco 2000). In the literature, there are pros and cons of adopting fixed exchange rates over floating exchange rates, in particular among non-industrialized countries and emerging economies. Fixed exchange rate regimes stimulate investment and trade by reducing fluctuations of the currency, thus having a positive effect on growth. In the event of external shocks, fixed exchange rate regimes tend to induce negative effects on economic growth whereas floating regimes tend to dampen these external shocks. External shocks have a higher toll on fixed regimes; in particular, there are significant costs in terms of real interest rates (Edwards 2002).

Methodology and Models

In this research a series of regressions are used to analyze the data. Data for 150 countries (See Appendix ) were gathered from various sources such as government agencies, the International Monetary Fund (IMF), the World Economic Outlook (WEO), the World Bank, and the Federal Reserve System. In order to analyze the relative importance of each explanatory variable, the research employed Ordinary Least Squares (OLS) regression. The explanatory variables that will be used in the regressions will include variables: the exchange rate regime (fixed and intermediate) –one for the IMF and one for the LYS regime classification, Sub-Saharan country, Latin American country, population, population growth, investment to GDP ratio, secondary enrollment, oil exports, and whether a country had a change in the exchange rate regime, beginning or initial time period covered in this study, and GDP in 1980.

The research includes additional nine independent variables that are known to have an effect on economic growth. The dependent variable, GROWTH, is the annual percent change in GDP per capita while the explanatory variables are: the exchange rate regime will be a dummy variable (one for the IMF (IMF FIX) and LYS classifications (FixExLYS). The exchange rate regime also includes two more dummy variables (for intermediate for the IMF and for the LYS classification (IMF INTR)) (InteExLYS); population growth, POPGRWTH); total population of the country in 2010 (POP2010); oil exports (OILEXP2010)- the total annual exports in billions of dollars in the year 2010. Additional variables
are (LATAM), Latin American country dummy variable; SUBAFRICA, a Sub Saharan country dummy variable; secondary enrollment in 2009 (SECER09), and investment to GDP ratio (INGDPR). In this study the LYS classification has eighty four out of the one hundred fifty countries classified as fixed, thirty of them were classified as intermediate, and the rest were classified as floating.

The variable, POP2010, represents the total population of the country in year 2010. It is included in the analysis to see if countries with larger populations have higher economic growth rates than countries with smaller populations. Population growth, POPGR, is expected to increase economic growth. In other words, there are positive externalities to having higher population growth. On the other hand, it is possible for POPGR to have congestive effects on economic growth. If this is not the case, we expect a decrease in the standard of living in the countries. Thus, the sign of the POPGR variable remains an empirical question. The variables SUBAFRICA and LATAM represent Sub Saharan Africa and Latin America, respectively. These regions tend to have smaller economic growth rates compared to countries in Asia and Europe. The SECER variable is included to see if higher secondary enrollment leads to higher economic growth, a proposition from human capital theory. There is evidence from human capital theory that countries with higher education also experience higher economic growth rates. The investment to GDP ratio variable, INVGDP, is included to control for both foreign and domestic investment. Economic theory suggests that higher investment should lead to higher economic growth. The variable (OILEXP) represents the view that countries who export oil have higher growth rates than those who do not.

The Models
The models include all the independent variables and the dependent variable. The regressions were run in Gnu Regression, Econometrics and Time-series Library (GRETL), a data analysis program. In Models (1) and (2) the time subscript, \( t \), is the time series for the period 1980 - 2010.

Model 1

\[
\text{Growth} = \alpha + \beta_1 \text{POP2010} + \beta_2 \text{SUBAFRICA} + \beta_3 \text{SECER} + \beta_4 \text{POPGR} + \beta_5 \text{INVGDP} + \beta_6 \text{LATAM} + \beta_7 \text{OILEXP} + \beta_8 \text{EXRGCH} + \beta_9 \text{IMFINT} + \beta_{10} \text{IMFFIX} + \beta_{11} \text{GDP80}\]

Model 2

\[
\text{Growth} = \alpha + \beta_1 \text{POP2010} + \beta_2 \text{SUBAFRICA} + \beta_3 \text{SECER} + \beta_4 \text{POPGR} + \beta_5 \text{INVGDP} + \beta_6 \text{LATAM} + \beta_7 \text{OILEXP} + \beta_8 \text{EXRGCH} + \beta_9 \text{LYSINT} + \beta_{10} \text{LYSFIX} + \beta_{11} \text{GDP80}\]
Model (1) is a standard Ordinary Least Squares Regression (OLS) that includes all explanatory variables except LYSINT and LYSFIX. Similarly, Model (2) includes all explanatory variables except IMFINT and IMFFIX. The reason why these variables are excluded from the study is because there is a need to separate the regime classifications and to compare the results from Models (1) and (2).

We examine whether there are causal relationships between the choice of an exchange rate regime and economic growth, using two different classifications IMF and LYS. The variables with a fixed exchange rate regime are expected to be statistically significant since the literature suggests that fixed exchange rates stimulate investment and lead to economic growth. We expect population growth to be significant (positive or negative) depending on whether population is a positive externality or whether it has congestive effects on economic growth. The variable investment to GDP ratio (INVGDP) is expected to be positive and statistically significant since investment tends to increase the GDP per capita. We test for robust standard errors by a heteroscedasticity test and also test for multicollinearity.

**Results and Discussion**

The results in Table 1 suggest that there is no relationship between an exchange rate regime and economic growth. After running the regressions for both the IMF and LYS classifications, none of the exchange rate regime variables were statistically significant. The following variables were statistically significant: total population of the country in 2010, total oil exports in 2010, population growth, and the investment to GDP ratio.
### Table 1. Regression Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regression I IMF</th>
<th>Regression II LYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.358088</td>
<td>0.135314</td>
</tr>
<tr>
<td></td>
<td>(1.1291)</td>
<td>(1.07997)</td>
</tr>
<tr>
<td>POP2010</td>
<td>0.00228744**</td>
<td>0.00238738**</td>
</tr>
<tr>
<td></td>
<td>(0.00103321)</td>
<td>(0.00104245)</td>
</tr>
<tr>
<td>Oilexp2010</td>
<td>-0.00963486</td>
<td>-0.0089139**</td>
</tr>
<tr>
<td></td>
<td>(0.00518588)</td>
<td>(0.00518439)</td>
</tr>
<tr>
<td>PopGrwth</td>
<td>0.585975***</td>
<td>0.569817***</td>
</tr>
<tr>
<td></td>
<td>(.15052)</td>
<td>(.15209)</td>
</tr>
<tr>
<td>SUBAFRA</td>
<td>-0.512003</td>
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<tr>
<td></td>
<td>(0.501314)</td>
<td>(0.504048)</td>
</tr>
<tr>
<td>LATNAME</td>
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<td>-0.0322675</td>
</tr>
<tr>
<td></td>
<td>(0.469127)</td>
<td>(0.476076)</td>
</tr>
<tr>
<td>SECER09</td>
<td>-0.0127044</td>
<td>-0.0137541</td>
</tr>
<tr>
<td></td>
<td>(0.00855111)</td>
<td>(0.00841808)</td>
</tr>
<tr>
<td>INVGDPR</td>
<td>0.16326***</td>
<td>0.164518***</td>
</tr>
<tr>
<td></td>
<td>(0.0235468)</td>
<td>(0.0236164)</td>
</tr>
<tr>
<td>EXRRGCH</td>
<td>-0.245056</td>
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<tr>
<td></td>
<td>(0.337593)</td>
<td>(0.334636)</td>
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<td>GDP1980</td>
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<td>(0.000602155)</td>
<td>(0.000594144)</td>
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<tr>
<td>FixExLYS</td>
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<td></td>
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<td>(0.388635)</td>
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<td>InteExLYS</td>
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<tr>
<td></td>
<td></td>
<td>(0.462326)</td>
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<tr>
<td>IMF_INTR</td>
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<tr>
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<td>(0.499029)</td>
<td></td>
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<tr>
<td>IMF_FIX</td>
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<tr>
<td></td>
<td>(0.437089)</td>
<td></td>
</tr>
</tbody>
</table>

**Bold=Significant**

R-squared  
0.413519  
R-squared  
0.402636

Note: * Significant at the 10-percent level. ** Significant at the 5-percent level. ***Significant at the 1-percent level.
It was expected that there would be some relationship between the exchange regime and growth, given that during the period under study many countries chose to have fixed exchange rates. The fixed exchange rate regime variable for both LYS (FixExLYS) and IMF (IMF_FIX) is the most important variable in this study. Theory suggests that it should be significant because it helps to stabilize the currency of countries and it facilitates trade with other nations. Based on OLS regressions, having a fixed exchange rate does not increase or promote growth among countries more than any other exchange rate regime such as intermediate or floating. There is the possibility that a fixed exchange rate regime helps stabilize countries.

The intermediate exchange regime as defined in the LYS classification (InteExLYS) is not statistically significant. Had the variable been significant, it would indicate that those countries that have intermediate exchange rate regimes grow faster or slower than those who have fixed exchange rate regimes. Out of the 150 countries in our sample, only thirty of them were classified as intermediate by the LYS classification. The variable (EXRRGCH) means that the country changed exchange rate regimes in the period covered in this study. The variable was not statistically significant which means that if a country chooses to change from fixed to floating or intermediate and vice versa it does not affect economic growth.

The variables that were statistically significant include total population (POP2010), total annual oil exports (OILEXP2010), annual population growth (POPGRWTH), and investment to GDP ratio (INVGDPR). The significance of the total population variable means that it enables highly populated countries to grow faster, given a broad base of aggregate demand. The significance of the OILEXP2010 variable means that countries that produce and export oil grow at a faster rate than those who do not produce and export oil. Since the variable reflecting oil exports is statistically significant, it demonstrates that countries who export larger quantities of oil will have higher growth rates. The investment to GDP variable (INVGDP) is positive and statistically significant. It shows how countries that have higher investment rates also have higher economic growth. The results are consistent with the De Vita and Kyaw (2011) who found that the choice of exchange rate regime does not affect economic growth in industrialized and non-industrialized nations. However, the results are not consistent with Levy-Yeyati and Sturzenegger (2003) who reported that the choice of exchange rate regime only affects non-industrialized countries.

**Conclusion**

The research found that there is no relationship between the exchange rate regimes and economic growth. Out of the five variables that represent the choice of an exchange rate regime, none of these were statistically significant, implying that the choice of exchange rate regime does not affect the economic growth of
countries regardless of whether countries are industrialized or non-industrialized.
The result stands in sharp contrast with the Levy-Yeyati and Sturzenegger (2003) results claiming that the choice of exchange rate regime only affects economic growth in non-industrialized nations. The results in this study are similar to De Vita and Kyaw (2011) who found that industrialized and non-industrialized nations are not more or less pro-growth based on the exchange rate regime.

The present article contributes to the literature by employing a variable EXRRGCH that has not been used in previous studies. The variable picks up any effects when a country has changed the exchange rate regime in the period 1980-2010. The variable measures how countries are affected in terms of economic growth when they decide to change the exchange rate regime. However, EXRRGCH was not statistically significant which implies that when countries change the exchange rate, economic growth is not affected. A possible explanation for this is that countries tend to adapt to their financial needs and adjust the currency to maintain its stability. A focus on only non-industrialized countries may yet produce different results but there are serious limitations due to the lack of available data.


## List of Countries (150 Country Sample)

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
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<tbody>
<tr>
<td>Albania</td>
<td>Finland</td>
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<tr>
<td>Algeria</td>
<td>Former Yugoslav Republic of Macedonia</td>
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<tr>
<td>Angola</td>
<td>France</td>
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<td>India</td>
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<td>Belarus</td>
<td>Indonesia</td>
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<tr>
<td>Belgium</td>
<td>Islamic Republic of Afghanistan</td>
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<td>Belize</td>
<td>Islamic Republic of Iran</td>
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<td>Israel</td>
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<td>Bolivia</td>
<td>Jamaica</td>
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<tr>
<td>Bosnia and Herzegovina</td>
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<td>Oman</td>
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<td>Estonia</td>
<td>Pakistan</td>
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</table>

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Exploring the Relationship of how Indigenous Students’ Identity Formation Affects their Aspirations for a Higher Education: From the Standpoint of Mixtecas

Eddie Triste
Dr. Manuel Barajas, Faculty Mentor

Abstract

This research examines Indigenous Mixtecan identity formation and explores how it relates to aspirations for higher education. Little is known about the youth who grow up in the United States with an indigenous upbringing but within a Eurocentric educational and societal context. This research explores the questions: How does indigenous students’ identity formation affect their aspirations for a higher education? How does their indigenous social capital (i.e., community ties and culture) help and hinder their academic achievement? Through qualitative, in-depth interviews with six Mixtecan college students, this study examines these questions and identifies how indigenous social and cultural capitals serve as motivators to these students, irrespective of their self-identification as indigenous or not. Results include that regardless of identity, students from farm working backgrounds see their communities as a source of positive motivation and support. Further, students, who do identify as indigenous, use their culture capital to guide them through higher education, e.g. seeking knowledge of their history, understanding social injustices, and giving back to their community.

Introduction

Latinas/Latinos in California now represent over fifty percent of students in our K-12 public educational system (Barajas 2011; Jeffrey S. Passel Pew Hispanic Center 2006). However, Latino/Latina classification has many sub-categories depending how the individuals identify themselves within this population. In the past thirty years, immigrants from Mexico to the United States form about 30% of the total and the largest immigrant population (Jeffrey S. Passel Pew Hispanic Center 2006). This migration also reflects much diversity and includes communities that maintain an indigenous identity, those who have not yet adopted the Mexican nationality identity (Barajas 2014). These indigenous migrants retain their cultural practices, language, communal way of living, and ethnic identity. Although they have managed to integrate into U.S. society, it
has not been easy or complete. Their integration has primarily been through the
work force, occupying low wage and unskilled jobs: like service and agricultural
occupations (Jeffrey S. Passel Pew Hispanic Center 2006). Unlike earlier mass
indigenous migrations such as those that occur as a result of the Bracero Program,
which were composed of primarily men, indigenous peoples migrating in the
post-NAFTA period consist of whole families that include women and children,
who face the challenges of incorporation into a new American society. Children’s
opportunity to integrate occurs primarily through the educational system.

The educational system has its own form of integration that has the potential to
suppress the formation of an indigenous identity, while imposing the mainstream
American one. Bean et al. (2007) elaborate on the institutional design of
integration that forces students to assimilate into the mainstream Eurocentric
culture. Ruiz and Barajas (2012) further discuss how indigenous students’
integration into public education is more complicated with overlapping and
competing hierarchical cultures, which suppress those of racial ethnic minorities.
For instance, as minorities with numeric majority status in schools, Latinas/
Latinos students can deter indigenous students to either reject mainstream white
culture and/or reject traditional indigenous cultures/identities by shaming them
for their differences i.e. language, culture, accent, customs, and appearance.
Barajas (2009) explains the forming of a separate identity as “Nepantla” or a
hybrid identity that does not reflect that of the “traditional-home” culture or
that of the dominant white culture. Furthermore, this identity which is aided by
indigenous social capital and communal structure may allow for students to retain
enough support to aspire for a higher education.

In 2011, the passage of the California Dream Act offered children of immigrant
communities, including the various indigenous ethnicities access to higher
education and a more hopeful future than their families had, one that remained
largely in the shadows of the economy and society (McGreevy and York 2011).
Education is one of the major pathways to help change one’s socio-economic
status. Past research has been conducted on Latino/Latina student achievement,
but few have explored the internal diversity of the Mexican-origin population,
particularly those who identify as indigenous and have a farm work background
(Ruiz and Barajas 2012). The purpose of this work will focus on the motivational
factors that inspire indigenous people from Oaxaca to pursue/attain a higher
education. This research objective is important given the extreme inequities
that indigenous people have faced over centuries across borders, particularly
in the U.S. where they are marginalized (Barajas 2009). Indigenous people are
not only marginalized by their own Mexican co-nationals but also by the larger
mainstream society, which homogenizes them as monolithic Mexicans and very
often misclassifies their needs/abilities in academic settings (Ruiz and Barajas
2012). This study will also assess various theories’ explanatory power in making
sense of how indigenous cultural and social capital —e.g., communal resources— assist Oaxacan students who navigate both an unfriendly and unfriendly educational system. The research will first review the relevant scholarship on Mexican-origin indigenous students’ experiences within the educational system, the marginalization they face in society, educational barriers, English as a Second Language, and mentorship. The author will also review various common theories explaining educational success. This study through qualitative interviews explores how identity formation relates to educational aspirations among indigenous students and how their indigenous social capital contributes or does not contribute to their educational success.

**Literature Review**

**Educational system**

With the demographic shifts in the United States in the 1990s, when Latino and Asian immigrants surpassed European immigrants as the largest foreign-born populations, nativistic, assimilationist, and exclusionary legislation was immediately enacted with proposals such as Proposition 187 and Proposition 227 (Barajas 2012). A dialectical analysis provides us with a lens that integrates race, class, and gender to understand how legislative action alienates students from school and further promotes an insider/outsider mentality among them (Barajas 2009). Indigenous communities have been historically marginalized, not only within Latina/Latino communities but also within mainstream America which racializes ethnicities as undeserving members of the nation and denies them basic human rights: food, education, housing, health, and citizenship (Barajas 2012, 2014; Gonzalez 1994; Menchaca 1995).

Historically in agricultural rural areas in California, public schools have been failing Mexican-origin students and more so, indigenous students (Ramirez 2011; Ruiz and Barajas 2012). In poor rural California, segregated schools create an inferior education for people of color who reside in farm working communities (Barajas 2009; Menchaca 1995). The impacted people have included Pilipino, Japanese, Chinese, and Mexicans. This research will focus on indigenous people from Mexico because these communities have been a historically and continuously marginalized population in California (Barajas 2009, 2014). Coming from a farm labor background, the author’s first-hand experience with racial-ethnic abuse in the educational system as a child, provided insights about how racial-ethnic abuse impacts identity formation. The school generally treated all indigenous groups as Mexican, though many came from diverse Meso-American regions and cultures.
Marginalization

Indigenous groups’ cultures are marginalized, which creates academic challenges for children (Ruiz and Barajas 2012). Language barriers between parents and teachers reduce students’ access to educational resources. Further, not knowing the language or practice of American culture places indigenous students at odds with more Americanized children, who ridicule the former for being different (Bean et al. 2007; Ruiz and Barajas 2012). Within the Chicano/ Latino community, ethnic hierarchies also exist; this further marginalizes the students and alienates them from their more mainstream counter-parts (Ruiz and Barajas 2012). Moreover, assimilated and selectively assimilated Latinas/Latinos place indigenous students to the extreme margins, which pushes them to reject mainstream America or reject their own indigenous identities and culture (Barajas 2014; Ruiz and Barajas 2012). Portes and Rumbaut (2006) classify this acculturation path as downward assimilation or oppositional culture. This classification, however, indicates that claiming an indigenous identity is deviant or defective and responsible for student failure (Barajas 2009). Barajas (2009) uses Interactive Colonization Theory to explain that deviation from mainstream society is not defective but results in the emergence of new and hybrid identities that reflect the lives of those living in between unequal worlds. For instance, historically Mexican-origin students have been marginalized in education: experiencing lack of resources, segregated classrooms, and have been recipients of hygiene policies like bathing at school (Gonzalez 1994; Menchaca 1995). More recently, indigenous students are separated and tracked into remedial/ESL (English as a Second Language) classrooms where opportunities to higher education are reduced and ESL students have limited access to college preparatory classes (Ruiz and Barajas 2012).

Educational Barriers

Students who migrated to the United States as children without documentation face many obstacles, among them are: lack of knowledge of mainstream culture, lack of mentors, experiencing hostility from the ideologies of nativism, and reduced access to resources (Ramirez 2011; Ruiz and Barajas 2012). As high school graduation nears for those who get that far, undocumented students face a reality of how to afford a college degree. Scholarships in rural farm working areas in California do exist for undocumented students; but since farm work is one of the primary industries that uses and exploits undocumented labor, the area is populated with a majority of these individuals (Barajas 2009). Thus, the number of scholarships is limited, and only a small number of these students receive them. If students have made it through the barrier of funding for higher education, the educational system presents more obstacles for students. Limited opportunities for research at the undergraduate level hinders students from gaining critical knowledge of how to do research and makes them less appealing to doctoral and
master’s level education programs (Ramirez 2011). In addition, equity programs that help first generation students’ transition into college are denied to the undocumented students, e.g., TRIO and Educational Opportunity Program because federal funding is denied to the undocumented.

English as a Second Language – ESL
The educational system has implemented programs to help transitioning Mexican immigrant students into school, but those initiating these programs rarely reflect the cultural knowledge of incoming indigenous students and fail to address their lack of literacy and written knowledge in both Spanish and English (Ramirez 2011; Ruiz and Barajas 2012). Consequently, the majority of students are placed in remedial classes that do not consider their high potential or their specific needs. This placement actually hurts their learning due to enrollment into ESL classes. The steps after enrollment slow the integration of newly arriving Mexican indigenous students and do not provide them with essential skills to enroll in higher academia (Ramirez 2011). Today, many indigenous children, who arrive from the southern states of Mexico, primarily Oaxaca, lack the cultural knowledge embedded in the ESL program.

Mentorship
The inclusion of minorities into accessible and quality public education remains challenging though the civil rights movement made some brief openings such as: the creation of ethnic studies, integrated schools, and the hiring of women professors as well as the hiring of professors of color. Although diversity in higher education has gained popularity on some campuses, the evidence that universities have become more diverse among their faculty is weak, particularly among historically underrepresented groups like Chicanas/Chicanos (Barajas 2011). In most colleges, a diversity value can be found in their mission statement but not in their hiring practices (Barajas 2011). Research shows that the majority of ethnically diverse faculty members have been historically found in African American institutions and in two year colleges (Kennelly, Misra, and Karides 1999). This poses a problem for all students, particularly those of color, entering any level of higher education. Students require culturally diverse institutions with faculty that reflect their background and/or lived experiences to be able to navigate and succeed in higher education (Ceja 2010; Ramirez 2011). Rural farm working students have parents with little to no formal education and find a bigger distance in the already large gap between student diversity and faculty homogeneity in higher education (Gonzalez 1994; Menchaca 1995; Kennelly, Misra, and Karides 1999). The inclusion of faculty members, which reflect these students’ histories and cultures, have shown to help these students excel in their aspirations of attaining a higher level of education (Ramirez 2011). The author will now review some relevant conceptual frameworks that have been used to
explain student achievement among racial minorities, and the author will lay out the theories that will help analyze the research findings.

**Assimilation Theory**

Bean et al. (2007) explain that the school system seeks to integrate students into mainstream white culture, or in other words, assimilate them into American culture. Assimilation theory expects academic success to occur based on the ability to assimilate. However, this theory does not problematize how racial-ethnic minorities are forced to shed their culture and heritage to be integrated into mainstream society. Assimilation theory is also flawed in the context of race, class, and gender inequalities as observed in the Japanese internment camps and more recently Great Deportations (Barajas 2012; Golash-Boza 2012). In both situations, these immigrants were racially discriminated against even though both had learned the language and were contributing members to U.S. society. A notable example of racial targeting and marginalization occurred during the creation and passage of Proposition 187 in California in 1994 which required that U.S. born children be denied access to public health and education if their parents were undocumented. The targets of this bill were children who were largely Americanized, as they predominately spoke English and were U.S. born. This theory does not inform this study because it lacks empirical and theoretical support when applied to historically marginalized communities such as indigenous people from the Americas and African Americans (Portes and Rumbaut 2006; Barajas 2012).

**Segmented Assimilation Theory**

Portes and Rumbaut (2006) propose segmented assimilation for understanding minority/immigrant integration in U.S. society and suggest that there are three acculturation paths that immigrants may take. The first acculturation path is assimilation, which is elaborated in the previous theory above. The second is selective acculturation, whereby immigrants retain their parents’ culture while strategically selecting culture from the host society. According to Portes and Rumbaut (2006), this path produces the greatest benefits and achievements for the immigrants’ children. The third path is downward assimilation, when the immigrant children do not reflect their parents’ nor the dominant group’s culture but form a new one. In Portes and Rumbaut’s (2006) view, for example, Chicano and Cholo cultures and other creative hybridities present challenges and downward assimilation for immigrants. This assumption is problematic. If a person deviates from either being fully assimilated or from their parents’ culture, the new hybrid identity is considered an example of downward assimilation or oppositional culture (Bean et al. 2007; Portes and Rumbaut 2006).

This study consists of people who retain their indigenous identity and are of Mexican origin. They generally reflect the selective acculturation path, as they
retain their traditional cultural values and are integrating into a mainstream one in higher education. However, this researcher does not classify those indigenous students who no longer reflect the parent culture or the dominant one as defective. This theory lacks analysis of the historical and structural relationships that exist between the United States and Mexico (or dominant and minority groups) and how these inequalities shape identity formation and produce new emergent identities, i.e., Nepantla, which reflect a common and normal experience for many racialized minority groups (Barajas 2009).

Interactive Colonization Theory
Barajas (2009) adds a unique view into immigration and migration that sheds light onto the retention of identities among transnational communities. Post-NAFTA migration saw whole communities migrate from their homelands to the United States, and when they came, they brought their traditions, culture, language, community, and communal structure, including multiple generations in the migration (Barajas 2009). This migration is unique because whole communities were involved, and their social ties transcended the nation, e.g., transnationalism. Transnational networks allow these communities to have somewhat of a foundation of support because the network provides a safety net as incoming members of a community arrive to the United States. Because these communities are marginalized in the larger national context, their culture often experiences transformations among the younger generations who experience several social and cultural contexts, e.g., they move from their parents’ culture to the dominant culture.

Barajas (2009) places identity formation of indigenous students within a historical context of colonialism, dialectical inequalities, and social interactionism (through transnational social ties). Although interactive colonization theory explains social capital, it explains it in the context of migration and national inequalities. In this study, the researcher examines how communal ties and integration with one’s own community affect aspirations for higher education. Within the context of historical inequalities, indigenous communities have been subordinated and forced to abandon their cultures and identities (Ruiz and Barajas 2012). Hence, in the educational setting, this study explores whether students that remain connected to and are in good terms with their indigenous communities have more resources to endure and protect themselves from predominately Eurocentric institutions, which continue to marginalize their existence. Like Portes and Rumbaut (2006), those that selectively acculturate are expected to do the best academically. Unlike Portes and Rumbaut (2006), those that experience being in-between two unequal worlds over time and form a unique culture and identity are not considered defective or deviant for not resembling the parent or host cultures but rather reflect a hybridity or nepantla (Barajas 2009). To further elaborate the need of affirming communities to
historically marginalized communities, the author will now discuss social and cultural capitals that indigenous students can benefit from.

**Social and Cultural Capitals**

Social and cultural capitals are used to explain ties that one has due to group membership. These memberships allow individuals to access resources that would otherwise be unattainable. One’s social standings within society will enhance social mobility into upper classes or social status within the group (Ramirez 2011; Stanton-Salazar 1997). Inclusions of social and cultural capitals are important concepts to further our knowledge of how community impacts indigenous students. However, social and cultural capitals are dictated as unearned resources that are provided based on connections or knowledge that status provides. The researchers’ interpretation and usage of this theory will consist of looking at the emotional and motivational forces that the respondents receive or do not receive. Community members act as a motivational force to pursue and attain higher education at a time when college has become more inaccessible to first-generation and minority students, as a result of reductions in government support to education, lack of diversity among the faculty and curriculum, higher tuition fees, and less class availability (Barajas 2011). Connectedness to and participation with one’s culture offers Mexican-origin indigenous students access to various community members.

**Methods**

This study uses qualitative in-depth interviews to explore the educational experiences of indigenous students. A purposive snowball sampling technique was used to identify six indigenous students who come from Oaxaca or who are of the many indigenous ethnicities of Oaxacan descent. Gatekeepers provided further access to the population identified; gatekeepers were chosen for their knowledge of the Mixtecas. All were from the community or worked with the community within cultural settings such as: Danza (which is a cultural dance), Guelaguetza (which is a traditional cultural event) or were elders from the community. This sample includes two cohorts: The first cohort (Cohort A) has graduated from high school or obtained a GED and reported that they continue to practice and participate in their traditional culture. These individuals attended a community college, a California State University, or University of California campuses. The second cohort (Cohort B) graduated from high school or obtained a GED and attend a community college, a California State University, or a University of California campus, but the participants no longer identifies with their indigenous background. No longer identifying as indigenous doesn’t exclusively mean that one no longer expresses communal values nor practice cultural traditions; it simply reflects that the respondent has homogenized into the larger Mexican
identity or even that of the larger mainstream white culture and no longer recognizes indigenous culture as being their own. Both cohorts reported that they come from farm working backgrounds and are between the ages of eighteen to twenty-five.

The structure of the interviews and questions asked (See Appendix) were flexible to allow the participants free expression. A qualitative method was chosen to gather in-depth personal experiences from the participants. This study has no intention of generalizing to a larger group but rather to explore experiences of indigenous students in depth so as to identify and understand some of the major experiences faced in pursuing higher education. The study will focus on these factors: 1) an individual’s sense of identity, 2) an individual’s sense of community, 3) individual’s aspirations in attaining a higher education, and 4) general support networks. Obstacles during data collection were: access to population, distance between research participants, full cooperation from gatekeepers, attaining sufficient participants, and time allocated to conduct research. Although the obstacles were numerous, provisions were made to minimize complications. Gatekeepers have been designated in each of the locations mentioned: a community college, a California State University and a University of California.

**Results**

Knowledge of one’s history provides an understanding of who one is and helps to guide/reach present and future goals constructively by applying lessons from the past. Indigenous students’ understanding about how racial and ethnic discrimination in Mexico and United States have affected their group position in the larger society. Their awareness of their indigenous identity helps combat racial-ethnic stereotypes and helps to inform programs that nurture respect and equity across group differences. This knowledge also helps students by providing a healthy self-concept and self-esteem. They are able to define themselves in positive terms which benefit their levels of confidence and academic success.

When asked how their identity affected their aspiration to higher education, the students’ responses illuminate how their identity informed their academic orientation. Questions ten, eleven, and eighteen asked are relevant to answering the broader question. As one respondent put it, “Your identity gives you a purpose, and for me it helped me know what I wanted to study, when you know your identity and you know the struggles your community has, I feel that it empowers you to continue.” Another respondent also highlighted, “I needed to start learning why is it that I am being discriminated against for who I am and that’s when I started to learn more about my culture, my family, my family’s history, my families’ town, basically my heritage.” This specific respondent later mentioned,
All the answers are in your historical ancestors, and the only thing education will do is give you a strategic position to approach certain things and that’s why I am in school is to learn how the world is being ruled by the economic policies being implemented throughout the world, and how governments are trying to cope with development, economic crisis and how they are trying to better themselves... I look at it as an opportunity to see how the world functions.

While these questions did not explicitly ask about educational aspirations or motivations, these questions led to responses that illuminate what motivated students to higher education (and while in higher education). Their educational aspirations did not include individualistic pursuits of money, cars, and status; they included a contextual view of the community they come from and aspirations of how to integrate their teachings from their community and their higher education back into the struggles of the marginalized. Apparently, the hostile social context against their indigenous community has clearly affected their academic goals, and they are interested in expanding their education and using it to improve the quality of life for their community.

How does their indigenous social capital (i.e., community ties and culture) help and hinder academic achievement?

This research focused on one main factor that related all participants to each other, whether indigenous identifying or not, that being a farm working background. Their communal ties to the fields and aspects of farm worker life showed a strong association that this line of work not only marginalizes, but it also oppresses the whole community, creating shared experiences amongst participants. All participants stated that their inspiration, motivation, and desire to excel in academia are a result of their surrounding farm working communities. Questions twelve, twenty-one, twenty-two, and twenty-three (See Appendix) informed these responses. One participant who did not identify as indigenous stated:

My mother watches the children of the workers, some of them are single parents and our home has become theirs. The people in the fields work long hours and my mother takes it upon herself to feed them and sometimes take them baths when they get dirty. All of the children come from the neighborhood and we all grow together. I wasn’t too involved in high school, because I would go home and help her. She inspires me to do good in school when I feel overwhelmed with school.

Another participant stated,

It’s always my grandparents, my mom and my most direct family that I think about. My grandmother always tells me that it’s good that I study because she doesn’t want me to be struggling like her, she doesn’t want me to work in the fields, get married and struggle to survive. My mom is the same, she uses
herself as an example and says that she is not the happiest person, she says you can have an easier route.

The two other participants noted, “wow it’s amazing I’m the survivor of 500 years of genocide that I’m the survivor of so much discrimination” and “because of the migration those who are here are in poverty.” With this context, they allowed themselves to see the structure of the oppression they faced.

Some failed to draw the connection between the past and present circumstances. Although these individuals didn’t identify as indigenous, their communities operated within an indigenous framework: being very communal, sharing resources, and ultimately providing motivation for the youth. This was further expressed with the participants that recognized their communal framework as being indigenous. One participant added, “The way we address each other is respectful, no hierarchy exists”. This participant later added:

As a History and Sociology major I feel we talk a lot about the oppressed, but there is a disconnect because students just think ah yeah poor people, and some have so much privilege that they are amazed that these things happen in the U.S. and to me I think my family lives this and the value of knowing all of your knowledge doesn’t come from the institution is also empowering. So when all these things like institutional racism, difficulties with my major I think about that school is not going to teach me everything and I feel it’s my job to fulfill the other things that are missing and I do that through my community, my mom, and when my grandparents talk to me. It helps me fill that emptiness that I feel in school, even though school is good intellectually and communicating or organizing with students makes me feel happy. I feel most fulfilled when I am doing these things with my community.

Students direct involvement with their communities has given them a direct understanding of the farm work their families do and how it is oppressive at all levels: low wages, oppressive managers, and hazardous working conditions (Barajas 2009). Communities will help with the aspirations of the youth. When asked question about community’s influence on them, one respondent shared his experience about the motivational factors for pursuing higher education, specifically pointing to his experience working in the fields while school is not in session:

It always been my own community, when I’m not in school it’s like my uncle, my cousin, the father of someone I’m working with, always someone who comes from my background. They encourage me to strive for more, they give me strength, every time I’m working in either the winter or the summer they tell me not to drop out to keep going and sometimes they give me the responsibility that you are representing us, because we never had the chance, and you have the chance, no one told us that we had a chance what they actually did was take away our chances... There have been instances that the
workers have given me money to help me and farm workers don’t make shit, let’s be honest they are poor, they are basically enslaved, they live in the poorer neighborhoods, they shop in the poorer markets, and get the poorer products and yet they are still able to have faith in me and help fund my education.

Conclusion

Through genocide, colonialism, guest work policies, Structural Adjustment Acts, the North American Free Trade Agreement (NAFTA), Proposition 187 and Proposition 227, indigenous people in the Americas have been persistently hurt since the advancement of Europeans (Barajas 2009, 2014). Today, through legislation like California’s Dream Act, movements have sought to improve the treatment of undocumented students, but access to scholarship/financial support needs to be expanded to address the challenges of a community that has been historically marginalized. Leaders of the world are moving to traditions that have predominately resided in indigenous cultures such as sustainability, organic agriculture, and a greater appreciation for nature. We must ask ourselves this question: how is it that an impoverished community that has been historically oppressed can maneuver through a society and succeed with education? We must continue to integrate people into our society without marginalizing their indigenous culture. In their communal culture and practices the respondents shed light on how to create positive environments that help them navigate higher education and succeed in academic spaces that might not be too nurturing to minorities. Regardless of identifying as indigenous or not, all respondents credited their communities for their perseverance and success in higher education. More research on this topic is critical since little research has been published on it.

With the permission of the indigenous communities, an accurate picture into the structure, values, and motivations of the community can be understood. This study’s policy recommendations include the increasing funding sources (state, federal, and private) to these marginalized communities in the San Joaquin Valley, who have given so much of their lives and labor to make this state the eighth largest economy in the world. Understanding the roots of their migration and historical experiences with unequal treatment in their incorporation into society, any comprehensive immigration proposal should be guided by this knowledge and by human rights and justice principles. Indigenous students deserve to exist with dignity, prosper without worry of material and social hardships, and follow their own dreams. Humane comprehensive immigration reform can only be created by listening to the voices of those who will be directly affected by the policy.
References


APPENDIX

Interview Questions

1. How do you ethnically identify yourself?
2. What is your mother’s occupation?
3. What is your father’s occupation?
4. Have languages other than Spanish/English been spoken in your household?
5. How has having an indigenous identity shaped interactions with students in high school?
6. How has having an indigenous identity shaped interactions with students in higher education?
7. How have you been received by students while attending high school?
8. How have you been received by students while attending in higher education?
9. How have these educational experiences shaped your identity?
10. How have you been received by teachers/professors while attending high school and in higher education?
11. Can you explain any situations that you may have encountered that challenged the identity you had developed at that time?
12. How has your community shaped your identity?
13. What advice would give to newly arriving indigenous students who want to enter into higher academia?
14. What kind of involvement in your community have you participated in?
15. If/When you feel discouraged about school who/whom do you find strength in to pursue your goals of attaining a higher education?
16. Can you list some of the cultural events you participate in as a student in higher education? How have those events changed/stayed constant over time?
17. What are some of the motivations you have in pursuing higher education?
18. How does your indigenous identity integrate with the lessons you learn in college?
19. Is there a sense of belonging in the larger community? Why?
20. Is there a sense of belonging in school? Why?

21. Is there a sense of belonging at work? Why?

22. How do your relationships to family help or hinder your educational goals?

23. How do your relationships to your community help or hinder your educational goals?
Abstract

High rates of obesity in the United States are correlated to chronic diseases like cardiovascular disease, diabetes, and cancer; fruits and vegetables play a key role in preventing these illnesses. The purpose of the study was to analyze the fruit and vegetable intake of a sample of Sacramento State students (n=32). A cross-sectional design was used where data collection included a survey and a three-day food record. Demographic variables (income, ethnicity, gender, and BMI) were compared to fruit and vegetable intake. On average, students did not meet fruit and vegetable recommendations regardless of BMI, gender, or ethnicity. Students with higher incomes consumed more fruits and vegetables. Qualitative analysis indicated that time, access, and preparation were the three main obstacles to consumption.

Introduction

Obesity has become an epidemic in the United States that affects the quality of life among many Americans today. According to the National Health and Nutrition Examination Survey conducted by the Center for Disease Control (2012), more than one third of Americans are obese (Ogden et al. 2012). Due to an ample portion of the population being obese, many health concerns have arisen. These complications include Type 2 diabetes, hypertension, adverse lipid concentrations, cardiovascular disease, and high medical costs. The National Health and Nutrition Examination Survey 2009-2010 reported in 1995, that the total cost spent on health issues due to obesity was 78.5 billion dollars. In 2008, costs had risen to 147 billion dollars, and roughly half were being covered by government healthcare programs (Ogden et al. 2012).

Fruits and vegetables are rich in vitamins, minerals, fiber, and low in energy-density; therefore, promoting increased consumption of fruits and vegetables is commonly used as a prevention strategy for obesity and some cancers. Longitudinal and cross-sectional studies of adults have found an inverse relationship between fruit and vegetable consumption and obesity (Ledoux, Hingle and Baranowski 2011). Reiss et al. (2012) postulated that an adequate intake of fruits and vegetables could potentially reduce the chances of developing
oral, stomach, colon, lung, and rectum cancers. Along with cancer reduction, if one half of the U.S population consumed one more serving of fruits and vegetables per day, an estimated 20,000 cancer cases would be avoided each year (Reiss et al. 2012).

National food guidance programs like the United States Department of Agriculture (USDA) MyPlate and Dietary Guidelines of America have been developed to assist the American population with increasing their fruit and vegetable consumption (United States Department of Agriculture n.d.). For example, the U.S Dietary Guidelines recommend that adults consume at least two and a half cups of vegetables and two cups of fruits each day, and to meet that recommendation (Dietary Guidelines for Americans n.d.), MyPlate suggests making half your plate fruits and vegetables (United States Department of Agriculture n.d.). The purpose of this study was to analyze the fruit and vegetable intake of a sample of Sacramento State students (n=32).

Literature Review

Two of the top-ten leading causes of death in the U.S are cardiovascular disease and cancer. According to the Center for Disease Control, cardiovascular disease killed 597,689 people and cancer killed 574,743 in 2010 (Center for Disease Control 2013). Organizations like the Center for Disease Control (2012), World Health Organization (n.d.), and The Mayo Clinic (2014) have come to a consensus that the risk of heart disease can be reduced with the consumption of fruits and vegetables. Fruits and vegetables are of particular concern because of the high levels of vitamins, minerals, and other nutrients that work together for optimal health. Epidemiological studies have demonstrated that higher concentrations of low-density protein (LDL) increase the risk of developing heart disease (Ledoux, Hingle, and Baranowski 2011; Reiss et al. 2012). Lipoproteins are compounds found in the bloodstream that contain various amounts of fats within a shell of protein and phospholipids. Low-density lipoprotein or LDLs however, are lipoproteins in the blood that contain high amounts of cholesterol (Wardlaw, Hampl and DiSilvestro 2004). A cross-sectional study looking at the association of fruits and vegetables to LDL levels found a correlation between the two. Subjects in the highest fruit and vegetable intake groups had LDL concentrations that were 6% to 7% lower than those in the lowest fruit and vegetable intake groups (Djoussé et al. 2004).

The National Cancer Institute of America conducted a study, examining the connection between diet and cancer (Erdman, Macdonald, and Zeisel 2012). None of the results found that food directly cures cancer; however, they did find a relationship between the two. Consuming foods high in vitamins and minerals before cancer has developed showed positive correlations to the reduction of
A higher intake of fried potato products was associated with higher total fat in the diet, as well as higher fruit juice intake was associated with a higher daily consumption of sugar (fruit juices were classified as sugar sweetened beverages) (Chung and Hoerr 2005).

The transitional period from adolescence to young adulthood has been highlighted as an important stage in terms of fruit and vegetable consumption. The American Journal of Preventative Medicine published a study drawing information from the Eating Among Teens Program (EAT), that examined the determinants of dietary intake and weight status. Larson et al. (2008) tracked 1,495 young adults during the transitional period to young adulthood, where participants were examined at fifteen years of age and again at twenty years of age; variables assessed were socioeconomic status, employment, and education. Results indicated that personal, behavioral, and socioeconomic factors influenced the decline in the intake of fruits and vegetables in that time frame. Factors like breakfast, fast food, and taste preferences were highly related to fruit and vegetable consumption habits (Larson et al. 2008). Chung and Hoerr (2005) also concluded that adolescents should be provided with the opportunity to taste a wide variety of fruits and vegetables through numerous avenues.

Since fruit and vegetables can be expensive, socioeconomic status (SES) becomes particularly important. Three main studies highlight important variables when dealing with fruit and vegetable consumption and barriers low-income families might encounter (Beydoun, Powell, and Wang 2008; Cassady, Jetter, and Culp
Affordability is one of the major obstacles that low-income individuals come across in terms of diet quality. Beydoun, Powell, and Wang (2008) examined the effects that prices of fast foods versus the price of fruits and vegetables have on dietary intake and body mass index (BMI). Individuals (n=7,331) twenty to sixty-five years old were assessed regarding dietary intake, BMI, and family income. Socio-demographic factors were associated with food price and diet quality (fruit and vegetable prices) (Beydoun, Powell, and Wang 2008). Powell, Zhao, and Wang (2009) studied the association of fast food, fruit, and vegetable prices with dietary intakes among US adults. They found that as fast food price index (FFPI) increased, their overall diet quality increased as well. As the prices rose, the more fruits and vegetables were consumed. Diet quality refers to having a balance of protein (15%), carbohydrates (55%), and fat (30%). FFPI was associated with higher fiber intake and lower saturated fat intake (Powell, Zhao, and Wang 2009). Cassady, Culp, and Jetter (2007) surveyed twenty-five supermarkets to investigate fruit and vegetable prices and the relationship to neighborhood income level. The results showed that low income families would have to devote 43% to 70% of their food budget to fruits and vegetables to meet daily recommended amounts (Cassady, Jetter, and Culp 2007). The reality of having to devote that much income to fruits and vegetables creates barriers for many low-income families who do not have the resources to meet these needs. These families consisted of young adults living on their own. Powell, Zhao, and Wang (2009) looked at the connection between fruit and vegetable consumption and food prices. This was a narrowed focus of the previous-mentioned study looking at eighteen to twenty-three year old young adults. The results showed that fruit and vegetable consumption was strongly associated with fruit and vegetable prices (Powell, Zhao, and Wang 2009). These studies highlight the fact that family income and the price of fruits, vegetables, and fast food, dictate overall diet quality.

Reviewing studies on college students revealed that exposure and environment are important factors in their fruit and vegetable intake (American College Health Association 2011; De Bruijn 2010; Yeh et al. 2012). Location and background were a reoccurring theme among these studies. Young adults who have come from low-income homes or who were not exposed to fruits and vegetables regularly are at a disadvantage. Students’ residential conditions played large roles in the consumption of fruits and vegetables. Particularly, one study pointed out that living on a college campus; specifically in dormitories, increased the fruit and overall nutrient profile (Brunt and Rhee 2008). However, a similar study emphasized that males who lived on campus were three times more likely to be overweight or obese (Yeh et al. 2012). Students living on campus had higher BMI’s compared to those who did not. Yet, living off campus posed barriers of cooking and preparing nutrient-dense foods. One thing they both had in common were competing foods. This is an idea that fast foods, sugary snacks, high
calorie beverages and other empty calorie foods were being chosen over nutrient-dense foods. This can lead to a reduction in fruit and vegetable intake.

The American College Health Association—National College Health Assessment surveyed college students (n= 105,781) at 129 different institutions across the United States, including Sacramento State and found different nutritional patterns among young college students (American College Health Association 2011). The majority of males and females consumed one to two servings of fruit and vegetables a day which is far below the recommendation of at least five servings per day. However, some females (6.5 %) consumed five or more servings, while males (6.9%) reported that they consumed no fruits or vegetables that day (American College Health Association 2011).

This current study will investigate the fruit and vegetable intake of Sacramento State college students. This population is on one of the most diverse campuses across the country. These individuals are at the heart of an agricultural area with varied economic levels. Consumption patterns will be assessed using a three-day food record and analyzed using the dietary analysis software, Nutritionist Pro. The importance of this study is to gain a clearer understanding of fruit and vegetable consumption behaviors of college students in a sample attending Sacramento State. Previous studies have investigated the relationship between adults, young adults, and specifically college aged students and correlations to consumption pattern obstacles to healthy dieting and income levels. The focus of this study is to analyze the fruit and vegetable consumption patterns of a sample of Sacramento State’s students, using more rigorous data collection methods and compare the results to the current USDA Dietary Guidelines recommendations. Variables include age, Body Mass Index (BMI), income level, and average amount of fruit and vegetables consumed over a three-day period. It is hypothesized that age, race, gender, BMI, and income are correlated with fruit and vegetable intake amongst a sample of the Sacramento State students and that consumption levels will not meet recommendations.

Methods

Procedure

The current study used a cross-sectional design with data collected from October through December 2013. Participants were from Sacramento State, which is a four-year university located in an urban city. Individuals were recruited from the Student Health & Counseling Services, Health and Wellness Department. This department offers one-on-one diet counseling services to enrolled students of Sacramento State. The Student Health & Counseling office attracts individuals who want to improve their dietary behaviors and students who need the services as credit for a class. Before the consultation took place, the students
filled out health record forms. These forms asked participants to self-report their height, weight, age, weekly physical activities, and a three-day diet intake. The software used to analyze the three-day diet record was Nutritionist Pro, which is a program that analyzes an individual’s diet and compares the nutrient profile to recommendations based on their lifestyle. The system factors in calorie expenditure of employment (student, construction worker, athlete, etc.), height, weight, age, gender, and weekly exercise routine to determine caloric and nutrient needs. Once completed, the students returned this form to the department and scheduled an appointment for their consultation. These consultations were conducted by student interns working for the Health and Wellness Department for academic units.

After the consultations took place, the students were invited to participate in the study. If the students agreed to participate, they signed a consent form (See Appendix A). After students consented to participate in the study, the interns administered two surveys: one about fruit and vegetable intake (Appendix C) and another about demographic background (Appendix B). The content of the fruit and vegetable survey includes questions about fruit and vegetable intake, shopping, and cooking habits adapted. The demographics page includes questions about race, age, and income. Interns were trained in the Student Health & Counseling Department on how to obtain consent, administer the surveys, and store data so that it remained confidential. Each survey has a specific ID number that correlates with an individual folder. The ID number is used to properly pair the participant’s food record with their survey, while keeping their information confidential. After consent was received, the intern blacked out all personal information on the diet records so personal information was kept confidential. The results were then placed into a sealed envelope and stored in a locked box that could not be opened by others in the health center. Surveys do not have any identifying information, just an ID number. All documents were stored in an individual file folder numbered to match the number on the survey.

Data Analysis
The survey data were entered into Microsoft Excel, and then a descriptive statistical analysis was conducted. All participants were assigned an ID number, and no identifying information was entered. Each variable was number-coded for better organization. After data were entered and cleaned, everything was counted, and percentages were determined. Two methods were used to prevent any errors in the data entry. First, a spot check was administered. This required scanning the recorded data for any outliers or missing sections and pulling the original file. Second, data sorting was done. Each section of the data was double checked to ensure data were recorded properly. Then Nutritionist Pro calculated recommendations (i.e., fruit, vegetable and fiber) based on the national guidelines.
Results

Of fifty surveys completed, thirty-two (64%) contained all the necessary components for data analysis. Data from participants who did not complete the survey or failed to sign the consent form were not used. Demographic characteristics of participants (n = 32) in Table 1 show that 37.5% (n = 12) were male, and 62.5% (n = 20) were female. The racial breakdown was 3% African American, 28% Asian/Pacific Islander, 40% Caucasian, 6% Latin, 13% Hispanic, 6% Mixed, and 3% of other racial background. BMI ranged from 19.4 - 33.7 kg/m². The mean BMI was 23 kg/m². Approximately 69% (n = 22), were classified as having a healthy weight, 22% (n = 7) as overweight, and 9% (n = 3) as obese. The age range was seventeen to forty-four years with the average age being twenty-three. Socioeconomic factors indicated a large portion of the sample had income level at or below 20,000 (78%).

Table 1. Demographics of Participants

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<td>Male</td>
<td>12</td>
<td>37.5</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>62.5</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Asian</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>Mixed</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>White</td>
<td>13</td>
<td>40</td>
</tr>
<tr>
<td>Latino</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Body Mass Index (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underweight (%)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Healthy weight (%)</td>
<td>22</td>
<td>69</td>
</tr>
<tr>
<td>Overweight (%)</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>Obese (%)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31,000 +</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>26-30,000</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>21-25,000</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>&lt;20,000</td>
<td>25</td>
<td>78</td>
</tr>
</tbody>
</table>

Note: n = 32
Table 2 shows fruit, vegetable, and fiber intake by gender compared to USDA Dietary Reference Intakes (DRI) recommendations. According to recommendations, men and women should consume two cups of fruit a day and twenty-eight to thirty-five grams of fiber. Men should consume three cups of vegetables while women are recommended to consume two and a half cups. The average fruit and vegetable intake was one cup of each. Men consumed more fruits, vegetables, and fiber than women. However, neither male nor female met the recommended fruit, vegetable, or fiber intake.

Table 2. Fruit, Vegetable, and Fiber by Gender Compared to USDA and DRI Recommendations

<table>
<thead>
<tr>
<th></th>
<th>Average intake</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit (cups)</td>
<td>1.0</td>
<td>2</td>
</tr>
<tr>
<td>Male (M)</td>
<td>1.3</td>
<td>2</td>
</tr>
<tr>
<td>Female (F)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vegetable (cups)</td>
<td>1.12</td>
<td>2.5-3</td>
</tr>
<tr>
<td>Male (M)</td>
<td>1.4</td>
<td>3</td>
</tr>
<tr>
<td>Female (F)</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Fiber (grams)</td>
<td>20</td>
<td>25-38</td>
</tr>
<tr>
<td>Male (M)</td>
<td>24</td>
<td>38</td>
</tr>
<tr>
<td>Female (F)</td>
<td>18</td>
<td>25</td>
</tr>
</tbody>
</table>

Note: n= 32

Chart 1 summarizes the differences in fruit and vegetable consumption by BMI. On the left are numbers 1.0-4.0 indicating cups of consumption. The bottom lists
Normal weight participants consumed an average of one cup of vegetables and .71 cups of fruit. Overweight and obese participants consumed an average of 1.3 cups of vegetables and 1.6 cups of fruit. Overall, overweight participants consumed more cups of fruits and vegetables than normal weight participants.

Chart 2 outlines the differences between income and fruit and vegetable intake. The individuals with higher incomes consumed more fruits and vegetables than any other groups. However, those earning $20,000 or less consumed more than individuals earning $26,000–$30,000.

Qualitative data was collected through surveys. The survey had three open-ended questions, including a section for participants to write personal obstacles of fruit and vegetable consumption and aspects that would help them consume more. Answers were reviewed, and three themes were identified. The most prevalent obstacles regarding consumption for these students were lack of time to buy and prepare fruits and vegetables; lack of food preparation skills; and lack of access to good quality and affordable fruits and vegetables.

**Discussion**

This sample was primarily white (n=13), traditional college age, and had more female (n=20) participants than male (n=12). Other ethnicities participating were Asian, mixed, Hispanic, African American, and other (ethnicity not listed). The BMI (19.4-33.7) results were lower than the national average, where six out of ten were classified as overweight or obese due to many participants in this study being of a healthy weight (n=22) and only a small portion (one out of three) being overweight (n=10) (Ogden et al. 2012). The average age of the participants was twenty-three years old with the median income being $20,000 or less per year. These characteristics were due to the population sample being drawn from
services given by the Health and Wellness office at Sacramento State. Students who typically use this service are required to by various classes, which include but are not limited to, nutrition, aerobics, and exercise physiology. This service is also free and available to the general student body that may have nutrition concerns or inquiries. Therefore, it is possible that the participants in this study were at a healthier weight and had a healthier diet than the general Sacramento State student population.

The current study expands on a study done by the National College Health Association Health Assessment (NCHAHA) in 2011. They found BMI range was 18.5 - 40+, with 62.7 % being of healthy weight, 21.4 % being overweight, and 11 % being obese (American College Health Association 2011). The current study conducted on Sacramento State students found BMIs ranging from 19.4- 33.7, with 69% being of healthy weight, 7% being overweight, and 3% being obese. In the current study, 60.8% of males reported consuming one to two cups of fruits and vegetables per day, and 26.9% reported consuming three to four cups per day. To compare, in the NCHAHA study, males averaged 1.3 servings of fruit per day and 1.4 servings of vegetables. In the current study, 57% of females reported consuming one to two servings, and 31.9% reported consuming three to four servings per day. However, in the NCHAHA study, females averaged one serving of fruit and vegetables per day. In the current study, females reported consuming higher amounts of fruit and vegetables compared to the NCHAHA study.

The current study further investigated the relationship between BMI, gender, ethnicity, and income with fruit and vegetable consumption. Overweight participants consumed 1.31 cups of vegetables and 1.89 cups of fruit. Obese participants consumed the lowest amount: the average intake of vegetables was 0.66 cups and 1.17 cups of fruit. Males consumed more fiber (24g) than the fiber (18g) consumed by females. Dietary fiber is also known as bulk or roughage found in plant foods that the body cannot digest or absorb. According to the Mayo Clinic (2012), fiber lowers cholesterol, aids in controlling blood sugar, and helps with weight loss. All participants failed to consume the recommended daily amount of fiber, and the sources of fiber that were consumed were not solely from fruits and vegetables. This is evidenced by the low consumption patterns of fruits and vegetables. It can be assumed that consuming more total calories may have attributed to the higher consumption rates of fruits and vegetables while raising their fiber intake in males. Overall, the sample did not meet fruit and vegetable recommendations due to various barriers.

Reviewing the open-ended survey questions (See Appendix C) on the obstacles for consuming fruits and vegetables, various themes were found. Many participants struggled with time, preparation, and access. Considering the sample was entirely made up of college students, these barriers make sense. The students of this study reported not having the time to grocery shop, cook meals, or even
learn about how to be healthy. They also reported lacking the skills to prepare fruits and vegetables in a preferred manner. That could be prepping meals for a long day/week or being able to cook them in a way that tastes good. Having access to fruits and vegetables was another barrier reported by the participants. Many mentioned the campus lacking availability of fruits and vegetables while others mentioned lacking the knowledge of knowing where to get them.

In the current study, income and gender played a factor in the consumption of fruits and vegetables. Higher income correlated with higher fruit and vegetable intake. Powell, Zhao, and Wang (2009) looked at the connection between fruit and vegetable consumption and food prices and found that there was a strong association between the two. Their study focused on individuals aged eighteen to twenty-three, which is the traditional college age range, as well as a similar age range in the current study (Powell, Zhao, and Wang 2009). Chung and Hoerr (2005) conducted a study analyzing the differences between gender and consumption. Women actually consumed more fruits and vegetables daily than men did. Compared to the current study, men in the Chung and Hoerr (2005) study consumed more fruits and vegetables on average.

Based on quantitative and qualitative data collected, students are not consuming enough fruits and vegetables and barriers preventing this are time, preparation, and access. Currently, Sacramento State’s Student Health and Counseling Services Nutrition Department (n.d.) has many programs to increase the overall nutrition of the students. The department offers free cooking demos, wellness programs, workshops, and counseling. The cooking demos expose students to new recipes, foods, and food preparation skills. The wellness program called Well into Nutrition (WIN) is a healthy lifestyles program that focuses on meal planning, mindful eating, food label knowledge, fitness, and other nutrition related topics. Sacramento State also hosts a bi-weekly farmers market funded by Associate Student Inc. (ASI).

The obstacles of preparation and time could potentially be solved if the student body was informed of the Nutrition Department’s services and took advantage of them. Attending cooking demos would allow students to be taught how to prepare fruits and vegetables and the many ways to make food taste good while being healthy. According to a systematic review of nutrition interventions, it was found that face to face education or counseling lead to higher fruit and vegetable consumption (Pomerleau et al. 2005). Participating in the WIN Program would give students the tools and confidence to make healthy decisions and have a positive relationship with food. Students are allowed to meet with interns or a Registered Dietitian (R.D) for no charge during the academic year. In a systematic review by McCormack et al. (2010), on the effectiveness of farmers’ markets, six out of sixteen studies that were reviewed, reported that participating in farmers’ markets raised fruit and vegetable consumption. Two out of the sixteen found
that either fruit or vegetable consumption would rise (McCormack et al. 2010). The current farmers’ market on campus contains fruit, vegetables, bread, and honey vendors. The Health and Wellness Department is in the process of having free food vouchers to be used at the farmers’ market as an incentive for students. These valuable services are available for the entire student body, but an area for improvement is more effective communication with students informing them of the services available and creating ways to encourage them to use the services, which could ultimately influence fruit and vegetable consumption.

LIMITATIONS

This study population was comprised of primarily white, college aged females. Limitations of this study were time, origin of participants, and validity of food records. The sample was not randomly selected, thus the results from this study cannot be generalized beyond this sample. This study was conducted on a strict timeline of eight months with only three months for data collection, which prevented expansion of sample size. Many individuals participated because of a class assignment, while only a few participated for personal reasons. There is a possibility that participants did not adequately report their intake over the three-day period.

CONCLUSIONS

The overall purpose of this study was to assess the diet quality of college students at Sacramento State, focusing on fruit and vegetable consumption. As previously mentioned, one in three Americans are obese, and according to Ogden et al. (2012), 17% of youth age two to nineteen are obese (Ogden et al. 2012). The results of the current study showed higher consumption of fruit and vegetables in the overweight individuals when compared to healthy weight and obese. Males consumed more fruits, vegetables, and fiber on average than female participants. Data showed that the participants with the highest income had a higher consumption of fruit and vegetables. Qualitative data outline several obstacles of consumption: time, preparation skills, preparation in advance, and access to fruits and vegetables. As mentioned in the literature review, college years are an important time for nutritional habits that lay a framework for adulthood. These are the years where intervention should be taken, and if utilized, the resources on campus could be one way to address the high rates of obesity in American adults. In future research, it would be beneficial to expand and randomize the sample so that the conclusions drawn could be applied to the entire campus population.
References


Larson, Nicole I., Dianne R. Neumark-Sztainer, Lisa J. Harnack, Melanie M. Wall, Mary T. Story, and Marla E. Eisenberg. 2008. "Fruit and vegetable Intake...


Appendix A

Consent Form

You are being asked to take part in a research study about fruit and vegetable consumption patterns in Sacramento State students. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

What the study is about: The purpose of the study is to see how many fruit and vegetable servings Sacramento State students are getting daily. We are also looking at if demographic factors (i.e., income, race, GPA, etc...) and BMI are correlated to intake patterns.

What we will ask you to do: If you agree to be in this study, we will use information from your diet analysis as data for the study. Also, we ask that you complete a quick survey regarding your fruit and vegetable intake and other questions regarding demographic information.

Risks and benefits:

I do not anticipate any risks to you participating in this study other than those encountered in day-to-day life.

There are no benefits to you; however, the study could increase awareness of fruit and vegetable consumption patterns of a sample of students at Sacramento State. This awareness could contribute to future research and changes on campus.

Your answers will be confidential. The records from this study will be kept private. In any report made public, we will not include any information that will make it possible to identify you. Research records will be kept in a locked file; only the researchers will have access to the records.

Taking part is voluntary: Taking part in this study is completely voluntary. You may skip any questions that you do not want to answer.

If you have questions: The researcher conducting this study is Brandon Venerable. Please ask any questions you have now. If you have questions later, you may contact Brandon Venerable at b_venerable@yahoo.com or 916-308-1852.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

Your Signature ______________________________ Date _______________
Your Name (printed) _____________________________________________
## APPENDIX B

### Demographic Information

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your age?</td>
<td></td>
</tr>
<tr>
<td>What is your gender?</td>
<td>______ Male</td>
</tr>
<tr>
<td></td>
<td>______ Female</td>
</tr>
<tr>
<td>How many people live in your household including yourself?</td>
<td>______ People</td>
</tr>
<tr>
<td>What year in school are you?</td>
<td>______ Year</td>
</tr>
<tr>
<td>Which group do you identify with ?</td>
<td>______ White (non-Hispanic)</td>
</tr>
<tr>
<td></td>
<td>______ Black / African American</td>
</tr>
<tr>
<td></td>
<td>______ Hispanic</td>
</tr>
<tr>
<td></td>
<td>______ American Indian</td>
</tr>
<tr>
<td></td>
<td>______ Asian or Pacific Islander</td>
</tr>
<tr>
<td></td>
<td>______ Latino</td>
</tr>
<tr>
<td></td>
<td>______ Other</td>
</tr>
<tr>
<td>What is your estimated income per year?</td>
<td>______ &lt;20,000</td>
</tr>
<tr>
<td></td>
<td>______ 21- 25,000</td>
</tr>
<tr>
<td></td>
<td>______ 26 - 30,000</td>
</tr>
<tr>
<td></td>
<td>______ 31,000 +</td>
</tr>
<tr>
<td>Do you receive any of the following programs?</td>
<td>______ WIC</td>
</tr>
<tr>
<td></td>
<td>______ SSI</td>
</tr>
<tr>
<td></td>
<td>______ Food Stamps</td>
</tr>
<tr>
<td></td>
<td>______ General Assistance (GI)</td>
</tr>
<tr>
<td></td>
<td>______ Fafsa (Financial Aid)</td>
</tr>
<tr>
<td>What is your current G.P.A?</td>
<td></td>
</tr>
<tr>
<td>How many units are you taking this semester?</td>
<td></td>
</tr>
<tr>
<td>How many hours a week do you work?</td>
<td></td>
</tr>
</tbody>
</table>
Fruit and Vegetable Survey Questions

1. Do you eat fruits and vegetables as snacks?
   - no
   - yes, sometimes
   - Yes, often
   - Yes, Everyday

2. Did you have citrus fruit or citrus juice in the past week?
   - Yes
   - No

3. Vegetables: How much do you eat each day?
   - None
   - 1/2 cup
   - 1 cup
   - 1 1/2 cup
   - 2 cups
   - 2 1/2 cups
   - 3 cups or more

4. Fruit: How much do you eat a day?
   - None
   - 1/2 cup
   - 1 cup
   - 1 1/2 cup
   - 2 cups
   - 2 1/2 cups
   - 3 cups or more

5. Do you eat more than one kind of fruit each day?
   - no
   - yes, sometimes
   - yes, often
   - yes always

6. Do you eat more than one kind of vegetable each day?
   - no
   - yes, sometimes
   - yes, often
   - yes always
7. How often do you consume fruit juice like orange, apple, grape, fresh, frozen or canned. (not soda)
   less than one week
   once a week
   2-3 times a week
   4-6 times a week
   once a day
   2 + a day

8. How often do you consume vegetable juice, like v8, naked drink, tomato juice
   less than one week
   once a week
   2-3 times a week
   4-6 times a week
   once a day
   2 + a day

9. How often do you consume green salads
   less than one week
   once a week
   2-3 times a week
   4-6 times a week
   once a day
   2 + a day

10. How often do you consume vegetable soup, or stew with vegetables
    less than one week
    once a week
    2-3 times a week
    4-6 times a week
    once a day
    2 + a day

11. Please describe what gets in the way of you eating more fruit and vegetables?

12. Please describe what would help you eat more fruit and vegetables?
Treatment Outcomes for African American Women With Breast Cancer: Does Income Matter?
An Integrative Review of the Literature

Angelica Ward
Dr. Michelle Dang, RN, Faculty Mentor

Introduction

In the U.S., the high mortality rate from breast cancer among African American women is of great concern. According to the National Center for Health Statistics (NCHS) (2013), the incidence of breast cancer is highest among European American women, with 124 women per every 1,000 experiencing breast cancer: with a death rate of 22 per 1,000. However, African American women have a disproportionately higher death rate of 31 per 1,000, despite having a lower incidence rate of 116 per 1,000 (National Center for Health Statistics 2013). In fact, African Americans have the highest death rates of any ethnic group as a result of breast cancer (National Center for Health Statistics 2013).

In the quest to find more information about African American women who have experienced breast cancer, the author had encountered difficulty finding evidence regarding income levels of African American women with breast cancer. More information was available about African American women with low socio-economic status (SES) than was available about African American women with high socio-economic status. The purpose of this review is to determine if treatment outcomes differed based on income. It is also important to identify common factors in the women’s experiences with and survival from breast cancer.

Theoretical Framework

The unification of environmental influence and an individual is the basis of the bioecological theory (Bronfenbrenner and Ceci 1994). The model, developed by Bronfenbrenner, is the ideal framework for describing the relationships among health care providers, the social environment, and policies which have an interactional impact on the health of African American women (Bronfenbrenner and Ceci 1994). Furthermore, the biological model allows the opportunity to evaluate the ways in which all elements of a person’s life— including influence from the physical environment— can interact to impact health.
The bioecological theory is made up of four components: microsystem, mesosystem, exosystem, and macrosystem (Bronfenbrenner and Ceci 1994). Immediate relationships within one’s social network make up the microsystem (Bronfenbrenner and Ceci 1994). In this case, African American women’s relationship with their physician represents a microsystem with an immediate influence. A mesosystem is a collection of the microsystems that create a collective affect (Bronfenbrenner and Ceci 1994). The women’s relationships with all healthcare providers and their environmental encounters are examples of a collection of microsystems. Outside influences that create effects on an individual is the exosystem (Bronfenbrenner and Ceci 1994). Policies that guide the healthcare system’s choices of administering care to patients reflect the exosystem. The macrosystem includes all system and cultural influences to create an effect (Bronfenbrenner and Ceci 1994).

Based on the model, it can be theorized that the early and/or persistent pressures placed on an individual can impact their health and development (Bronfenbrenner & Ceci 1994; Sallis, Owen, and Fisher 2008). Research has shown that persistent pressures can influence the offspring of the next generation (Bronfenbrenner and Ceci 1994; Sallis, Owen, and Fisher 2008). Sallis, Owen, and Fisher (2008) explains that changes in genetic expression can occur as a result of a direct connection between the cluster of social and physical factors and the genetic properties of an individual. Therefore, it is important to consider all aspects of the bioecological model when reviewing a disease such as breast cancer within a population such as African American women. This allows for a greater understanding of the health concern, as well as finding a ways to improve outcomes from breast cancer.

**Literature Review**

This research was completed using an integrative literature review methodology which is a type of literature review. With an integrative review, the author synthesizes scholarly information from different sources and integrates important concepts using a chosen framework (Torraco 2005). African American women and breast cancer are the focus of this review; therefore, the author examined articles that were both relatively new and old to obtain a wide range of information about the subject. A wider range of information allowed the author to construct a more in-depth analysis of the literature and to reach conclusions (Torraco 2005). As a result, this integrative review permits the reader to gain a better understanding regarding the complexities of African American women and breast cancer that are based on research evidence (Whittemore and Knafl 2005).
Methodology

For this integrative review process, a combination of keywords and terms were used to find books and articles. These terms included African American, women, breast cancer, income, health providers, healthcare system, rich, poor, and racism. The methodology consisted of several steps. First, the author searched through the Academic Search Premier, ERIC, PsycINFO, PubMed, ERIC and Science Direct databases for articles, which resulted in the review of more than sixty-two articles that were related to the topic. The article “Health-related Quality of Life of African American Breast Cancer Survivors Compared with Healthy African American Women” and the article “The Patient Protection and Affordable Care Act” were identified by using the Google Scholar search engine. These sources were used as supplemental information about breast cancer and healthcare.

While reviewing scholarly articles, selected references were used to find additional articles on similar topics. Next, the author visited the university’s health librarian for guidance in searching for additional categories in other databases. The selected sources needed to fit the specific criteria to breast cancer which included informative facts about the following: breast cancer, African American women who experienced breast cancer, and economic factors that may have played a role in cancer outcomes. Any sources that did not meet the criteria were excluded for this review.

Background information about breast cancer was also included as it provided context for readers who are not familiar with the effects of breast cancer. Furthermore, the background information would facilitate understanding regarding the perspectives of breast cancer patients and provide a foundation for readers who may be new to the topic. This allows for the discussion of disadvantages that may affect the cancer treatment and survival of African American women with breast cancer. An additional search was also conducted using Google Scholar with the following key terms: African American, women, breast cancer, income, health providers, and healthcare system. As a result, both were searched separately. Another recommended source was “Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care” which is an article that focused on the healthcare industry while considering ethnicity and gender as working factors. The author also analyzed information obtained from books and government-sponsored websites using the aforementioned keywords.

Table 1 lists the most important studies for this paper and briefly describes the major components of the studies. These components include article title, purpose, and findings. The strength of each source depends on the amount of information it provides about breast cancer while focusing on African American
women and their income. A source is weak if it provides information on either of these disadvantages, finances, or treatment; and a source is moderate if it provides information about a combination of disadvantage, finances, or treatment. Finally, a source is considered strong if there is information used for disadvantage, finances, along with treatment. The strongest sources were included in Table 1 and this article.

Table 1. Studies of disadvantages, finances, and treatments affecting African American Women

<table>
<thead>
<tr>
<th>Title</th>
<th>Purpose</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects on Social Injustice on Breast Health-Seeking Behaviors of Low-Income Women. Academic Journal of Health Promotion (Bowen et al. 2013)</td>
<td>What occurs after low-income women receive an abnormal breast screening</td>
<td>There is an increase of stress due to low employment and lack of insurance</td>
</tr>
<tr>
<td>Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care (Institute of Medicine 2002)</td>
<td>A review paper about health disparities</td>
<td>A combination of actions from patients and healthcare providers factor into patients becoming underserved</td>
</tr>
<tr>
<td>Disentangling the effects of race/ethnicity and socioeconomic status of neighborhood in cancer stage distribution in New York City (Islami et al. 2013)</td>
<td>To investigate the association between stage of cancer at diagnosis with neighborhood</td>
<td>Late stage diagnosis is correlated with race and ethnicity</td>
</tr>
<tr>
<td>Socioeconomic status and racial and ethnic differences in functional status associated with chronic diseases (Kington and Smith 1997)</td>
<td>To examine the relationships between wealth and income and selected racial and ethnic differences in health</td>
<td>Socio-economic status is correlated with African American and Hispanic populations as well as chronic diseases</td>
</tr>
<tr>
<td>Socioeconomic and racial differences in treatment for breast cancer at a low-volume hospital (Kong et al. 2011)</td>
<td>To determine whether nonwhite or low-SES patients are disproportionately treated in low-volume hospitals</td>
<td>One potential reason for breast cancer diagnosis among minorities is remoteness from advanced medical facilities</td>
</tr>
</tbody>
</table>
Table 1. Studies of disadvantages, finances, and treatments affecting African American Women (continued)

<table>
<thead>
<tr>
<th>Title</th>
<th>Purpose</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic differences in breast cancer survival: status and determinants</td>
<td>To present relevant studies for all major US racial/ethnic groups and discuss underlying causes of disparity</td>
<td>The health hierarchy has Caucasians at the top (with the exception of Japanese American women); Hawaiians and Latinos are at the center, and African Americans are at the bottom</td>
</tr>
<tr>
<td>(Maskarinec et al. Sen 2011)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Structuring of Ethnic Inequalities in Health: Economic Position, Racial Discrimination, and Racism</td>
<td>The inadequate measurement of ethnicity, lack of good data on socioeconomic position, particularly data that address life-course issues</td>
<td>Health inequality is correlated with society’s ongoing racism, discrimination, and socioeconomic status</td>
</tr>
<tr>
<td>(Nazroo 2003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveillance mammography use after treatment of primary breast cancer and racial disparities in survival</td>
<td>To examine whether surveillance mammography reduces racial disparities in survival among elderly breast cancer survivors following active treatment for breast cancer</td>
<td>There is a need for eliminating the effects health disparities have on racial groups in addition to surveillance mammography helping detect breast cancer</td>
</tr>
<tr>
<td>(Nurgalieva et al., 2013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Racial differences in outcomes of triple-negative breast cancer</td>
<td>To examine the literature regarding survival outcomes</td>
<td>When African American and European American groups were given like treatment and follow-up, their race was not significant in treatment outcomes</td>
</tr>
<tr>
<td>(Pacheco et al. 2013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health-related quality of life of African American breast cancer survivors compared with healthy African American women</td>
<td>The purpose of this study was to compare health-related quality of life of African American women</td>
<td>There are immeasurable factors which contribute to the treatment outcomes of women of the African American population</td>
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Analysis of Findings

While reviewing the literature, the author noted recurring concepts that became the focus for the paper. These concepts included health inequity; culture and health; healthcare cost and insurance; and genetics. These aforementioned concepts also led to the discussion of care and availability, treatment results, and genetics; these factors were also found to have effects on the survival of African American women with breast cancer. The concepts are further discussed below and serve as possible biocultural factors that contribute to the health disparities among African American women experiencing breast cancer.

Health Inequity

Health inequity can impact African American women and their health journey within the healthcare system. According to The Institute of Medicine (IOM) (2002), medical coverage and assistance from healthcare providers may generally be available to all who are covered, but differences exist in care received by European American patients and patients of color. For example, a study by Islami et al. (2013) revealed that African Americans and Hispanics living in New York were more likely than whites to be diagnosed with later staged cancers, regardless of their neighborhood or socioeconomic status. African Americans becoming diagnosed with later stage cancers is but one of many health inequalities within society.

In addition to receiving delayed diagnoses for cancer, ethnic diversity amongst healthcare providers is also an issue (Institute of Medicine 2002). The ethnic make-up of healthcare providers from minority backgrounds is underrepresented and does not reflect the population they serve. It is acknowledged by The Association of American Medical Colleges (AAMC) (2006) that minorities are not represented well in numbers within healthcare, and African American doctors are only at 3.3 percent of the physician population, and Native American doctors are the lowest at .03 percent.

As a result, the interactions between providers and patients may be challenged due to cultural and language barriers (Institute of Medicine 2002). Furthermore, research has shown that bias among healthcare providers towards patients of color has resulted in inferior care because of stereotyped perspectives about certain ethnic groups and their responses to health and illness (Institute of Medicine 2002). All patients still need healthcare services; however, they must still rely on the healthcare system and healthcare professionals that may exhibit bias and deliver unequal treatment. A proposed strategy to address this issue is to increase the diversity of the healthcare workforce. The Association of American Medical Colleges (2006) has demonstrated that most minorities go to serve underrepresented groups, and patients respond positively to the care of
doctors’ from minority groups. Doctors who are of a minority background may have enhanced understanding of patients with similar backgrounds (Association of American Medical Colleges 2006).

The Nation’s Health news journal published an interview with Michael Marmot, a prominent epidemiologist, who spoke of inequality along with distribution of healthcare in Western countries (McGill 2013). He further emphasized that inequality is due to the impact of unequal financial and tax distributions (McGill 2013). It has been proposed that a market-driven healthcare system creates an environment in which insurance providers drive the use of incentives. This strategy saves costs while sacrificing the quality of treatment; particularly for vulnerable populations such as people who are uninsured or lack the social capital to leverage resources (Institute of Medicine 2002).

Cutting costs could also mean that the healthcare providers become limited in their ability to provide high quality healthcare. Marmot further stated that there is involuntary inequality in child development and job attainment (McGill 2013). The inequalities work together with healthcare to create disadvantages structured by policies that western governments implement (McGill 2013). A high demand for a better quality environment and long-term health may be caused by addressing the ways people in society view one another and what they need to be healthy (McGill 2013). Once people recognize the social inequalities around them, they will then be able to connect the inequalities to themselves and increase the demand for more quality healthcare.

Culture and Health

It is important to consider culture when examining certain factors that may contribute to the rate of survival among African American women with breast cancer. A study by Paxton et al. (2013) focused on co-morbid issues in older and obese African American women. Issues such as high cholesterol, hypertension, and diabetes have possibly been caused by below average physical activity and plenty of television (Paxton et al. 2013). Diet and stress are factors that affect the health of African Americans due to customs and background. African Americans have a history of consuming a less than healthy diet, including animal leftovers such as chitterlings, due to food availability and survival extending from an era of enslavement (Trescott 2003).

There is one drawback; psychosocial reasons for co-morbidities may have been responsible for the sedentary tendencies of African Americans (Paxton et al. 2013; Nazroo 2003). According to Nazroo, social stress, such as racism, also has an impact on minorities. Stress takes a toll on the body and can contribute to co-morbid diseases (Ranabir and Reetu 2011). Ranabir and Reetu (2011) explained that hormones change during stress as the body’s means of survival. Stress affects the hormones catecholamines and glucocorticoids, as well as
cortisol, which is associated with abdominal fat (Ranabir and Reetu 2011). This level of change in the body, due to stress, could be a possible cause for multiple health issues among African American women.

African Americans have a history of mistrust with the healthcare system and may not seek treatment because of discrimination, travel, and cost (Skloot 2010). A case of health inequity can be further substantiated with the experience of an African American woman named Henrietta Lacks. Lacks was originally from Virginia and was hospitalized at Johns Hopkins hospital in the 1940s for cervical cancer (Skloot 2010). The case was significant in that one of Lacks’ physicians took samples of her cells without her permission or knowledge (Skloot 2010). Lacks’ cells were subsequently sold and distributed worldwide for research and resulted in scientists benefiting financially and academically from her cells (Skloot 2010). However, Lacks and her family were never notified of these actions, nor did they benefit from them (Skloot 2010). Lacks’ experience happened during a time when her family had limited resources and when segregation and discrimination were common occurrences, which discouraged African Americans from visiting medical facilities (Skloot 2010).

Many African Americans have a history of unhealthy relationships with the healthcare system (Freimuth et al. 2001). A study by Freimuth et al. (2001) and a description from a Britannica (2012) encyclopedia recognized the Tuskegee Syphilis Study as an unforgettable mark on African American history. Six hundred African American men were used by the Public Health Service in a U.S. government sponsored university study of the syphilis disease without the men’s knowledge. The entire length of the study lasted from 1932 to 1972 (Britannica 2012; Freimuth et al. 2001). Approximately 100 men who were part of the Tuskegee syphilis study died because they were denied available treatment, even when penicillin was discovered as an effective treatment for syphilis ten years before their death (Freimuth et al. 2001).

Another goal of the Tuskegee study was to learn if African American men had more cardiovascular problems as opposed to neurological problems when compared to European American men (Britannica 2012; Freimuth et al. 2001). Other examples of unethical research includes African American patients who were abused when experimented on with harmful chemicals such as radiation and even dissected in some southern states (Freimuth et al. 2001; Harris et al. 1996). Together, these historical cases highlight important reasons for mistrust among African Americans towards the healthcare system.

**Healthcare Cost and Insurance**

A delay in the breast cancer diagnoses of African American and Hispanic communities has been an issue (Islami et al. 2013). It has been documented
that African Americans tend to experience a circular pattern of health related behaviors (Islami, et al. 2013). For example, an African American woman with low income will most likely face barriers to preventive services such as mammograms. This results in delayed diagnosis and treatment. Even with treatment, African American women often continued to experience barriers such as the ability to afford treatments (Bowen et al. 2013). Access to treatment can be affected by decisions that are made by health insurance providers (Vigen 2006). Vigen (2006) explained that insurance providers can place barriers by limiting certain benefits, co-pays and additional medical costs, and the option to not cover the patients’ treatment costs. This type of politics in the healthcare system may not allow room for true equality and may encourage the distribution of more supportive healthcare to European American patients with higher incomes (Vigen 2006).

Holtz (2008) noted that other countries, including India and Japan, spend less than half the money that the U.S. spends on healthcare each year, yet the countries that spend less have results that may be superior. An example by Centers for Medicare and Medicaid Services (CMS) (2014) continue to show that in comparison to the countries previously mentioned, the U.S. spends a large amount on healthcare. The U.S. spends $6,815 for the health of all residence on average (Centers for Medicare and Medicaid Services 2014). However, the amount in healthcare spending does not align with life expectancy as the average life expectancy in the U.S. is approximately seventy-eight years as compared with seventy-nine years in other developed countries (Holtz 2008). In fact, the U.S. ranks 42nd in life expectancy at birth when compared with other countries (The World Factbook 2013). The history of spending in the U.S. may demonstrate a lesser quality of treatments for the average amount of money that is spent on healthcare (Vigen 2006).

There are times when barriers to healthcare may exceed the needs of African American women who have experienced breast cancer. A study by Bowen et al. (2013) on African American women with breast cancer found that they experience a circular pattern as shown in Diagram 1: lower socio-economic status, breast cancer diagnosis, and no treatment. The diagram demonstrates the cycle that places African American women in a vulnerable position. The oval at the top of the page represents the lower SES of the African American women. The oval in the center represents the breast cancer diagnosis of the women. The oval at the bottom of the page represents the lack of access to treatment, and is the last step of the cycle.
Diagram 1. African American Women socio-economic healthcare pattern

This diagram demonstrates the barriers African American women encounter when attempting to successfully utilize preventative care. African American women may go through this cycle, which starts over each time they seek treatment. This can be a disadvantage because of barriers to treatment and more treatment options for serious health situations. According to Kington and Smith (1997), African Americans are generally less wealthy than European Americans because access and opportunities are not equal due to socio-economic positions. An example is the contrast in average income between European Americans and African Americans; $57,009 and $33,321 respectively (DeNavas-Walt, Proctor, and Smith 2012). This example demonstrates that a difference in income may result in a difference of the quality of healthcare among minorities. It has been found that unequal wealth is directly linked with chronic diseases, despite personal choices (Kington and Smith 1997). One extra dollar in wealth does not change much for the wealthy, but it impacts the underprivileged 80 times more than the wealthy and 40 times more for income of the underprivileged (Kington and Smith 1997). Lack of wealth may contribute to breast cancer treatment issues involving African American women and their position in the healthcare system.

The financial impact of healthcare can be as significant as a patient receiving vital treatment itself. Many African Americans are disadvantaged economically, which adds to their inequality in healthcare. Disadvantage made by discrimination and harassment work together to shape the economy and
society with race-based influence (Nazroo 2003). It is not just an individual but a people that end up disadvantaged with no level position in this economy. Constraints on medical care may be vital when patients need to receive time-sensitive care for a disease that is on the increase. Kong et al.’s (2011) article described African Americans as being less inclined to visit hospitals with more medical technology because of distance and costs of treatment. However, Dai (2010) explained that a late diagnosis is a result of segregation among African American and European American populations, i.e. largely metropolitan Detroit and the rest of the U.S. and that distance from a preferred hospital are reasons for not attending treatment. Kong et al.’s study also mentioned that minorities could not attend the hospitals with more technology even if they were closer in proximity because of higher costs.

Nurgalieva et al. (2013) made clear that Health Maintenance Organization (HMO) and SES status could affect the option for African American women to receive adjuvant hormone therapy. Nurgalieva et al. (2013) further explained that this treatment saved lives but may not reach everyone, due to limited access (Nurgalieva et al. 2013). A study by Von Ah et al. (2012) found commonalities among African American breast cancer survivors, such as the women’s salaries being under $30,000 and medical coverage that was not comprehensive and was basic in nature. As a result, one’s income level was associated with the quality of healthcare coverage.

Rosenbaum (2011) described The Affordable Care Act (ACA) as health insurance by way of a new government program that covers almost everyone; including those living below the poverty line. The ACA also limits the insurance providers from the ability to select whom they can provide coverage. It is not permitted for providers to refuse coverage for patients; including those deemed as being high risk (Rosenbaum 2011). However, a drawback to the ACA program is its risk of being rejected by healthcare providers who do not wish to honor the health coverage in healthcare facilities nationwide. This potentially allows patients to be turned away, continuing the circular pattern introduced by Bowen et al. (2013), due to a discrepancy between the government and state laws.

The treatments for breast cancer that are offered to breast cancer patients can work successfully for African American women. Pacheco et al. (2013) and Nurgalieva et al. (2013) found that minorities who received the same treatment as European Americans and had a similar response to the treatment, suggesting that when African Americans are given the same breast cancer treatment as European Americans, they fare just as well (Pacheco et al. 2013; Nurgalieva et al. 2013). The findings of the two studies suggest that social issues leading to barriers in breast cancer treatment may be due to access to treatment and not a result of the treatment itself. Nurgalieva et al. (2013) and Paszat et al. (2009)
have highlighted the issue of access to the proper drugs and adjuvant hormone therapy, which can improve survival among breast cancer patients of African American and Hispanic ethnicities (Nurgalieva et al. 2013; Paszat et al. 2009).

**Genetics**

The author has also found that patterns in African American women being diagnosed with breast cancer are more complex than SES alone (Newman et al. 2002). Newman et al. (2002) presented the possibility of genetics setting the stage for African American women to have breast cancer, with the mutation of the BRCA gene as a contributing factor. Treatment for the BRCA gene’s expression may reduce the numbers of African American women who are diagnosed with breast cancer. Treatments are one of the most important stages within the breast cancer journey, and the chance to receive treatment may be life changing for African American women.

According to Weaver, Meaney, and Szyf (2006), epigenetics allows us to look more closely at the environmental impact of stressors, resulting in effects on the health of individuals. Epigenetics is defined by Riggs as “the study of mitotically and/ or meiotically heritable changes in gene function that cannot be explained by changes in DNA sequence” (Bird 2007, 396). Changes in gene expressions that are because of a stressful environment may help an individual to adapt to the stressful environment in the short term but may cause significant health problems in the long term (Weaver, Meaney, and Szyf 2006). The life experiences of one generation may cause certain gene expressions without changes to the DNA. Such gene expressions, as a result of experiences, may influence health either positively or negatively. Weaver, Meaney, and Szyf (2006) further explained that the subsequent generation’s health status may be a result of stress from the previous generation. For example, in a study using rats as animal models, Weaver, Meaney, and Szyf (2006) demonstrated results of how rats that were exposed to stress experienced cellular changes in certain regions of their brains that negatively affected their responses to stress. Such a negative response to stress, as a result of life experiences, can theoretically be applied to humans. In terms of African American women who experience breast cancer, it is possible that the women’s bodies respond to certain stressors from the environment, and as a result, these experiences may have altered gene expressions over time.

According to Danforth (2013), women of African descent in America became diagnosed with breast cancer because of genetic factors along with SES, and potentially, the availability of healthcare. Preventative healthcare may be limited by the women’s income because general health care plans are limited in offering adjuvant therapy and are usually more available to patients with comprehensive healthcare plans (Nurgalieva et al. 2013; Paszat et al. 2009).
LIMITATIONS

This integrative literature review was conducted by the author, but the research did not include original data collection. The author was not able to identify specific studies that directly addressed the question about African American women with breast cancer and income levels. However, the author was able to identify four major concepts as discussed in the analysis that indirectly addressed the study’s question. Other work related to this topic may have been inadvertently omitted due to different keywords. In addition, not all articles in the review were solely about income, such as background information about breast cancer and African American women.

IMPLICATIONS

Using the bioecological theory as a guiding framework, findings from this integrative review indicate that many factors, from genetics to culture and policies contribute to treatment outcomes of African American women with breast cancer. Diagram 2 demonstrates the experiences of African American women through the healthcare system and their experience with breast cancer. African American women are at the center of the diagram. Next, the relationships African American women have with their doctors which can influence the women’s own experiences are presented as the next system. Then, environmental factors which contribute to the amount of pressures that impact health are presented. Finally, policies guiding treatment options that contribute to either solutions or limitations of the women are represented as the outermost circle. The experiences previously mentioned simultaneously impact African American women’s health, and may contribute to their survival from breast cancer.

Diagram 2: Healthcare bioecological system for African American Women

Ultimately, income can pose significant barriers that impact African American women’s treatment outcomes. However, based on evidence, income similarities between African American women and European American women still posed
a difference in health with African American women having a higher likelihood of experiencing poorer health (Islami et al. 2013; Nazroo 2003). African American women do encounter more serious hardships with the aggressive nature of breast cancer than women of other ethnicities (National Center for Health Statistics 2013). Research has also indicated that survival of ethnically diverse patients could be positively impacted by similar medical treatments.

Newman et al. (2002) suggested making a change in the policy which may promote more economic advantage to disadvantaged groups (Newman et al. 2002). Socio-economic position may improve through policy, which promotes economic advantage and success to minority groups such as African Americans (Newman et al. 2002). Policy makers may add more of a push and realism to make economic advantage happen, such as Affirmative Action. The Affirmative Action policy would allow more opportunities for the advancement of minorities' who are underserved populations in our society. The more opportunity there is in this economy for minority groups such as African Americans, the more chances of wealth increasing for everyone and leading to opportunities toward comprehensive health plans that offer more treatments. More economic advantage means more money for minorities. More money for minorities leads to the affordability of better health insurance.

Another way to improve African American women's health is to adopt ways that will help them gain control of non-genetic factors which may help to combat breast cancer. Eating healthy and exercising regularly is the first step to this population controlling their own health. Better nutrition contributes to the body functioning properly and effectively. Li, Fridinger, and Grummer-Strawn (2004) provided breast feeding as another way to decrease risks of breast cancer among African American women. The suppression of milk production may have a cancer-causing effect on women who have multiple children (Li, Fridinger, and Grummer-Strawn 2004). It is also noted by Mukhina et al. (2004) that African American women who had children earlier in life experienced a greater risk of breast cancer because of higher levels of mitogen IGF-1. Women accumulate hormones after each pregnancy, and this is a factor that contributes to high levels of mitogen IGF-1 (Mukhina et al. 2004). Keeping these facts in mind can help African American women make better choices and take control of their health.

Diversity among healthcare professionals may bring about cultural competence in healthcare systems due to improved communications and understanding between providers and patients (Tervalon and Murray-Garcia 1998). The concept of cultural humility, coined by Tervalon and Murray-Garcia (1998), may be an effective strategy in enhancing the understanding of the unique experiences that African Americans have. Cultural humility consists of patient-
focused interviewing and care, community based care and advocacy, and institutional consistency (Tervalon and Murray-Garcia 1998). Tervalon and Murray-Garcia (1998 emphasized that cultural humility is having self-awareness about our own values and biases and being constantly open to learning about other cultures without generalizing or stereotyping. Cultural humility places patients first, and by practicing cultural humility, healthcare providers can recognize and learn about each patient's unique needs. Such an approach would better serve minority populations such as African American women (Tervalon and Murray-Garcia 2008).

In conclusion, it is important to keep in mind that the health of African American women is also influenced by larger societal forces such as their relationships within healthcare and their mistreatment within society. The more society moves toward equality in economics and health and lessens the emphasis on social hierarchy, the more likely we will have a society that is healthier and more successful. This is an investment that society must make as a whole in order to become successful in maintaining a healthy society.
References


