# THE UNIVERSITY OF MARYLAND
McNair Scholars
UNDERGRADUATE RESEARCH JOURNAL

Inaugural Edition

UNIVERSITY OF
MARYLAND

"Whether or not you reach

your goals in life depends

entirely on how well you

prepare for them and how

badly you want them.

You're eagles!

Stretch your wings and

fly to the sky."

THE UNIVERSITY OF MARYLAND
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DR. RONALD ERVIN MCNAIR, the second African American to fly in space, was born October 21, 1950, in Lake City, South Carolina to Carl and Pearl McNair. He attended North Carolina A&T State University in Greensboro, where, in 1971, he graduated magna cum laude with a B.S. degree in physics. In 1976, at the age of 26, he earned his Ph.D. degree in physics from the prestigious Massachusetts Institute of Technology. Ronald E. McNair was nationally recognized for his work in the field of laser physics. In 1978, he was one of 35 applicants selected from a pool of ten thousand for NASA's space shuttle program and assigned as a mission specialist aboard the 1984 flight of the shuttle Challenger.

In addition to his academic achievements, he was the recipient of three honorary doctorates and numerous fellowships and commendations. He was also a sixth degree black belt in karate and an accomplished jazz saxophonist. He was married to Cheryl Moore and had two children, Reginald Ervin and Joy Cheray.

On the morning of January 28, 1986, McNair and his six crew members died in an explosion aboard the space shuttle Challenger. In his memory, members of Congress provided funding for the Ronald E. McNair Post-Baccalaureate Achievement Program to encourage low income, first generation college students to enroll in graduate studies. This program is dedicated to the high standard of achievement that Ronald E. McNair's life represented.

TRiO

RONALD E. McNAIR
POST-BACCALAUREATE
ACHIEVEMENT PROGRAM

Acknowledgments

A note about the structure of the journal: The journal includes abbreviated work of the students' final paper and represents combined efforts of students and their research mentors. The views expressed in the papers and abstracts are not intended to represent the views, beliefs, interests, values, or practices of the University of Maryland, College Park. Part One includes only abstracts from the Summer Class of 2007. Part Two includes abstracts of some students and featured abbreviated papers of other students from the Summer Class of 2008.

To request copies of the full papers, send an email to McNairInfo@umd.edu.

Funding for McNair program: 95% ($1,332,215) in federal funds, 5% ($75,000) in state funds.

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Ronald E. McNair Post–Baccalaureate Degree Program
Executive Editor, Inaugural Edition

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Associate Director,
Ronald E. McNair Post–Baccalaureate Degree Program
Editor, Inaugural Edition

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Administrative Assistant,
Ronald E. McNair Post–Baccalaureate Degree Program

Erik M. Hines, M.Ed., Ph.D. Candidate
Academic Counselor,
Ronald E. McNair Post–Baccalaureate Degree Program

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Renae Mayes, B.S., Graduate School Seminar

Wallace Southerland III, Ph.D., Research Methods Instructor of Record

———— ✤ ————

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University of Maryland

From the Associate Provost and Dean for Undergraduate Studies

UNIVERSITY OF
MARYLAND

2130 Mitchell Building
College Park, Maryland 20742-5241
301.405.9363 TEL 301.314.9896 FAX
www.ugst.umd.edu

OFFICE OF THE ASSOCIATE PROVOST FOR ACADEMIC AFFAIRS
AND DEAN FOR UNDERGRADUATE STUDIES

MESSAGE FROM THE DEAN

Dear Reader:

It is such an honor to congratulate the McNair Scholars Program on fulfilling its vision of creating the University of Maryland McNair Scholars Journal. This inaugural edition includes the abstracts and scholarly papers of the participants from University of Maryland, College Park, Frostburg State University, Saint Mary's College of Maryland, and University of Maryland, Eastern Shore.

For the past 17 years, the McNair Scholars Program has been an important asset and contribution to the research culture at the University. Since 1991, more than 300 students have benefited from the program's services, opportunities, and research mentoring. We are so very proud to have the program on our campus. We look forward to many years of partnering with the McNair Scholars Program, as we implement the University's strategic plan.

I am happy to offer my sincere congratulations to the participants on their latest accomplishments, as illustrated in this inaugural journal. The participants' work in the world of inquiry, as demonstrated by these abstracts and papers, is a defining moment in their academic and intellectual life.

Finally, I encourage you, the reader, to get to know the McNair Scholars here at the University of Maryland. Please support the scholars through your mentoring, generous time, or financial support for graduate school. To those of you who already support the scholars and their graduate school pursuits, I thank you.

Sincerely,

Donna B. Hamilton
Associate Provost for Academic Affairs and
Dean for Undergraduate Studies

From the Executive Director

UNIVERSITY OF
MARYLAND

2110 Marie Mount Hall
College Park, Maryland 20742
301.405.4736 TEL 301.314.9794 FAX
www.aap.umd.edu

ACADEMIC ACHIEVEMENT PROGRAMS
Office of the Executive Director

Dear Reader:

I am pleased to share with you the Inaugural Edition of the University of Maryland McNair Scholars Journal. The inaugural journal embodies the spirit of Dr. Ronald McNair and the McNair program itself. The collection of scholarly work demonstrates the McNair Scholars' dedication and passion for research and scholarship, the scholars' determination to overcome tremendous obstacles to arrive at this point in their academic journey, and the support from family, community and research mentors necessary for their success. The publication represents the culmination of time spent in the field, in research labs, and in libraries in an effort to blaze new paths of intellectual discovery and to build upon educational and research experiences during the academic year or in previous McNair Summer Research Institutes.

The diverse interests of a group of very special scholars are evident in the pages of the journal. Research projects undertaken by 2007 and 2008 McNair scholars include, for example, inquiries related to health disparities, first-person shooter video games, effects of lighting, the examination of obesity, the perceptions of college preparation, understanding the physiological changes in alfalfa plants, and dissecting Supreme Court Justice Anthony Kennedy's views on privacy. Pursuit of a Ph.D. degree is a serious and challenging undertaking. The abstracts and papers indicate that this group of young scholars has fully embraced the challenge of pursuing a graduate degree and contributing to new knowledge in the larger global community.

I am very proud of each of our McNair scholars and you will know why as you read through this inaugural journal. Congratulations to Dr. Southerland for providing the leadership on this historic and monumental effort and to the McNair staff for their service to the students and the University. As readers, we ask for your continued support as we approach our 18th year here at the University of Maryland, College Park.

Sincerely,

Dr. Jerry L. Lewis, Executive Director
Academic Achievement Programs and
Project Director, McNair Scholars Program

Table of Contents

Raising Social Capital Throughout the African Diaspora with Reparations

Calvin Anderson–Vines
Mentor: Dr. Ronald Zeigler
Director of Nyumburu Cultural Center
University of Maryland, College Park

Abstract

This paper examines why those within the African Diaspora who have been negatively affected by the Atlantic Slave Trade need reparations to raise thelevels of social capital within socially poor communities. The Diaspora can be understood to describe any place in the world in which large amounts of people of African heritage reside. Social capital is the amount of social resources, such as family, church, or mentors that are available to individual community members. For example, a person classified as having low levels of social capital may reside in a single parent, socially isolated home, in a community with few positive role models. Reparations are literally acts aimed at repairing a past harm. In the pages to follow, I thoroughly examine why reparation for the Atlantic Slave Trade is necessary and how it would be best administered to those who need it most.

Part one illustrates the present state of African Americans, specifically linking the current socioeconomic problems that afflict poor Blacks to dwindling levels of social capital in urban areas.

Part two illustrates how the institution of the Atlantic Slave Trade negatively impacted the African Diaspora focusing particularly on North America, Brazil, and the Caribbean.

Part three defines how specific government funded, community building social programs and educational grants can raise social capital levels in Black communities.

Part four illustrates an idealistic view of what black neighborhoods would look like throughout the Diaspora if social capital were abundant in the communities and the effect this would have on the future of inner city communities, particularly the youth.

Part five is a review of literature regarding reparations, beginning with the arguments from both the proponents and detractors of the reparations movement. This section also details the legal, economic and political debate surrounding reparations in regard to; who should pay for them and who should receive them, according to the most knowledgeable scholars on the topic.

Part six is a subsection that directly compares the transatlantic slave trade to the Jewish Holocaust, focusing particularly on the application of the word genocide.

Part seven is a conclusion providing two possible scenarios concerning the future of Africans in the Diaspora; one with reparations and one without.
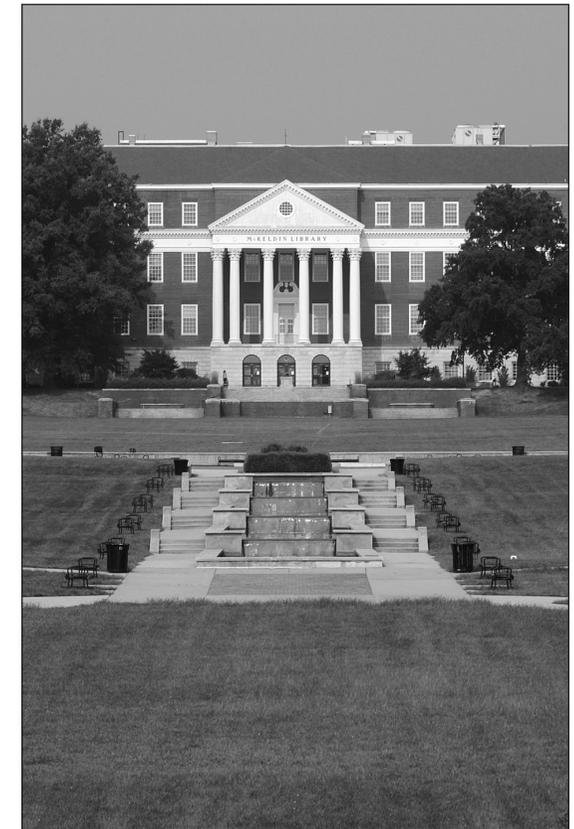
The Central American Free Trade Agreement: From Ratification to Implementation with an Emphasis on Poverty in the Rural Areas of El Salvador

Isabela del Carmen Azucena
Mentor: Dr. Wallace Southerland III
University of Maryland, College Park

Abstract

The Central American Free Trade Agreement (CAFTA) is one that particularly sparks and merits attention. Essentially, CAFTA is an accord between five Central American countries, the Dominican Republic and the United States. In the eyes of its authors, CAFTA will foster democratic development, economic reform, and free trade; but the implementations of CAFTA also brings into question the dominant role and powerful influence of the United States in Central American policy, hence the salience of this study. This qualitative cases study focuses implementation aspect of CAFTA within El Salvador. More specifically, the study examines how, if at all, implementation has affected poverty within the rural areas of El Salvador.

This study is guided by two main research questions: What are the characteristics of poverty in the rural areas of El Salvador? and Who are they major players in the implementation of CAFTA in El Salvador? Answers to these two research questions enable the analyst to answer a final, broader, more salient research question: How has the implementation of CAFTA changed, if at all, the characteristics of poverty in rural areas of El Salvador and who were responsible for those changes?

To answer the research questions, written records on CAFTA in general and CAFTA's implementation, electronic data, documentary data, and interview data will be collected and analyzed. To aid the analyst in data collection and analysis, an analytic framework steeped in political orientations of policy making and economic theories of poverty will serve as a conceptual map for the study. To construct the analytic framework for this study, literature on poverty, policymaking, public policy at the federal level, and CAFTA will be examined. As a result of reviewing the aforementioned bodies of literature, analytical categories will be extrapolated, integrated into research questions, added to interview instrument, and will be used to collect, sort, categorize, and analyze the qualitative data. This study will include a set of conclusions and recommendations for future research.

In sum, this study is important because little is known regarding the implementation of CAFTA and what players influenced, managed, or controlled implementation strategies. Further, this study is important because gaps exist in the literature regarding CAFTA's influence on poverty in the rural areas of El Salvador. The results from this study will add to current scholarly thought on CAFTA implementation.

Kenya's Social Revolution: Mau Mau and Its Impact on Contemporary Kenyan Social Movements

Amina Brown
Mentor: Dr. Melinda Chateauvert, Director, Undergraduate Studies, Department of African American Studies

Abstract

During British Colonial infiltration into Kenya's Central Province during the 1930s and 40s the land based Kikuyu population suffered economic and social losses due to the extraction of land and the denial of productive lands on which they once lived for generations. The result was a class of landless or land poor peasants suffering from economic degradation attributed by the new colonial structure, economic and social stratification between a new class of foreign appointed chefs and other loyalists who were able to benefit from the system and the mass of poor. This hostility and frustration toward alien intruders and black loyalists made fertile ground for the Mau Mau to emerge as a revolutionary social force. The social upheaval caused by many of the violent tactics employed by the Mau Mau led the Colonial government to call an official State of Emergency which eventually led to the internment of up to a million Kikuyu peoples. The Mau Mau movement eventually encompassed much of the Kikuyu population but was also embraced by several other ethnic tribes in the Central Province Region. This unity has had a lasting impact on the social structure of Kenya post-independence as did the divisiveness between the supporters and loyalists. This phenomenon is also present in modern Kenyan political and social spheres. The perception and memory of Mau Mau has evolved since the early days of independence in which they were vilified or left out of history all together. Today, they are well received and remembered despite government propaganda to repeal their contributions. Their impact exceeds the boundaries of Kenya and has influenced the activity of other social justice based movements. But their impact on their own country may be more far reaching than previously identified. A new group of resistance fighters has emerged within the Kikuyu population and analysis of preliminary research may show that this is an outgrowth of another political movement that could be comparable to that of the Mau Mau.

Using Network Theory to Reveal Cooperative Motion in Granular Materials Close to Jamming

Emmanuel Cephas, Jr.
Mentor: Dr. Wolfgang Losert, Associate Professor, Physics University of Maryland, College Park

Abstract

A granular material is a collection of discrete solid, macroscopic, particles, such as powders and grains. The physics describing the behavior of granular materials is incomplete since they behave neither fully solid like (they can flow) nor liquid like (granular matter jams). The goal of this study is to better understand systems that are jammed or glass–like, using Network theory.

We apply Network theory to study the dynamics of a granular material in a thermal cycling experiment. Recent granular material research has applied Network theory to the study of static structure; in particular, the network of forces between particles of a granular material in its jammed–state. This work focuses on using Network theory to characterize how an initial particle contact network in a jammed–state gradually breaks apart when a system of particles is driven into more and more jammed states.

The granular material under investigation is a collection of spherical glass beads contained in a glass tube, which is thermal cycled. A Closest–Neighbor Network (CNN) model is introduced and is used to represent the granular contact network in its jammed–state. Each thermal cycle results in a new jammed–state. Compaction of the granular material changes the structure of its corresponding CNN: some links break, some new links form, and some links persist.

A Persistence network is defined as the network that results from a dynamic process; however, it contains only the links that persisted. We study the evolution of two different Persistence networks, with respect to two jammed–states: the initial jammed–state resulting from thermal cycle 1, P^1, and the jammed–state resulting from thermal cycle 5, P^5.

The initial jammed–state is much more fragile then the jammed–state formed by thermal cycle 5, and the topologies of their Persistence networks evolve differently. In particular, the CNN breaks up more quickly for the initial jammed–state, and the Persistent network is more string–like and preferentially aligned along gravity. The results suggest that the dynamics of a granular material are sensitive to the structure of its prior jammed–state.

The Effect of Gender on Leadership Perception

Hali Chambers,
Visiting McNair Scholar from Tuskegee University
Mentor: Dr. Paul Hanges, Professor, Psychology
University of Maryland, College Park

In the United States 51% of women hold lower-to-mid-level managerial and professional positions.   However, despite this percentage of women in business, there has been a slow progression of women into executive positions. One possible explanation for this slow progress is that many people still perceive men are better leaders than women.   If this explanation is true, then to break the glass ceiling, it is important to study how individuals' perceptions of leadership change. We wanted to find out if changes in leadership perception could be measured using the cusp catastrophe mathematical model, which is used in the physical sciences to model planet rotation, meteorology, fluid dynamics, and cybernetics in computer science. In this study, the cusp catastrophe model is used to show how individuals may have hidden biases towards women having leadership roles. Following the works of Hanges, Sipe, Higgins, Dyer, Conn, and Salvaggio (2000), I hypothesized that people will be more receptive to leadership behaviors demonstrated by males than by females. In addition, we wanted to find out if a female has to exhibit twice the leadership behaviors as a male to be perceived equal to the male in terms of leadership.

This is a laboratory experiment in which 60 participants viewed a 35 minute videotape showing 4 individuals (two men and two women) working on a group task. Participants were asked to indicate who they thought was the group's leader by using a computerized measure. Their leadership perceptions were collected once every half second for a total of 4,200 observations per participant. Data was analyzed using both qualitative and quantitative methodology. Data from 3 participants were graphed to show changes in their leadership perceptions over the course of the experiment. These leadership ratings were also correlated with personality and gender bias measures to detect any significant findings.

We were able to observe differences in the leadership ratings of biased and unbiased participants. WE also found that personality also influenced the leadership ratings. Finally, evidence for the discontinuous ratings predicted by the catastrophe model was obtained. Because all of the participants' data have not yet been analyzed, my results are tentative. However, these findings provide preliminary support for the cusp catastrophe model and its usefulness to detect biases.

Minority College Students' Perceptions of College Preparation Experiences and Their High School Counselors

Brittney Chisley
Mentor: Dr. Cheryl Holcomb–McCoy, Associate Professor
Counseling and Personnel Services
University of Maryland, College Park

Abstract

There are major problems with high schools preparing minority students for college. These problems stem from many issues, one being the lack of school counselor training in college preparedness. The need for this research is showed by the lack of literature on the topic of preparing minority students for college. The purpose for this study is to find possible reasons why academic achievement may be challenging for some urban African American high school students in choosing to continue on with education after high school. This study will also show important roles high school counselors can play in ensuring urban African American high school students' academic success. This paper will present the results of a study examining minority college students' high school experiences related to college-going and their perceptions of high school counselors in the process of college admission and preparation. A survey was given to the scholars of Ronald E. McNair Post Baccalaureate Achievement Program at the University of Maryland College Park during their summer program in 2007. The participants (n = 15) completed the online 68–item survey. The survey included items that asked the students about their high school college preparation courses, activities that prepared them for college, and their high school counselor's involvement in their college readiness process. The results from this study demonstrated that current college students did not feel that various high school experiences and courses prepared them for college. The results also found that parents/guardians and high school counselors were considered the most influential in current college student's decisions regarding college preparation and overall decision to further their education.

Note: This study is part of a growing body of research on high school students in low income and minority communities. Given the disparities in college going rates based on race and income, there is a critical need for research that is focused on the variables that promote increased rates of college going among low-income and minority youth. Future research on tracking high school students and looking at the influence of school counselors, teachers, peers, and family have on the students going to college is warranted.

A Fundamental Right:
Justice Anthony Kennedy and Privacy

Mark Collier Jr.
Mentor: Dr. Scott Johnson
Political Science Department
Frostburg State University

Abstract

Although many believe that privacy is something inherently granted to them within the confines of the Constitution. This however is untrue. Nowhere within the Constitution is the word "privacy" ever mentioned, and was only truly made into a right in the 1965 Supreme Court Case, *Griswold v. Connecticut*. After which, debate over privacy fell into three main areas; abortion rights, gay rights, and euthanasia rights. Since the appointment of Chief Justice Roberts and Justice Alito to the court, I thought it would be informative to determine precisely where Justice Kennedy, the last swing voter of the Supreme Court, fell on the aforementioned categories. Using his voting records on past privacy cases he handled, as well as opinions he gave, and secondary sources regarding Kennedy's influence on the court, I came to several conclusions one the state of abortion, gay, and euthanasia rights in the United States. Kennedy's record has historically been what many would consider conservative in regards to abortion. Although in his first cases he backed state programs which forced minors to inform their parents of an abortion beforehand, he denounced attempts to force women to inform their husbands of abortions. In *Planned Parenthood v. Casey*, Kennedy reinforced *Roe v. Wade* as precedent that will likely be withheld throughout Kennedy's tenure in the court. Kennedy gave the majority opinion in *Lawrence v. Texas*, the landmark 2003 case which abolished anti-sodomy laws throughout the country. Seeing as how it was Kennedy himself that created this precedent, it is unlikely that gay rights will be impeded upon while he serves. Finally, Kennedy's stances on euthanasia were varied, and offer no truly concrete consensus on what direction euthanasia cases will take in the future. While Kennedy is still in office, it can be expected that abortion rights might see a narrowing in scope, but that there will never be a complete overturning of *Roe* as precedent. Sodomy laws in the United States are most likely forever gone. Due to the relatively recent debate over right to die cases, euthanasia is still up in the air, with no strong precedent like *Roe* or *Lawrence* to help indicate what direction Kennedy will take in future cases.

African American Females Battling
Juvenile Delinquency

Kelie Marie Darbouze
Mentor: Dr. James Thorpe, Associate Professor, Art
University of Maryland, College Park

Abstract

The purpose of this research study is to get a deeper understanding why African American females are resorting to delinquency during their juvenile years. As a minority student faced with some of the same obstacles, the question evolved what makes me so different? What happened along my life journey to stare me away from committing delinquent acts; over choosing school and success as a young adult? Many researchers have studied female delinquency. They have looked at what contributions play a role in these young women resorting to delinquency. After examining a lot of different studies there seem to be common themes.

The research question that is set out to be answered is: What contributes to female juvenile delinquency amongst African American women in today's society? This research is not about what types of delinquent acts or crimes African American females are mostly likely to commit. Nor does this research look at why they resort to those types of crimes. This research focuses what has happened in these African American females' lives that leads them into choosing a lifestyle if delinquency as opposed to not being delinquent. When thinking about the act of delinquency, it is in itself wrong. Thus, what happens when this is the only alternative in sight? African American girls are only 12% of the population; they make up 50% of the girls in the juvenile justice system (OJJPD, 1998a). This leads evidence to show that there are some circumstances and or factors that are affecting these young African American females. What are the underlying reasons?

There are five major factors that I believe have the most pivotal affect on the lives of African American females. These factors often lead them to choose a lifestyle of committing deviant acts. The first factor is Socio-economic status (SES). This deals with aspects such as poverty level of the family with the delinquent girl, the parent's income if they are able to work or not, and what the job availability is in the community. Also another major factor is looking at Education. The important aspects in dealing with education include the parent's education level, are these females encouraged to attend school on a regular basis, or are they dropping out of school, and what are the school systems like in the community. These are just some of the factors that have a huge impact on African American females and why they are in the constant battle in dealing delinquency.

Synthesis & Purification of Bio–5'–AMP

Sharis Erwin
Mentor: Dr. Dorothy Beckett, Professor
Chemistry and Bio-Chemistry
University of Maryland, College Park

Abstract

The biotin repressor, BirA, regulates biotin retention in *Escherichia coli*. BirA binds to the biotin operator, BioO, to repress transcription of the biotin biosynthesis operon. BirA is required for the retention of biotin within the cell in two protein-bound forms. It catalyzes the formation of the adenylated form of biotin. Transcription is activated by a small molecule, bio–5'–AMP, the complex formed by BirA and ATP. After synthesis, biotinyl–5'–AMP remains noncovalantly bound to BirA and provides the activated form of biotin required by BirA for its holocarboxylase. A second reaction that occurs from this adenylate of biotin is the linkage of the biotin to the biotin carboxyl carrier protein, apoBCCP. This bio–5'–AMP complex functions as the essential intermediate in the biotin transfer reaction and as the corepressor in repression of transcription. It is known that two holoBirA monomers (BirA•bio–5'–AMP) bind cooperatively to the biotin operator. Thus, bio–5'–AMP acts as an allosteric activator by activating BirA to bind to DNA by promoting homodimerization. After the synthesis and purification, all of the biotinyl–5'–AMP was purified.

Physiological Changes in Alfafa Plants Due to Injury Induced by Potato Leafhopper

Olubunmi I. Fakilede
Mentor: Dr. William Lamp, Associate Professor
Department of Entomology
University of Maryland, College Park

Abstract

The infestation of plants like alfalfa can lead to injury by insects like the potato leafhopper*, Empoasca fabae* (Harris). The potato leafhopper feeding causes a reduction in the photosynthetic rate of alfalfa plants. The exact cause for the reduction in photosynthesis is currently unknown. It is believed however that the potato leafhoppers' feeding disrupts the flow of the products (i.e., sugar) that result from photosynthesis through the vascular tissues of plants. As a result of this disruption it is believed that the rate of photosynthesis is reduced as a result of feedback inhibition, which is also known as end product inhibition. To determine if the rate of photosynthesis is reduced because of feedback inhibition, two types of greenhouse experiments will be conducted. The first greenhouse experiment compared the rate of photosynthesis as a function of the internal carbon dioxide concentration in healthy plants versus alfalfa plants that have been injured by leafhoppers. I found expected that the ACi (assimilation–internal carbon dioxide) curve of injured plants was be lower than that of the healthy plants only for heavily-infested plants. In the second greenhouse experiment the impact of leafhopper injury in alfalfa plants was compared over the varying ages of the plant. It was expected that the alfalfa plants that are injured by the leafhopper will experience a more disruptive effect of photosynthesis in the older plants than in the younger ones, however I found the younger plants were most severely injured. This study is important because it impacts the way the pest infestation is managed in growing plants. The results of this study will help scientists and farmers alike find a way to reduce the crop injury caused by these pests.

Parenting of Black/White Biracial Children

Dawnyea Jackson
Mentor: Dr. Leigh Leslie, Family Science
University of Maryland, College Park

Abstract

Researchers have begun to conduct research that centers on biracial children because the most recent numbers indicate that children of two or more races make up between 2-4% of the population for the nation (Kids Count Data Online, 2004). A great deal of the research that focuses on biracial children has specifically looked at Black/White biracial children. This focus is due to social stigma associated with their parents' relationship. While the number of interracial marriages and their social acceptability are both increasing, both Black/White interracial couples and their children are the most likely to be less accepted (Joyner & Kao, 2005).

This review of literature will focus on the unique parenting issues and challenges related to parenting Black/White biracial children. The focus will be on Black/White biracial children because questions of identity and belonging may be most pronounced in biracial people whose heredity is one Black parent and one White parent because that type of union still has the most social stigma associated with it (Leslie & Kelch-Oliver, 2007; Fears and Dean, 2001). Looking at Black/White biracial children and Black/White interracial relationships is also important because those two cultures have a pronounced history of difference and cultural clashing in the U.S. Understanding all the facets of interracial families and the biracial children they produce is imperative to understanding the well being of these children.

Parenting is filled with challenges for all parents. For example, in every parent-child relationship boundaries on discipline need to be discussed and developed. Additionally, in every parent-child relationship children learn about their own and others' cultures. However, there may be challenges that while common to all parents, have a dimension that is specific to minority youth. For example, in every parent-child relationship teaching and learning about identity happens, but issues of racial identity development may be more salient in racial minority families. And while these issues may be common to parents there may be difficulties that arise for interracial couples raising a biracial child, especially a Black/White biracial child, because racial or cultural differences may exist between parents in their approaches to discipline, discussions of culture, and teaching about racial identity.

Selenium–Induced Senescence for LnCAP and PC–3

Mandy Kang
Mentor: Dr. Wen-Hsing Cheng, Department of Nutrition
University of Maryland, College Park

Abstract

Cancer is the second largest cause of death in the US, accounting for 23.1% of the mortality rate. Despite the advances in understanding of this disease, the death rate caused by cancer has remained relatively unchanged. A relationship of selenium and cancer progression is through oncogene-induced senescence. The effect of selenium on senescence could be an important mechanism in which cancer prevention is achieved.

An Experimental Investigation of Unsteady Jet Mixing of Non–Newtonian Fluids in a Waste Tank

Ren Liu
Mentor: Dr. Norman Munroe
Associate Director, Research Development of Applied Research Center
Florida International University

Abstract

Unsteady jet mixing of Non-Newtonian fluids is investigated experimentally in order to develop a mixing correlation for treatment of stored radioactive waste prior to disposal. The radioactive waste is simulated by using a carbopol mixture, which possesses both Newtonian and Non–Newtonian fluid rheological characteristics. Viscosity, shear stress and shear rate are analyzed by a Rheostress meter. Particle Image Velocimetry (PIV – a non–intrusive measurement technique for studying the velocity of particles in fluids) is used to track the degree of mixing (fluid consistency factor, K and fluid behavior index, n) of the fluids under unsteady jet conditions. The medium is seeded with tracer particles, which are illuminated periodically by a plane laser beam in order to obtain successive digital images by a charged coupled device (CCD) camera. These images are then analyzed by a computer, which determines the velocities of the tracer particles. This information enables a better understanding of the fluid velocity profile and mixability in the waste tanks.

Information Systems and Information Technology

Arlene Logan
Mentor: Dr. John Cordes, Director, Science, Discovery, and the University Academy, University of Maryland, College Park

Abstract

The purpose of this study is to identify themes and issues in the marketplace of information systems that may be instrumental in bridging a theorized disconnect between the research done in information systems, the academic curriculum taught and the efficient and effectiveness of the usage of information system as a tool of competitive advantage by manager in the global economy. A content analysis of Information Week, a weekly magazine was used to identify certain themes that were prominent from 2004 to 2007. This weekly publication was used because it is one of the magazines that continuously deal with issues in information systems and their management in the global economy.

Identifying these issues and themes are important because they bring to light the topics that manager of information systems in different organization deem as been important. Also, in keeping these themes and issues in mind, we might be able to correlate the research done in information systems and the academic curriculum; which will in turn prepare managers of information systems to be more effective and efficient when managing the resources of the company to maintain and increase the business value of their company's resources.

The results of the content analysis identify certain themes and issues that were consistently prominent each year for the past 5 years. These themes and issues were; competitive advantage, innovations, security and information privacy, and management information systems salary. The result also shows that there were changes in the volume of articles that deal with the different themes and issues which could be seen to coincide with the important of these different themes and issues. In 2004 the highest volume of articles was about competitive advantage, in 2005, the highest volume of articles discussed innovation. In 2006, the highest volume of articles discussed the salary of people in information systems. In 2007 the highest volume of articles focused on security issues in information systems. It is important to note that from 2004-2007 articles discussing competitive advantage showed a constant decrease while for the same period articles discussing security issues showed a constant increase.

The Burden of Low Income Populations: Never Ending Rising Gasoline Prices

Riane E. McWain
Mentor: Dr. Kelly Clifton, Assistant Professor
Urban Studies and Planning
University of Maryland, College Park

Abstract

Is transportation really an issue? Research as long examined the cause and effect transportation has had on employment for low-income populations. With the increasing and constant trend of rising gasoline prices, it is necessary to examine what effect rising gasoline prices has on transportation used by low-income populations to reach various destinations. Although, many socio-economic classes are beginning to feel the effect of this phenomenon, low-income populations are more likely to feel the effect, being that they have limited incomes and limited access to various services. Various events, ranging from the 1973 Oil Crisis to the invention of the Ford assembly line, will be examined to understand the consequences, short and long term, that impacted gasoline prices and transportation. Throughout this literature review, four dilemmas's and how they interact with each other will be reviewed to recognize the social and economic impact of rising gasoline prices on low-income populations. These dilemmas include the income provided by the job, the spatial make-up of the job, the type of transportation taken, and of course, the price of gasoline itself. Each dilemma will show a different aspect of rising gasoline prices. The Bureau of Labor Statistics declares that "food, apparel, and housing" are basic necessities. Additionally, the Bureau of labor Statistics, declares that transportation lags only second behind housing making it the second biggest expenditure spent by households, thus making "lower income households are particularly burdened by higher transportation costs since these expenditures claim a higher percentage of their budgets even if they are spending less". Authors whose work will be analyzed in this literature review include: S. Grasky et al, T. Sanchez, Q. Shen, and G. Yago. The literature review is not limited to using these authors. The literature review does not limit it self to the authors mentioned above. The effects of this trend, rising gasoline prices, will be analyzed through reading and deductive reasoning of scholarly journals, nation reports from research centers, and narrative accounts in order to understand the various impacts on low-income populations. However, beyond this, the literature review does offer thoughts for future literature reviews and primary research.

The Influence of Religion and Ancient Law on Today's Criminal Justice System

Jessica Jacqueline Membreno
Mentor: Dr. Arnett Gaston, Professor, Criminology and Criminal Justice
University of Maryland, College Park

Abstract

Religion, faith, or believing in some higher entity is part of almost every form of societal structure. Throughout centuries religion has influenced many of societies' laws and style of living. This paper will address the question of how ancient religions and ancient codes of laws might have influenced contemporary criminal justice systems. Emphasis will be on the three religions that appear to have had significant impact on societies and cultures throughout the world over time, i.e. Judaism, Christianity, and Islam. This paper also attempts to address the impact that different ancient codes of laws such as the Code of Hammurabi, the Sumerian Code, and the Code of Draco might have had on today's criminal justice practices.

There is not much literature describing the development of any influence these specific religions might have had on today's criminal justice system. The one common theme is that various forms of punishment, primarily ranging from corporal to capital, appear in each of these religions as a means of addressing various forms of antisocial behavior. It became apparent and problematic that some religions considered certain offenses serious enough to warrant death, while other religions did not. This lack of consensus contributed to the need to know the religious, societal, environmental and other phenomena that led to contemporary criminal justice thinking. A literature review and historical reference research were conducted to provide context and perspective. Three main research questions evolved: (1) What did these three main religions feel were major violations of their law; (2) What punishments were outlined for the individual when they broke the code of law; and (3) What if anything did these three religions most commonly believed was worthy of punishment for violating the laws and what were worthy punishments?

Several interesting concepts were proposed in a number of articles reviewed. The importance of the literature research helped to generally answer two primary questions in that religion may have influenced today's *substantive* law, i.e. what might be a crime and what should be its punishment, and the codes, such as the Code of Hammurabi may have initially influenced *procedural* law, i.e. what is the process by which we investigate, adjudicate and punish those who have offended us.

This still leaves the criterion question of how we developed the belief that punishment (either corporal, capital or both) should be the vehicle through which justice is served. Further study is recommended, particularly in the areas which

predate religion and civilization. Could it be that what we currently believe to be legally appropriate has been influenced by early religious belief and ritual, which might have been influenced by even earlier pagan belief and ritual? The conclusion is that while investigation of religion and civilizations could partially lead to the understanding of how and why punishment is employed as the response to transgression, it is not enough, and research into preliterate and perhaps even prehistoric groups is recommended in order to determine where such influence began.

Associations between Negative Parenting and Children Developing Behavioral Problems

Nichelle Newton

Mentor: Dr. Brenda Jones–Harden, Associate Professor
Institute for Child Study
University of Maryland, College Park

Abstract

The purpose of this study was to identify whether there is a correlation between mother's negative regard and children's behavior problems. Negative regard can be defined as mother overtly rejecting their child, blaming him or her for mistakes and not supporting their child emotionally (Sosinsky, Carter & Marakovitz 2001). A sub-sample of 20 mothers and toddlers young as (ages 0–36 months) were randomly selected out of 120 participants who were enrolled in local Early Head Start programs. To be eligible to participate in this study, mothers had to meet at least one of the four criteria: scoring high on depression, having three children under the age of five, being reported to child protective services, and being a teenage mother. To assess whether the mother displayed negative regard, mother-child free play interaction were coded by using the Parent Child Interaction Rating Scale (PCIRS) developed by Laura Sosinsky, Alice Carter, and Susan Marakovitz. The scale ranged from one through seven with one being the lowest level of negative regard and seven being the highest level of negative regard. The results indicated that no significant correlation existed between mother's negative regard and children's behavior problems. Mothers displayed very little negative regard therefore; a larger sample size may have been needed to observe more variation. For future recommendations to identify whether there is an association between mother's negative regard and children's behavior problems, a larger sample size maybe needed to show more variation and more diverse participants maybe needed to see whether other factors contribute to children having behavior problems other than their mother's being from a low socioeconomic group and the mothers meeting at least one of the four criteria.

Eating Behaviors, Food Consumption and Hunger of Low-Income, Urban Students

Zainab Okolo
Mentor: Dr. Sally A. Koblinsky, Professor, Family Sciences
University of Maryland, College Park

Abstract

Despite research examining hunger and food insecurity and its negative effects on children, relatively fewer studies have investigated the eating behaviors and food insecurity of children in different age groups and geographic locations. In particular, the literature failed to reveal any studies of hunger and the eating behaviors among Baltimore inner city children in the elementary and secondary grades. Studies have also failed to express the relationships between hunger and children's intake of particular foods such as fruits, vegetables, lean meats, and milk.

Therefore the purpose of this study was to compare the eating behavior of Baltimore City elementary and middle school children. The study further sought to explore relationships between hunger and age differences among the children. The information made available by this study should be valuable to educators, nutritionists, and legislators in their development of strategies to improve children's nutritional status and help them succeed in school. Subjects in the study were over 340 students from Baltimore City schools ranging from kindergarten to 11th grade. Students were predominantly African American and were all participants of PAL after school programs. Each student in the study were also participants in the free of reduced lunch programs being offered at their respective schools were surveyed about their eating behaviors and feelings of hunger throughout the day. Sample survey questions included, "What did you have to eat today?", "How many times a week do you eat vegetables?", "What type of snacks do you like to eat?", and "How many times a week are you hungry?"

A 27-item questionnaire was administered at 18 Police Action League Centers in Baltimore City. Results indicated that the average elementary and middle school student missed at least two breakfasts per week and felt hungry three days per week. The average high school student missed more than three breakfasts per week and felt hungry about three and one half days per week. Additionally, students' reports of snack consumption revealed that 93% of snacks were sweet and/or salty, while only 7% of snacks included fruits, vegetables, dairy, and whole grains. Implications of these findings for students' nutritional status and school performance are discussed.

The Future of Work: Understanding the Attitude Towards Technological Changes in the Workplace Among Undergraduate Students at the University of Maryland

Adanze Okoroha
Mentor: Dr. Allison Druin, Associate Professor and Director
Human Computer Interaction Lab
University of Maryland, College Park

Abstract

The new century has brought a lot of changes into the nature of work, most of which is driven by technology. As some mechanical and electrical technologies grow and changes, companies are increasing their level of skills needed in the workplace. Tasks that used to take about 30 men and 4 weeks to finish years ago now take 1 man and 1hr to complete. Little is known about college students' awareness to this rapid change in the workplace, this study examines the level of awareness and understanding that college students have about these changes and the actions they might be taking to better prepare themselves for the future. Using the qualitative method, 15 University of Maryland undergraduate students, 7 male and 8 female were arbitrarily selected to participate in an extensive thirty to forty-five minutes interview at the Stamp Student Union. The result of the data analysis collected from the thematic analysis was that younger students were a little more aware than the older students when it can to the change in future work skills in the workplace. Furthermore, the level of concern also varied according to the different students' majors.

How Has the Civil War in Sierra Leone Manifested the Use of Prosthetic Devices?

Omolola I. Olakanye

Mentor: Dr. Margo Humphrey, Associate Provessor, Art Department
University of Maryland, College Park

Abstract

The purpose of the study is to determine if the Civil War in the African country of Sierra Leone has manifested the use of prosthetic devices. A prosthetic device is a corrective device designed to restore function to an individual who has undergone the amputation of a limb. Subjects that were given medical treatment were involved and became amputees. The subjects were also given free prosthetics and medical treatment from various organizations such as "Arimed" which is stationed in New York City and the "Handicap International", which is stationed in Sierra Leone. During their stay in New York, the subjects were given prosthetics and were taught to use their limbs in order to function in society by themselves. Organizations such as Arimed went to Freetown in Sierra Leone and brought back victims that had lost some of their upper extremities, such as the loss of both arms. The subjects were taken to Staten Island University Hospital for their treatment and physical therapy. The victims brought over were also provided with warm clothing and arranged with free dental visits at N.Y.U. The use of prosthetic device is instrumental to saving the lives of the victims. In Sierra Leone, the "Handicap International" has set up a workshop in Freetown to provide prosthetic devices, orthopedic services and mobility aids for the community. This organization has seen that the people involved in the war who was disabled before the war broke out is receiving little attention to get help. As a result of this, many disabled people are seen on the streets of Freetown in wheelchairs and on crutches begging for their daily survival. This organization seeks to end this problem. The results of the study showed that having the devices and being properly fitted and trained to live with them, the victims were able to return to their country and live normal lives, by not having the amputation hinder them.

Identifying Expression Variation Caused by FZF1 Protein Divergence

Robert Patterson

Mentor: Dr. Kalai Mathee, Florida International University

Abstract

Genetic assortment provides phenotype variation, which contributes to biodiversity. Yeast is an ideal model for observing expression variation that results from transcription. The FZF1 gene is a transcription factor associated with sulfite metabolism. If sulfite is not properly regulated by a cell it can become toxic. Previous work identified phenotypic variation in sulfite sensitivity due to the FZF1 gene from different species of yeast. For this study, we contrasted two strains of Saccharomyces cerevisiae, one containing the FZF! allele from S. cerevisiae and the other containing the FZF1 allele S. Paradoxus. These two strains have identical genetic backgrounds making it possible to measure distinct phenotype characteristics. For this procedure, we determined 1.5mM of sodium sulfite is the appropriate concentration to inhibit cell growth in both species of yeast. Using DNA microarrays, we will identify genes that are differentially expressed by the two FZF1 alleles. The result indicates that 1.5mM of sodium sulfite produced the appropriate double ribosomal band which was used to determine sulfite sensitivity between the two proteins resulting from downstream changes in gene regulation. From our findings we can elucidate the underlying mechanisms of sulfite in the immune response and various neurodgenerative diseases

African Retention in America

John Edward Sanders
Mentor: Dr. Fatimah Jackson, Professor, Department of Anthropology
University of Maryland, College Park

Abstract

Despite the vast research by Americans regarding Pan "Africanism" from Africa and beyond, this study will successfully elucidate the cultural retention from Africa to the United States. Hence this study highlights the significant contributions of African culture in the development to what is now known as African American culture. This informative study will examine African traditions and how these traditions have transferred to the New World, granted, how these traditions are unconsciously practiced today. Accordingly, this study will investigate how African culture has aided in the development culture

The intent of this study will be to further the understanding of culture in Africa, West Africa in particular, and anthropologically examine the cultural retentions from Africa to United States; (African culture in the United States, also known as African American culture).

This cultural examination process successfully sketches the course of the African journey across the Atlantic. Many African civilizations are strategically dissected and explored; some of which being the Yoruba, Igbo, Kongo (Congo), and many more.

This study shows how the many African civilizations have formed, and how they are reflected in the aesthetic, social and metaphysical traditions of blacks in the New World. These traditions include: music, sculpture, textiles, architecture, religion and writing of Africans in the United States. Hence, these distinct African civilizations have cultivated the cultures in the New World, retaining the copious history and traditions.

I hypothesize that the rich and ancient history of African culture boldly presented, affirms that African Americans are not an isolated group, but a group intimately connected to particular cultures and societies in West Africa and the African Diaspora. I also hypothesize that many of the cultural practices of today, from church to music, can discover its eminent genesis back to the motherland of Africa. Therefore many subconsciously retain historical practices of the African culture.

This study will examine the role countries on the western coast of Africa, where slaves were egregiously extracted, to discover a unique correlation in the development of black America today. Speech, religion, music, family structure and other factors will be inspected on the quest to excavate stratigraphic layers of a cultural derivation.

This study successfully extracts factors qualitatively, addressing the question why, to obtain the necessary information in discovering the correlation between my hypothesis and the concluding research.

The purpose of this experiment will be a) to discover the reinstatement of African culture in the New World; b) observe the creative aspects of the transformations from Kongo (Congo), Yoruba, Igbo and other African nations to what transforms into African-American culture; and c) to examine the scope of specific African nations and their cultural retention in the New World.

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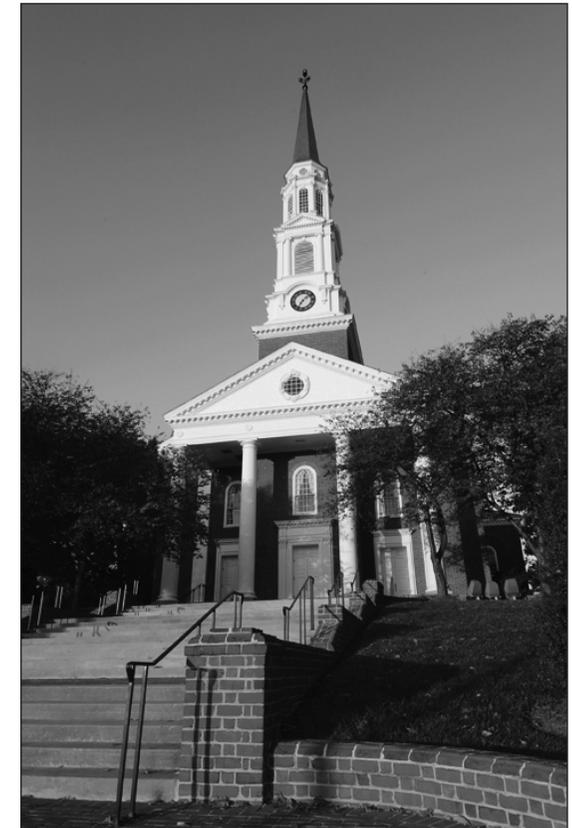
Constructing Race in Campaign 2008: A Textual Analysis of the PBS All American Presidential Forum featuring the Democratic candidates at Howard University

Shavonne Shorter

Mentor: Dr. Stacey L. Connaughton, Assistant Professor
Department of Communication
Purdue University

Abstract

History was made on June 28, 2007 when candidates for United States presidency for the first time debated exclusively about race. This article provides a close textual analysis of the first PBS All America Presidential Forum featuring the Democratic candidates for United States President, to discover how these individuals construct race. We find that candidates constructed race in this debate as a direct synonym for African Americans. Additionally, African Americans are being constructed by the candidates as poor, lacking education, and destined for failure. Implication of these constructions for discourse about race and politics in the american political campaign context, as well as for how African Americans may view themselves vis-a-vis the U.S. political system, are discussed.

How Does Media Coverage in the Washington Post Depict Young People Engaged in Violent Crimes?

Tahera Sparks

Mentor: Dr. Alice Bonner, Lecturer, Journalism Department
University of Maryland, College Park

Abstract

The goal of my research is to find out if the media has a direct effect in the stereotyping of minority teens and the shaping of public policy that affects teen minorities. The media is a social construction that influences the behaviors of teens and exaggerates the magnitude of violence that actually occurs. The newspaper elevates the level of crimes because of the number of times the stories are presented and the descriptions used to illustrate the crimes. This creates stereotypes and promotes that it is normal for young people to commit crimes and that young people commit the most crimes. The Washington Post newspaper, from June 13th-July 15th was used to determine if there is a correlation between teen violence and racial segregation on public opinion discrepancies in the presentation of the race, proximity, age and sex of the accused and victims that could affect racial stereotypes and public policy. Each story was analyzed to find out the date of publication, the number of times an article was written for the given story, the length of the article, location of the story in the newspaper, and the language used in the description of the victims and the accused (i.e. thug or gang). My research has found that the frequency of the stories in the post depict young people as violent and show that they are committing more crimes than they really are. This research is important because the depiction of youth in a widely read newspaper could alter the general perception of other readers and create false stereotypes that teens are committing more crimes than they really are.

The Economic Impact of Hispanics in Maryland

Leimer Tejeda
Mentor: Dr. Ana Patricia Rodriguez, Associate Professor
Languages, Literatures & Cultures
University of Maryland, College Park

Abstract

This research focuses on the different ways that Hispanics legal/illegal impact Maryland's economy. Particular attention is given to Hispanic businesses and their contribution to the economy. No literature exist at the state level with regards to immigrant's contribution to the economy and the ones that do exist at the national level have major discrepancies on the way that scholars conducted their research. There are two particular researchers in the field who seem to fall into this dilemma, thus, the conclusions of their research is presented. The initial intent of the study was to replicate a previous study titled *The Economic Contribution of Non-Native (Immigrant) Hispanics to Nevada* conducted by Dr. Robert Gingsburg and Dr. David Moberg and the Center on Work and Community Development in Chicago Illinois. However, for the purposes of this specific study Dr. Werling, from Inforum (Interindustry Forecasting Project at the University of Maryland), and I discovered that the software used on the study was not well suited to arrive at the desired conclusions. An overview on the reasons why Hispanics, specifically why Mexicans, Salvadoran and Puerto Ricans (the most populous in Maryland) came and continue to immigrate to the U.S. is also presented. There were several limitations to the study which has not allowed for final conclusions to be made. Further research in this topic is extremely important to better understand the economic situation of Hispanics in Maryland and every state in the nation.

West African Immigrants: The Mother–Daughter Relationship

Manuela Tingbo
Mentor: Dr. Jacqueline Wallen, Associate Professor, Family Science
University of Maryland, College Park

Abstract

Among other things, it is the presence of various religions, ethnicities and language that make the United States of melting pot. Considering the influx of immigrants, numerous studies have been conducted in attempt to understand and adequately attend to the needs of those groups. Unfortunately, West African immigrants are a group that has not been studied in depth. This research is designed to study a subset of that population, that is, mothers and their daughters. Data from a study conducted by Lee, Dwyer and Coward suggests that the daughter-mother relationship is closer than any other family dyad types (1993), but what becomes of that relationship once immigration occurs? Drawing from studies of other racial or ethnic groups, immigration to a country with liberal values such as the United States makes adherence to traditional/conservative West African values more difficult. The pilot study done over the summer was exploratory in that it sought to determine to what extinct had immigration influenced cultural identity and the dynamics of the mother daughter relationship of West African immigrants.

There were a total of 11 participants, all of whom were adolescent girls from a local youth group and were between the ages of 14 and 18. Over half of the participants were born in the United States while the remainders were born in Liberia, Ghana or Sierra Leone. The questionnaire they were given was a combination of 11 open ended and close ended questions. The preliminary findings point to the fact that over 70 percent of the participants thought their mothers strongly uphold traditional African values and tried their best to pass on similar values and beliefs to their daughters. At this stage of the research it is not clear what may have contributed to this, but 36 percent of the participants identified with their mothers' cultural heritage. Data was also collected on recent occurrence of a time spent together and subject(s) mother and daughter both agreed on.

At this point in the research, adjustments are being made to produce better qualitative data and in so doing identify key factors that influence the mother–daughter relationship of West African immigrants.

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Part Two: 2008 Abstracts and Featured Papers

ABSTRACTS

FEATURED PAPERS

Lactate Dehydrogenase (LDH)

Sharis Erwin
Mentor: Dr. Peggy Biser, Associate Professor, Chemistry
Frostburg State University

Abstract

Lactate Dehydrogenase (LDH) is a glycolylic enzyme that is present in all tissue. It catalyzes the reversible oxidation of lactate. For this reason, many undergraduate biochemistry laboratories use LDH for experimentation. As of now, there is no data on bovine LDH, so my research focused on the techniques in which the protein is extracted and purified, based on a published laboratory manual. After the extraction and purification, two dimensional analysis will be performed on the protein, so that the data on which its isoelectric point and pH can be published.
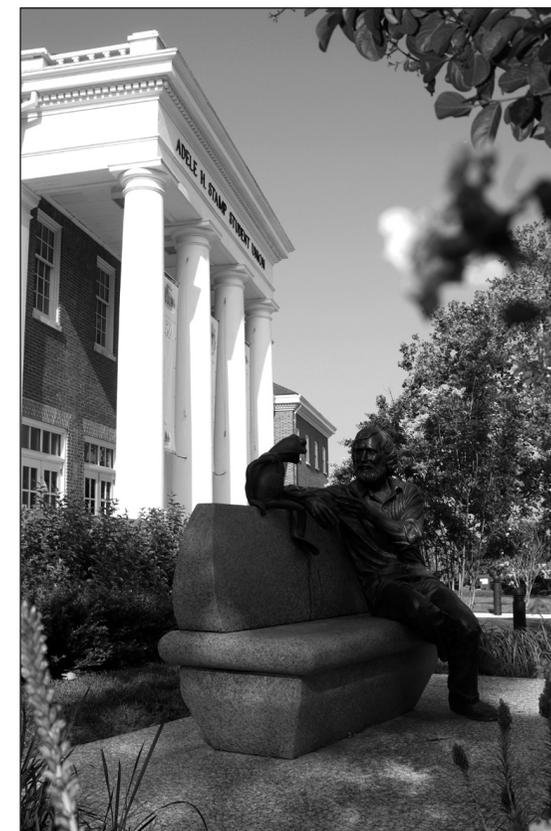
What Factors Affect Gas Price?

Wenjie Hoe

Mentor: Dr. Dorith Grant–Wisdom, Government and Politics
University of Maryland, College Park

Abstract

The aim of the research project was to conduct a qualitative analysis on the potential impacts of the rise in oil prices. The rise of the gas price has a lot of factors influencing. Energy Information Administration (EIA) analysis of the petroleum market points to the cost of crude oil as one of the contributor to the record high gasoline prices that we are now experiencing. The cost of crude oil now accounts for about 73% of the gasoline pump price. (June, 2008) World crude oil prices are at record highs due mainly to high worldwide oil demand relative to supply. Other contributing factors include political events and conflicts in some major oil producing regions, such as a high demanding of oil, the War in Iraq, weakening of U.S economy and unregulated market price. There may be other factors like the decrease of the quantities of oil in the world and environmental effect to the oil price. These two are very important problems which have to adjust immediately, but I will consider this factor as future study reference. My current paper is concentrated on talking about the direct and indirect factor that affects the gas price. For example, in the factor of weaken of U.S economy, there are a lot of indirect sub-factors which makes the U.S economy suffer. Once we find out all the factors, we need to eliminate as many factors as we can.

How Do African American Male Relationships with Their Mothers Affect Their Relationships with Their Spouses?

Sharelle Law

Mentor: Dr. Wallace Southerland III, Associate Director
McNair Scholars Program, University of Maryland

Abstract

This conceptual paper investigates the difficulties Black married couples are experiencing in an attempt to maintain stable relationships. This document is a literary analysis of how the bond African American men have with their mother's affects the union they have with their wives. The following questions are posed: (a) How are African American mother- son relationships characterized in the literature? and (b) How does the bond between African American mothers and their sons affect their sons' future relationship with their wives and marital satisfaction?

The significance of this paper is to first gain a broader perspective of the state of marriage in the African American culture then identify and understand how African American mother- son relationships influence spousal unions and use the findings as an instrument to enhance Black marriages. Finally, to gain a larger comprehension of Black-male, Black-female tension and provide a different perspective and knowledge in assessing the origins of the conflict. The Freudian psychoanalytical Oedipus complex will be used to discuss how Black men subconsciously choose a mate that resembles their mother. Olson and Olson's five typologies of marriage will also be used a guideline in discussing marital satisfaction among Black married men. The conclusions are as follows: there are certain affairs only a mother can teach a son, many Black marriages are conflicted, a Black man will subconsciously pick a mate much like his mother, the martial union will most likely resemble the mother-son relationship and many Black-mother son relationships are most likely conflicted.

Hydrogen Purification

Ren Liu

Mentor: Dr. Ashwani K. Gupta, Appointed Distinguished University Professor and Islam Ahmed, Associate Researcher
University of Maryland, College Park

Abstract

Today, 90% of U.S waste goes to land fill. However, the amount of land is limited while the amount of waste produced is increasing. Therefore, combustion/ thermal treatment of waste before disposal to land fill is suggested because the size of waste could be reduced up to 90% after thermal treatment. Furthermore, the energy release by thermal treatment process could be recycled for solving energy shortage problem and enhance energy stability.

Waste to energy technology had been practice for many years. However, increase the energy recovery efficiency is still a big issue. This paper focuses on increase the energy recovery efficiency of combustion/ thermal treatment. Hydrogen purification facility was design to further combine with a gasification facility in order to study the way to increase the energy recovery efficiency.

Literature review analysis was done for selecting the method of hydrogen purification. Comparison between Pressure Swing Adsorption (PSA) and Membrane Diffusion method was reviewed. Difference between two methods was explained. Moreover, Membrane Diffusion method had been selected for hydrogen purification process due to its high hydrogen recovery efficiency. The difference between organic and inorganic membranes was discussed. Furthermore, advantages and disadvantages of different inorganic membranes was review and cited in detail for membranes selection. Palladium membrane was chosen due to its high premeance and selectivity hydrogen.

Design of hydrogen purification facility was discussed and a diagram of basic design was shown. Three different gases were used to simulate the syngas. Its contents could be easily analyzed by the measurement of flow meters. A stream generator was adapted in order to add steam into syngas for preventing the overheating of palladium membranes. Research parameters are pressure and temperature and a pressure gage and a furnace were use for this purpose. This facility was study independently but it would be connected to a gasification facility for further research. Overall, a 99% of hydrogen recovery efficiency was expected.

Father/Son Relationship Trajectories in Low–Income Families

Valencia K. Morton

Mentor: Dr. Kevin Roy, Associate Professor, Family Sciences
University of Maryland, College Park

Abstract

The research project examined factors that influenced low–income father involvement and there paternal resilience over time. Paternal resilience consists of the father still being actively involved in their child's life despite obstacles such as substance abuse, gang involvement or incarceration. One hundred and fifty interviews with low–income fathers were conducted with fathers varying in age and race. A sub-sample of 30 fathers, 10 European American, 10 Latinos and 10 African Americans, were taken from the population of one hundred and fifty interviews. From these interviews, initial conclusions have developed from a grounded theory approach about father/son relationships and cultural factors in low–income families. From these interviews or life histories, their father's involvement with them from birth to age 18 was examined. Four typologies for father involvement were developed and used to form theories and explore factors for father involvement. This research shows how factors such as divorce and separation shape father involvement. As cohabitation and "out-of-wedlock" pregnancy become the norm in society, there is more likely to be a decline in father involvement. Research is still pending on the new factors involving the "other" or sub-father, based on data collected and coding constructed in the Nudist 6 program thus far.

Racial Healthcare Disparities in the African American Community

Nichelle Newton
Mentor: Dr. Wallace Southerland III, Associate Director
McNair Scholars Program,
University of Maryland, College Park

Abstract

The purpose of this literature review was to determine why racial healthcare disparities exist in the African American community and what can be done to eliminate healthcare disparities. Disparities in healthcare was defined as racial or ethnic difference in the quality of healthcare that are not due to access related or clinical needs preference or intervention (Institute of Medicine, 2003). The following strategies were used to collect, review and analyze literature.

First, I used the University of Maryland Research port database. The Academic Search Premier was chosen because this particular database has a lot of articles pertaining to my topic. The concepts that were used to find literature involving racial health disparities were "health disparities" the number of source found were 1700. Second, to filter out the articles that were not addressing issues of racial healthcare disparities in regard to African American I used descriptive terminology to narrow the search. The terminology that was used to narrow the articles pertaining to my topic "health disparities and African Americans" the number of sources found were seven. Third, I examined digital dissertation to identify dissertations that had discussed topics in regard to racial healthcare disparities.

Analytical review of the literature answers two central research questions. The evidence in research reveals that there are many factors that contribute to racial healthcare disparities and discrimination in the health care system. There are many negative consequences in lost of productivity or use of services that could be prevented if individuals received early care and treatment.

The key findings from the literature suggest reasons why racial healthcare disparities exist in the African American community: healthcare providers may have prejudice or bias attitudes towards certain ethnic groups and not consciously aware; literature suggests healthcare disparities exist because of historical experience African Americans have encountered; the literature implies that access and utilization is another contributing actor to racial healthcare disparities; improving access to care is another barrier that needs to be improved to eliminate racial healthcare disparities; having more minorities in the healthcare profession can assist in reducing healthcare disparities; and improving healthcare financing and delivery method can help to lower racial healthcare disparities.

This analytical review of empirical research in the literature focused solely on African Americans and what can be done to minimize racial healthcare disparities within this group.

Lighting Conditions and the Social Behavior and Communication of Human Beings: A Conceptual Analysis of the Literature

Adanze Okoroha

Mentor: Dr. Wallace Southerland III, Associate Director
McNair Scholars Program, University of Maryland

Abstract

Considering the fact that electric lighting is an important factor in our daily lives, it is important to investigate if it has any effects on human behavior and communication. A number of studies have examined the effect of lighting on performance level in the workplaces but very few have actually focused on what effects it has on human communication, social behavior and the arousal level. Hence, this paper attempts to collect, analyze and understand, through literature survey, the effect different lighting conditions have on the social behavior of human beings, the way they communicate and interaction between arbitrary groups. The following questions would be addressed in this paper, 1) Does the manipulation of lighting effect the voice levels of human beings, 2) Does differences exist between men and women in terms of how lighting effect their arousal level? Furthermore, this study also attempts to serve as a basis for future research which could help determine if there is a recommended lighting level for different social situations.

Postpartum Depression and the Factors that Influence It

Omolola I. Olakanye

Mentor: Dr. Margo Humphrey, Associate Professor, Art
University of Maryland, College Park

Abstract

During pregnancy, there are many changes that are going on in a woman's body. There are even mental changes that mothers go through especially new mothers. Some of these mental changes are women realizing the significant changes that will happen once their child is born, financial issues, martial issues that may come about, and occupational changes in their life that may occur. These are factors can cause negative affects to the mothers during and after pregnancy. When pregnant mothers have a lot of stress on them during pregnancy, the problems tend to get worse once they have given birth (Grote, 2007). The effects of their problems may lead to Postpartum Depression. We have seen too many times in the news where new mother's are hurting their children but do not know why and what thought processes were going on in their head that led them to committee such crimes. Crimes include drowning their children in the bath tub or suffocating their child to death.

While having all of this information, the cause of PPD has not yet been fully found, but research has been done to see if optimism during pregnancy is associated with less postpartum depression and if the depression has anything to do with four dimensions such as financial, spousal, physical, and occupational problems (Grote, 2007). The purpose of this study is to identify the risk factors on PPD and to learn of the different ways that it is brought about in a woman and how it can be treated. The research looked at different mothers and their diagnosis and her experience during and after pregnancy.

The Impact of Anti-Immigration Policy in Virginia's Prince Williams County on Women's Reproductive Health Specifically with STIs and HIV

Cintya Renderos
Mentor: Dr. Judith Shinogle, Research Scientist
University of Maryland, College Park

Abstract

This paper will study the impact of anti-immigration policy in Virginia's Prince Williams County on women's reproductive health specifically with STI's and HIV. The study will examine whether denying access to health care on the bases of citizenship has created multiple public health problems and negative wellbeing of the general community. The investigation will search for a possible positive correlation between the number of women reporting STI's or HIV and denial to health care services and education. It will analyze the past effects on the overall health of the population when health access is denied to the immigrant population by studying the affects of two 1996 health reforms, The Personal Responsibility and Work Opportunity Reconciliation Act and The Illegal Immigration Reform and Immigrant Responsibility Act of 1996. In doing so, the research will help to expand on the limited amount of research currently available on the topic. A literature review includes a brief history of HIV/AIDS and STIs with Latinos in the Metropolitan area and Prince Williams County. The economic, health and social affects of immigrants will be studied using a combination of the Health Belief Model and Cost Benefit Analysis. Lastly recommendations will be made to Prince Williams Politicians based on primary findings.

The Impact of Gentrification

John Sanders
Mentor: Dr. Tony Whitehead, Professor, Anthropology
University of Maryland, College Park

Abstract

This thesis explores the various types of physical and social upgrading processes that have been used specifically in Washington D.C. It will be assumed that the transitional phenomenon is a microcosm of the African American community at large.

This study places emphasis on the negative social and cultural consequences of community gentrification that have been encouraged in many urban centers in the United States as a local economic and political leaders strive to raise the morale the conditions of inner cities. While urban refurbishment is generally viewed as a positive by policy makers, local businesses, and local developers, the physical upgrading interlinked in urban redevelopment usually leads to the displacement of low-income minority residents that have traditionally occupied the central city neighborhoods. In the context of Washington, D.C., several different processes of physical and social upgrading are evident. The focus of the thesis is to examine the relationship between gentrification and cultural retention. Additionally, this study will explore the severe detrimental cultural impacts on the on the original residents of an area who are priced out of their traditional communities.

An Examination of the Delivery of Services in Emergency Rooms in Urban Areas of the United States and Canada

Tahera Sparks
Mentor: Dr. Katherine McAdams, Associate Dean of Undergraduate Studies and Associate Professor of Journalism
University of Maryland, College Park

Abstract

The researcher performed fieldwork to determine if is a relationship between the delivery of healthcare services in urban emergency rooms in Canada and the United States. The population studied was patients in the urban at inner city at Johns Hopkins Hospital. The main research question incorporated smaller questions to add sustenance to the larger question and they are as follows: (a) would America benefit from free healthcare, (b) what is Canada doing to eliminate the delay in emergency rooms, (c) are the methods in Canada successful or unsuccessful, (c) are the wait times in Canada versus the United States longer or shorter (d) how successful are the emergency rooms in the United States and Canada. An ethnographic observation was used to observe the climate of the emergency room at Johns Hopkins Hospital. A coding chart was created to document the responses from the patients, their possible wait times, injury, and appearance. This chart was filled out at random times during the day to see if they wait times and injuries vary throughout the day. The results showed that there is a slight delay but not a delay that is crippling to the system or the likelihood that deaths would increase. Further research would produce more coding results because the results would most likely yield the results that there is a crippling delay in emergency care. Furthermore, it would highlight that health insurance, homelessness, and drug addiction from frequent flyers or people that overuse the emergency room are the primary cause of the delay in emergency rooms.

STIs and HIV/AIDS and African Immigrants: What do Church Leaders, Health Professionals and Young Adults Have to Say?

Manuela Tingbo
Mentor: Dr. Sondra Gaines, Summer Research Methods Seminar Instructor, McNair Scholars Program
University of Maryland, College Park

Abstract

Knowing that sex and any related topics are taboo in the majority of African countries, how then do these families address those issues when they migrate to the United States? Among other factors, the shortage in quality and quantity of appropriate reproductive health education, contributes to the high rate of HIV/AIDS and other reproductive health infections across the world. Furthermore, Sub-Saharan Africa is home to one of the world's youngest population with one out of every four persons being between the ages of 10 and 19 since the beginning of the 21sr century. Unfortunately, it is the world's region most affected by HIV/AIDS and other reproductive health infections (WHO, 2003). This information is important in the study of STIs, and HIV/AIDS in the United States because the black population is the second largest minority population (Census, 2003) and is disproportionately affected by STDs and HIV/AIDS (CDC, 2006). Reproductive health is a topic that has been studied in depth; nevertheless there is a lack of sufficient of data on these issues as they relate to Sub –Saharan African immigrants living in the United States. Whether in Sub Sahara Africa or the United States, high risk sexual behaviors puts adolescents and young adults at risk of sexual and reproductive health problems; for this reason steps needs to be taken to insure that they are well informed.

Gender Difference in Schizotypy and Loneliness

Shauntia D. White
Mentor: Dr. Blanchard, Professor, Department of Psychology
University of Maryland, College Park

Abstract

Loneliness is described as a multifaceted set of feelings that is driven by social isolation and disconnectedness.[1] Its characteristics are also correlated with other psychopathology such as depression but not schizotypy. Schizotypy personality-spectrum disorder is described as the aversion of social learning upon schizophrenic individuals.[2] Studies have shown that individuals with schizotypy have high elevated levels of social isolation and social withdrawal. The intent of this study is to examine the loneliness and schizotypy personality of older adults over 50 years of age. Findings suggest men had higher levels of loneliness and schizotypy than women, while women had higher levels of depression. There are no studies that correlate schizotypy and loneliness. In this present study, we found a correlation correlation between loneliness and schizotypy. Both gender scored high on loneliness and poor interpersonal relationships. Results show that men scored high levels of schizotypy (Interpersonal and Disorganization) than women (Cognitive-Perceptual). Data suggests that men have more negative social outcome than women in older populations. Depression was also found to have a strong correlation to stress and loneliness.

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[1] (Capciollio et al., 2000).
[2] (Meehl, 1962).

The Correlation Between the Elimination of Nutritional Risks and Food Insecurity and Cultural Food Preferences Among WIC Program Recipients in Fairfax County, Virginia

Rashida Ali-Mubarak
Mentor: Dr. Kevin Roy, Associate Professor, Family Sciences
University of Maryland, College Park

Abstract

This was an exploratory research study in which adult WIC program recipients were interviewed to determine their cultural food preferences. Four daily appointment schedule sheets were chosen at random and evaluated to determine how many persons were being served on an average day at two of Fairfax County's busiest WIC offices. Data revealed how many adults and how many children were being served per day. Data also indicated if a mother had multiple children who were receiving WIC services. Preliminary results indicate that WIC recipients in Fairfax County do have firm cultural food preferences. Through information gained via direct interviews this study also revealed that some of the WIC-recipient families are also food insecure, have disordered eating habits/behaviors.

Statement of Problem

This study will evaluate the culturally preferred foods of WIC program participants. The goal is to identify the more familiar foods that participants actually consume which have a high nutrient density. A comparison will be made between foods the WIC program currently provides and those actually consumed by the participants. Culturally preferred foods should be made available to WIC participants.

The supplemental foods currently offered to participants in the Women, Infant, and Child (WIC) food supplementation program are not always culturally-preferred foods, which means that the potential to maximize the nutritional intake and decrease the incidence of food insecurity of WIC participants is not being fully realized.

Each adult WIC, participant is required to complete food preference survey sheets which reflect their culturally-specific dietary needs, but the food supplementation vouchers that are currently being issued by the WIC program do not permit women to select more culturally-preferred foods. Based on cultural food preferences, and a lack of WIC food options, recipient's are unlikely to eliminate/decrease the degree of food insecurity and/or nutritional risk to themselves or their minor children. The

target population of this study is first-generation immigrants with limited English language proficiency residing in Fairfax County, Virginia.

Purpose of Study

This study will examine the nutrient density of culturally preferred foods of WIC program participants as compared to standard foods made available by WIC. The goal is to eliminate nutritional risks and food insecurity by modifying the current food voucher program for WIC in Fairfax County to include culturally familiar foods that are of high nutrient value.

Research Questions

1. How do the national WIC demographics compare to the local demographics of the study population? Who are WIC's clients in Fairfax County, VA and which supplemental foods are available to them? Are there any special needs/ considerations necessary for target group: nutritional risks or food insecurity?
2. How do WIC recipients make use of the foods that they receive from WIC? What survival strategies do they employ after the vouchers are used for the month? Are recipients experiencing food insecurity? Were there any preliminary indications that WIC recipients do appear to prefer more culturally diverse foods, than they are currently being supplemented with by the WIC program?
3. How do the results of this study indicate that Fairfax County's WIC recipients would prefer to consume more culturally diverse foods, than they are currently being supplemented with, will County officials be prompted to offer WIC clients more diverse food supplementation choices? How will the adaptations eliminate nutritional risk and/or food insecurity for the target group?
4. The future of WIC:
    a. How can WIC evolve to address the needs of its growing diverse population in Fairfax County?
    b. How much control over foods available for WIC clients do local-level WIC nutritionists/personnel have?
    c. Is WIC/FNS obligated to consider cultural diversity when selecting foods for WIC's food voucher program?
    d. How far is USDA/FNS willing to go with establishing cultural competency in voucher program?

Summary of Theoretical Framework

Bronfenbrenner's Ecological Systems Theory (Cherlin, 2008) and the Theory of Planned Behavior (Brannon and Feist, 2007) are the frameworks utilized in this research project. Ecological Systems Theory was selected because it best describes the overall benefit to be realized by Fairfax County. The County has compelling interests to identify cultural food preferences of WIC recipients especially if the County's goals are to eliminate and prevent nutritional risks, and eliminate food

insecurity among its WIC eligible county residents. Without going into the politics of the immigration debate, the Theory of Planned Behavior (Brannon and Feist, 2007) is but one vehicle to explain why parents of WIC eligible children have emigrated to America.

The Theory of Planned Behavior will also be explored to demonstrate that the virtual act of emigrating from another country to the United States is in itself a planned act with the all-encompassing goal of improving one's status in life. These parents will do whatever it takes to improve the lives of their children and will utilize whatever resources are available to them.

Review of the Literature

The Economic Research Service of the United States Department of Agriculture in its work *The WIC Program: Background, Trends, Issues* (ERS, 2006) gives a detailed overview of the WIC program and eligibility criteria for client participation. The WIC program was designed to subsidize and support American agribusiness and to provide supplemental foods to eligible individuals and families with demonstrated nutritional risks.

The WIC program administers a basic means test to all applicants. Applicants must meet categorical, residential, income, and have a verified nutritional risk(s) to qualify for WIC services (*Economic Research Service/USDA, 2006*). Categorical eligibility is defined as: a pregnant or up to six week postpartum mother; a lactating mother and infant pair from the child's birth until age one year; children from age one until age five. Applicants must reside in the state in which an application is filed in order to determine residential eligibility. Applicants with a total household income at 185% of the poverty line or $32,653 for a family of four (Economic Research Service/USDA, 2006) income eligible. Those who meet federal income guidelines for federally funded programs like food stamps, TANF, and Medicaid programs are automatically eligible for WIC services if they choose to apply. The determination of nutritional risks must be verified by a practicing physician, or other qualified health care professional. Risks factors can be either multivariate or specific in nature and can include conditions like: anemia, Rickettes, gestational diabetes, low-birth weight and/or premature birth, low maternal gestational weight gain, improper or inadequate food consumption, failure-to-thrive in infants, delayed growth in toddlers, etc.

After eligibility has been determined, food voucher "checks" are issued in the name of each eligible family member. All identifying information on the voucher "check" is typed from data collected by WIC clerks and nutritionists. The exact amount of each individual food item that each recipient is eligible to receive is listed prominently on the front of the voucher. Each voucher check also contains an exact dollar amount. That dollar amount establishes a limitation on the dollar value of the food voucher, i.e. the WIC recipient is not able to "purchase" WIC eligible foods above the amount established on the voucher. In addition to identifying information, and an establishing voucher values, each voucher also contains a "value

termination date". "Value termination dates" refer to the fact that the vouchers are only "good" in thirty-day increments. Vouchers are issued in ninety-day increments, or three months at a time, each WIC eligible family member is also means tested every ninety-days to determine continued WIC eligibility.

In situations where an applicant for WIC services is an Undocumented Immigrant (UI) affidavits verifying identity, residency, and income must be completed and witnessed by a WIC staff member. The affidavits are then maintained in the client's permanent file. Specifically in Fairfax County, UI individuals are disproportionately of Hispanic and/or Latino origin, have extremely low or unstable incomes, lack proficiency in English, and have poor dietary habits. Due to their lack of legal status, the only assistance that these families qualify for is—WIC, because citizenship is not a criterion for participation in this federal program.

WIC Demographics

Program Participation

According to findings from the USDA, Food and Nutrition Service, Office of Research, Nutrition and Analysis, *WIC Participation And Program Characteristics 2006: Summary (PC 2006),* as reported in April 2006, WIC served or assisted approximately 8,772,218 eligible persons. This figure represents an overall 22% increase in the total number of eligible persons enrolled in the WIC program. Approximately 8 million or 49% of WIC's total population was eligible children, 26 % eligible infants (0 – 12 months), and 25 % eligible women.

The Program Characteristics 2006: Summary also details information as to the racial composition of WIC program recipients. For example, when evaluating WIC participants by "race": Whites comprise 55.3% of the total population, non-immigrant African-Americans 19.6%, Native Americans 15.3 %, Asian/ Pacific Islanders 3.7 %. When evaluating program participation by ethnicity Hispanic/ Latinos comprise the single largest ethnic minority group representing 41.2 % of the ethnic minority WIC population.

Fairfax County Program Participation

WOMEN INFANT AND CHILDREN PROGRAM (WIC)
Special Supplemental Nutrition Program
for Women Infants and Children
WIC STATISTICS for Fairfax County, Virginia
2007

Number of Women, Infants and Children served in six offices every month.

Month	Pregnant Women	Breast Feeding Women	Post– partum Women	Infants	Children	TOTALS
Jan	1679	2038	611	3500	5956	13784
Feb	1713	2017	603	3561	5961	13855
Mar	1873	2036	604	3629	5972	14114
Apr	1941	2061	601	3673	6010	14286
May	2033	2053	592	3745	6253	14676
Jun	2071	2036	599	3720	6017	14443
Jul	2107	2036	627	3863	6322	15012
Aug	2100	2116	646	3834	6401	15097
Sep	2100	2116	646	3837	6521	15220
Oct	2109	2125	675	3938	6521	15368
Nov	2051	2212	722	4002	6533	15520
Dec	2056	2237	734	4050	6579	15656

(source: Virginia Department of Health, WIC Statistics)

The Standard WIC Food Package

The above illustration represents the standard WIC food package. Of the food items identified here, they predominate the variation that one will notice across the nation is in the name of the local "store brand" foods that WIC recipients are able to select. This food package represents a national standard which does not take into account the cultural food preferences of the WIC recipients.

Variation in the Food Package

The predominate variation in the WIC food package is in the costs incurred at both the local and state level to purchase the foods. In Fairfax County, Virginia there are no obvious variations in the food package offered when compared to the national standard WIC food package with the exception of the preference by the WIC program for regionally specific "store brand products". There has been a state–wide change in the type and size of juice currently available to/for WIC

recipients. The change from offering WIC recipients a choice between 64 oz unchilled and 12 oz frozen juice to offering 12 oz unsweetened apple or orange as the only options available to WIC recipients was determined to be in the "best interests of Commonwealth of Virginia" not necessarily in the best interests of the Commonwealth's WIC recipients. The average 12 oz frozen juice can costs the Commonwealth of Virginia an average of $ 0.89. On average, recipients can purchase two to four cans of frozen juice per food voucher at an average cost of $ 1.78 to 3.56 per food voucher. This portion of juice will/can serve as the nutritional beverage of choice a single meal because after adding the concentrated juice and three cans of water inside of the average juice container the recipient only has one-half to three-quarter of a gallon of juice. The state has supplemented the family for a single meal with a non-soda, low sugar, all-natural beverage. The WIC recipient, however, must decide for the duration of the week between nutritious juice and cheaper "other" beverages for herself and/or her children. Currently, the average price for a half gallon of orange juice can be as expensive as $4.00 per half gallon.

The Problems with WIC

Farmer's Market Nutrition Program

The Farmer's Market is an addendum to the standard WIC food package offered to some WIC recipients. This portion of the food supplementation program is only made available to WIC recipients from 1 July until 31 October. The Farmer's Market food voucher permits WIC recipients to purchase fresh fruits and vegetables from designated farmer's markets throughout Fairfax County. Recipients can only purchase foods from vendors who have been "WIC-approved" and who only sell locally-grown produce. The cultural preference is not taken into account for this portion of the WIC program as its primary focus is to provide a guaranteed market for local farmers and their small harvests. The most obvious limitation of the Farmer's Market program is that it is only available from July until October and does not have a component available to WIC recipients during the late Fall, Winter or early Spring months. Since the products made available are only locally grown products, highly nutritious foods like: plantains, papaya, guava, bananas, watercress, and snow peas, which are culturally preferred by large numbers of Fairfax County's WIC recipients, are not options for consumption and purchase.

Cultural Food Preferences

In addition to the Farmer's Market program, the more standard food voucher program also does not take cultural food preferences into account when determining which foods to make available to WIC recipients. In other words, despite the knowledge that 85% of the County's WIC clientele is non-native Hispanic/ Latino the County does not offer them more culturally specific foods.

Eliminating Nutritional Risks and Food Insecurity

Studies conducted by researchers like Kropf et al in 2007 indicate that women and children enrolled and participating in WIC may be at an increased risk for experiencing food insecurity. Food insecurity as defined by Bellows and Hamm (2002) is a profound lack of and an inability "to provide food supplies to adequately [satisfy] consumption needs". According to Kropf, households with children under the age of six years are more likely to experience food insecurity than households without children. Both the prevalence and incidence of food insecurity increase as the average total household income decreases (Kropf, 2002). This is a stark reality of many of the Hispanic/Latino households in Fairfax County because many of the fathers/husbands/head-of-household is seasonal and/or day laborers. Their work is often more steady during warmer months and sporadic during much colder winter months. This causes the total household income to fluctuate greatly. The result is that the supplemental foods provided by WIC have a double importance because during periods of little or no work the food received from WIC becomes the basis of the entire family's subsistence. Studies like Casey et al 2001 and Kaiser et al 2003 indicate that when household income become extremely limited the parents are more likely to forgo eating in favor of their children. Parents are also more likely to stop attempting to purchase more nutrient dense foods from markets and grocery stores, because fast foods options like McDonalds are cheaper and more expedient.

Dr. Kumanyika and Grier in the work *Targeting Interventions for Ethnic Minority and Low-Income Populations* (Kumanyika and Grier, 2006) investigated how best to design and implement an intervention within ethnic minority groups and low-income populations. Families were evaluated to determine how decisions are made about food consumption with the family structure. The researchers noted that children in low-income and ethnic minority household had a greater tendency to prefer to consume less dense foods that they saw on television during commercials. The parents also had a greater tendency to use food, especially less nutrient dense foods, to reward and entice their children to behave than their counterparts in higher socioeconomic status neighborhoods. The researchers also noted that more fast food restaurants were operating in or in extremely close proximity to low-income, more urban neighborhoods than in more affluent neighborhoods. Children in low-income household also have a greater likelihood of watching several uninterrupted hours of television after school and during their early pre-school years than their more affluent counter parts as well.

The lower the socioeconomic status and education level of adults the greater the tendency for their children to experience periods of disordered eating, exhibit nutritional risks, and endure periods of food insecurity. These situations are occurring despite the participation in "safety net" food assistance programs like: WIC, school lunch, and summer community lunch programs (Kumanyika, 2006; Kaiser et al, 2003; Casey, 2001; Kropf, 2007; and Bellows, 2002).

Research Methodology

Sample Data

Roughly 85% of the WIC clients in Fairfax County Virginia are either Latino or Hispanic, first-generation, lower-income, underemployed, less educated mothers. These women are not always literate in their native language(s) and are even less likely to be literate in English. The same is true for another 10% of the County's WIC clients who are first-generation immigrants from North Africa, the Middle East, and Asia to include Afghanistan, Pakistan, and India.

The informant populations for this exploratory study were selected from the two busiest WIC field offices in Fairfax County located in Falls Church and in Springfield at The Cary Building. At the onset of this study it was decided that the re-certification date for WIC recipients would be the optimal time during which to determine, via direct interviews and reviewing data collected by WIC nutritionists on 24 hour food pyramid diet recall sheets, which foods recipients preferred to consume versus the foods that their diets were being supplemented with by WIC. During the course of direct detailed interviews many recipients, especially pregnant and lactating recipients revealed that they did not have enough food to eat on a consistent basis. Several also revealed that they only consumed the foods provided by WIC because they could not afford to consume other foods. Several of the teen mothers also revealed that because of extreme financial situations they could not afford to purchase food for themselves and/or their children.

Approximately 10 men were present with their family members in the WIC office during the recertification process. Of these men three participated in direct interviews primarily as translators for their adult family members.

Quantitative Data

Quantitative data was gathered from several different sources including peer reviewed scholarly articles. Figures to determine exactly how many clients were served during a specific year; statistical data was gathered from the website maintained by the Virginia Department of Health. Information was also gathered utilizing the 24-hour food pyramid consumption quantity sheets. WIC recipients are required to complete these sheets as a part of their initial application and again every three months during a re-certification process. Re-certification is a process through which eligibility is re-verified; modifications and/or additions/deletions are made.

Qualitative Data

Qualitative data was obtained via direct interviews with WIC clients, in the waiting area of the WIC office, on the specific re-certification day for each WIC office participating in the research study. Before each interview was conducted each WIC client was brief about the research study and asked to participate on a voluntary basis. Each client was then asked specific questions about all foods and drink consumed in the previous 24-hour time period for the mother and each of her

WIC eligible children. Basic demographic data was also collected like: marital status; age of all WIC-eligible members of her household; ethnicity of mother, father/partner and each child; native language; feeding method for all babies newborn through age one year.

Data Collection Instruments

A basic "picture booklet" was created of some common foods that the initial fifty interviewees revealed that they preferred to consume, with the addition of a few basic "general staple foods". Pictures of the most common foods were downloaded from the internet, printed in color, on the front and back of paper which was then labeled in Spanish and laminated. The booklet gave WIC clients who were less proficient in English the opportunity to participate in the research study by self-identifying foods that they preferred to eat either by touching the appropriate picture or circling the appropriate pix with a dry-erase maker. The food preferences were then recorded on a 24-hour total food consumption sheet for each meal and snack for one day.

Data Analysis

In gathering quantitative data for this study, four daily schedule sheets were chosen at random from the beginning, middle, and end of the data collection phase for evaluation to determine the adult-to-child ratio and an average number of persons   served per day. In all, the data for 172 appointments for both initial certification and re-certification were evaluated. Of this number 31 were adults and 141 were children. Adults ranged in age from 17 years to 38 years. Children were aged 10 days to five years, with births dates from May 2003 thru June 2008. Of the 141 children there was one set of non-immigrant African-American twin boys, and nine other sibling non-twin sets. With the exception of the single set of twins, the indication of multiple sibling sets seems to indicate that mothers are repeat WIC recipients. In other words, the findings would appear to indicate that mothers are willing to utilize WIC services on a repeat basis.

Direct interviews were also conducted during the data collection phase of this project. Permission for direct interviews was obtained before the start of this project from Mrs. Anna Kanianthra of the Fairfax Department of Health, WIC Nutrition Services. An application is also on file with University of Maryland's Institutional Review Board (IRB).

During three weeks of data collection more than 300 individuals were scheduled for both certification and re-certification appointments. Interviews were conducted at both the Springfield and Falls Church, Virginia WIC offices by a single individual; access arrangements had also been for the Herndon/Reston, Virginia WIC office but were cancelled due to construction at the office. Potential interviewees were approached randomly while they waited for their scheduled appointment times. Each was approached individually and invited to answer a few

demographic questions as to: their age, self-reported "race", number of children, marital status. Each was also asked to reveal exactly what they and their child/children consumed for the entire twenty-four hours prior to the interview.

A total of seventy-eight individuals were contacted for detailed interviews. Of the seventy-eight, thirty were adults aged seventeen to thirty-five, forty-one were children aged ten days to four years of age. Of the adults 15 were married while another 15 were single mothers. Seven of the interviews were incomplete because the mothers had to leave for their scheduled appointments. The mothers were asked to self-identify their race which revealed that Hispanic/Latinos are in fact the largest single ethnic group among WIC recipients in Fairfax County; Asians are the second largest demographic group. (See figure 8). During the interview session mothers were asked not to explain which food groups that the food that they had consumed came from but rather exactly which food and drink they consumed and how much of all food and drinks were consumed in twenty-four hours. There were three established goals: 1. to determine if the mothers and children were consuming the WIC supplemental foods; 2. to determine if the recipients actually had cultural food preferences; and 3. to learn what WIC recipients consume after they spend their food voucher.

Findings, Conclusions and Recommendations for Future Research
Findings

RESEARCH QUESTION 1:
How do the national WIC demographics compare to the local demographics of the study population? Who are WIC's clients in Fairfax County, VA and which supplemental foods are available to them? Are there any special needs/considerations necessary for target group: nutritional risks or food insecurity?

FINDINGS:
WIC foods include iron-fortified infant formula and infant cereal, iron-fortified adult cereal, vitamin C–rich fruit or vegetable juice, eggs, milk, cheese, peanut butter, dried beans/peas, tuna fish and carrots. Special therapeutic infant formulas and medical foods may be provided when prescribed by a physician for a specified medical condition (www.fns.usda.gov/WIC-Fact-Sheet).

WIC's clients in Fairfax County, Virginia are predominately undocumented Hispanic/Latino immigrants or 85% of the total population; 70 % of the total population are immigrant West Asians from Pakistan, Afghanistan, India; roughly 10% of the total population are East Asian from Vietnam, Cambodia, Thailand; 10% of the total population are White American; 20 % of the total population is non-immigrant African-American; 40 % of the total population is North African from Somalia, Ethiopia, and The Sudan. Nationally, the WIC population is not as diverse with these specific ethnic and cultural groups, however, as Fairfax County, but the

national WIC population is evolving. By "race" Whites comprise 53.5% of the total WIC population while Hispanic/Latinos represent 43% of the total population. Whites represent the largest racial group while Hispanic/Latinos represent the largest cultural/ethnic group.

RESEARCH QUESTION 2:
How do WIC recipients make use of the foods that they receive from WIC? What survival strategies do they employ after the vouchers are used for the month? Are recipients experiencing food insecurity? Were there any preliminary indications that WIC recipients do appear to prefer more culturally diverse foods, than they are currently being supplemented with by the WIC program?

FINDINGS:
This exploratory study was small but did reveal that overall WIC recipients are consuming the supplemental foods that they receive. Many mothers actually revealed that they shared the supplemental foods with other non-WIC recipient members of their households. This means that the nutritional risks that WIC nutritionists have identified will take longer to correct because the food packages tailored do not include provisions for extra consumers of the food or other family members. When asked about food consumption after the food voucher is spent many younger mothers revealed that they found it easier to feed themselves and their children at McDonald's and/or other more cultural fast food restaurants because they could not afford to shop at local grocery stores on a regular basis because the food prices were so high. During the interviews several mothers were feeding their children Chicken Nuggets and milk from McDonalds each of which costs $1.00 from McDonalds. This might also indicate that many WIC recipients in Fairfax County live in households where food insecurity is a reality.

During this study it was revealed that the adults were more likely to consume culturally preferred foods than were their children. Some of the children attended daycare or Early Head Start programs and did not have an option of consuming more culturally familiar foods. The most preferred food among Hispanic/Latino mothers was the tortilla served with cheese, rice, and/or chicken. Among Asians the most commonly preferred foods were rice and fresh fruits, the majority of which are not offered by WIC's Farmer's Market nutritional program because they are not grown locally.

Of those that had at least one child present with them, all had toddlers who appeared to be 10 LBS or more overweight. The majority of the overweight toddlers were little girls. According to Bellows and Hamm (2002) one of the indicators that a family is food insecure is the presentation of overweight or obese children. The reasoning is that all of the food resources of the family will be expended to feed the child/children rather than the parents because the appearance of "fat" children is, in some cultures an indicator of wealth, good health for the offspring, and status. That "fat" child hides the fact that the family is poor and that the parents only consume a large meal once a day, usually at night. Many of the Hispanic/Latino children in particular did, upon observation, appear to be overweight. Studies by researchers

like Kumanyika, and Grier (2006) indicate that when low-income immigrants are able to afford to purchase culturally preferred foods they do so and report that they believe that their diets are better without the addition of fast food. The work by Drs. Jonnalagadda and Diwan (2002) also indicate that changes in the culturally normal diets of some immigrant groups can lead to negative health effects.

Although sample size of the study population was relatively small (78 persons interviewed, and 172 appointment records evaluated) in relation to the average total population, the sample did reveal some cultural food preferences. For example, a cross section of all persons interviewed indicated that all have cultural preferences for fresh produce on a daily or almost daily basis. This is fairly significant because Fairfax County does participate in the Farmers' Market Nutrition program and issues special supplemental food vouchers to some recipient which are "good" or active from 1 July until 31 October. The drawbacks to the program are: the cultural preferences of recipients are not accounted for; the supplement only provides $20 worth of fresh fruits and vegetables for a month; recipients are only allowed to select produce from specific vendors; the markets are not necessarily accessible via mass transit; and the markets do not operate during convenient hours for working adults. In addition to a clear preference for fresh fruits and vegetables on a daily basis, other cultural food preferences do exists. Asians, for instance, indicated a high preference for rice and fresh vegetables. Western Asians and the North African also showed a clear preference for home-made bread and plain yogurt, and Basmati rice. Hispanic/Latino respondents also showed a strong preference for tortilla, cheese, plain yogurt.

Issues related to food insecurity were "discovered accidentally" during the initial few interviews conducted at the Springfield, Virginia WIC office. Several pregnant or lactating women revealed that in twenty-four hours they had only consumed two plain bagels with either butter or cream cheese, two cups of soda, and tortilla with cheese and chicken for supper. After asking the pregnant mothers if they were suffering with Morning Sickness, and learning that none of them were, a few of them confessed that they were eating what was available; one said that she did not want to get fat.

RESEARCH QUESTION 3:
How do the results of this study indicate that Fairfax County's WIC recipients would prefer to consume more culturally diverse foods, than they are currently being supplemented with, will County officials be prompted to offer WIC clients more diverse food supplementation choices? How will the adaptations eliminate nutritional risk and/or food insecurity for the target group?

FINDINGS:
During the data collection phase of this research project county nutritionists indicated that Fairfax County is in the process of phasing in a new food voucher, as mandated by USDA/FNS in 2006, which was created to address some of the issues related to cultural food preferences. For example, the new food voucher will offer whole wheat tortillas, brown rice, and more vegetables than the current

food voucher. Less formula will also be given to lactating mothers after the new voucher is phased in to help promote breastfeeding. All children and adults will be issued 2% whole milk, instead of whole milk, and low fat cheeses instead of regular milk because the overuse of whole milk has been negatively linked to increased obesity in both adults and children. Children and adults with specific nutritional risks which can be further mitigated with the consumption of whole milk will receive voucher for whole milk only if the IWC nutritionist receive verification of the nutritional need from a qualified physician or other designated health care professional. According to interviews conducted among WIC nutritionists Fairfax County does not plan to have the revised food voucher program implemented throughout the county until the Fall of 2009 some three years after the initial USDA FNS mandate to for all local-level WIC offices to adapt and utilize a more culturally sensitive food voucher.

RESEARCH QUESTION 4:
The future of WIC:
a. How can WIC evolve to address the needs of its growing diverse population in Fairfax County?
b. How much control over foods available for WIC clients do local-level WIC nutritionists/personnel have?
c. Is WIC/FNS obligated to consider cultural diversity when selecting foods for WIC's food voucher program?
d. How far is USDA/FNS willing to go with establishing cultural competency in voucher program?

FINDINGS:
According to the USDA, states do have some degree of local control over foods made available to their WIC recipients. However, while collecting data for this study, it was learned that the foods made available to WIC recipient are determined more by factors other than the actual cultural, financial, or nutritional needs of WIC recipients. For example, the agribusiness lobbies the USDA, at the federal level, for the exclusive right to provide certain foods to WIC recipients. Additionally, all major formula manufacturers have lobbied the USDA for exclusive and highly lucrative contracts to provide formula to WIC recipients. The USDA receives substantial financial benefits from formula companies which it then uses to fund its breastfeeding promotion efforts among low-income mothers who are WIC recipients. States do have some limited

control over quantities of specific foods and alternative foods to accommodate specific food allergies. Demographics and cultural food preferences are not are true part of the formula utilized when determining which foods will be made available to WIC recipients.

Conclusions

CONCLUSION 1:
WIC's efforts to eliminate nutrition risks and food insecurity

This is an exploratory study in nature; therefore we did no expect to produce concrete solutions. The preliminary results, some of which were provided by WIC, indicate that some of the nutritional needs of WIC clients are adequately being addressed by the current supplemental foods. However, interviews with pregnant women, teens, and younger mothers who are active WIC recipients did reveal that many of them are not consuming adequate amounts of food to remain healthy long-term.

Also, after conducting certain interviews which seemed to reveal food insecurity and/or disordered eating, nutritionists were asked about the findings and facts that the mothers revealed but failed each time to act. Part of the failure to act was that WIC personnel are trained to rely on the responses that mothers make on the 24 hour food pyramid consumption sheets to determine nutritional risks. Food insecurity is a reality for some WIC recipients but WIC personnel can only make referrals to other agencies, i.e. the mission of the WIC program is to eliminate nutritional risks, it does not have a clear mandate to intervene in cases of food insecurity. The issue of disordered eating is addressed by mandating that all adult WIC recipients attends periodic nutrition classes during which short films are shown or a nutritionists attempts to explain how to prepare a balanced meal to her clients utilizing USDA approved plastic food.

CONCLUSION 2:
Nutritional risks and food insecurity in Fairfax County Virginia

From observations and findings related to this study, WIC in Fairfax County is not, and cannot, address the food insecurity of the population that it serves. Individual nutritionists are aware of the food insecurity issues but cannot act to address them because of the mission of WIC.

Recommendations for Future Research

RECOMMENDATION 1:
Creation of a special County Food Stamp pilot program to address food insecurity suffered by American citizen being raised by undocumented immigrant parents

Food insecurity suffered by American-citizen children being reared in the homes of undocumented Hispanic/Latino parents may be more pronounced than with other groups of children. Both the increased incidence and prevalence of food insecurity and nutritional risks can be linked directly to the status of the parents. Therefore, as a result of this exploratory study, officials in Fairfax County should devise a legal method to separate parental legal status from the rights of American citizens to eat.

The WIC program should serve as the vehicle through which to offer a special County sponsored and funded "County Food Stamp Program" primarily targeting undocumented WIC recipients. The County Food Stamp Program should function much like the federally funded Food Stamp program. The singular goal would be to further supplement the diets of the County's poorest citizens/residents and totally

eliminate food insecurity and nutritional risks. The WIC program is the ideal vehicle from which to operate such a pilot program because citizenship and legal status are not criteria for eligibility.

Implementing a pilot program of this nature is in the best interests of Fairfax County. The costs incurred by the County to operate this pilot program, would, overtime, costs less than the salaries of special education teachers, less than the salaries of teachers to teach remedial SOL courses, less than the medical expenses to offer medical services to children with preventable health conditions, etc. By actively eliminating nutritional risks and food insecurity the County would boost the overall health, and academic performance of these children which would give them a better opportunity to succeed.

RECOMMENDATION 2:
All nutrition programs should be placed under the authority and control of the U.S. Department of Health and Human Services (DHHS)

The primary goal of the USDA is—to support and protect agribusiness; therefore, all functions of Food and Nutrition Services should be removed from the USDA. All food and nutrition programs should be placed under the direct purview of the Department of Health and Human Services (HHS). The primary mission of HHS is the "prevention of disease and infirmity"—the elimination of nutritional risks and food insecurity are essential to the efforts of disease prevention. The primary mission of Public Health is not the protection or support of business, or industry; therefore, removing money from the formula should refocus food and nutrition programs on the needs of the people that they serve. That refocusing of attention would allow government officials to better understand the evolving WIC population. That enhanced understanding should cause innovators within the HHS to seek redress and acknowledgement of the importance of recognizing role of cultural food preferences in the efforts to eliminate nutritional risks and food insecurity.

Despite the fact that this an exploratory study, it does appear that in order for the federal government, to properly address issues like food insecurity and nutritional risks cultural food preferences should be taken into consideration when attempting to offer low-income, poor families direct food assistance. Following this logic necessitates a complete paradigm shift which would remove of the focus of American nutrition programs away from agribusiness and on to the poor and needy. Agribusiness will suffer the loss of guaranteed pricing and guaranteed markets for their products if "it" is removed from the center of the both national and local efforts to assist people in their efforts to eliminate their own nutritional risks and food insecurity. But, the poor should, in theory realize more benefit from nutrition program that are directed by more preventive health focused agencies. Interviews with several nutritionists revealed that there is a strong desire, among them to enhance the mission of WIC.

RECOMMENDATION 3:

Expansion of the Farmers' Market Nutrition Program

This exploratory study revealed that among the immigrant WIC recipients in Fairfax County fresh fruits and vegetables are a major component of their culturally preferred diets. For example, the majority of Asian mothers reported that they preferred to consume fresh fruit for breakfast instead of the hot and cold cereals their diets were supplemented with by WIC. Large numbers of the mothers also revealed that they would prefer to offer their children fresh fruit and vegetables for snacks, but cannot do so at home because they could afford to purchase fresh fruits and vegetables from local grocery stores. Several mothers stated that they often purchased fresh fruit from McDonald's because it was available on the Dollar Menu. These mothers also stated that they regularly substituted the French fries in their child's Happy Meal with apple slices.

Taking these facts into consideration, expanding the Farmers' Market Nutrition Program would serve the best interests of both WIC recipients and Fairfax County. Currently, the Farmers' Market option is only avail from 1 July until 31 October, which serves the best interests of small local farmers. Expanding the program would serve the long term interests of all parties—the WIC recipients, Fairfax County, and small farmers. WIC recipients would benefit because they would be able to consume fresh fruits and vegetables. Raw fruits and vegetables are rich in necessary vitamins, aid in bile elimination by adding fiber to the diet, and have a higher antioxidant content than many other foods. Fairfax County, and ostensibly the Commonwealth of Virginia, would benefit because the consumption of fresh fruits and vegetables has been positively linked to numerous positive health benefits. Local farmers would also realize a benefit because the contracts that they have with the County as WIC-approved vendors would garner more income for them as the demand for fresh fruits and vegetables increased. Therefore, expanding the Farmers' Market program offers a possibility of garnering immediate tangible benefits for all parties involved.

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Assessing African American College Persistence at a Predominantly White Institution Using the Cultural Capital Theory: A Research Proposal

Calvin Anderson-Vines
Mentor: Dr. Ronald Zeigler, Director of Nyumburu Cultural Center
University of Maryland, College Park

Abstract

Manning Marable once claimed that there were two distinct Black America's. Since desegregation there has been a rapidly growing class of middle class Blacks and a similarly expanding "underclass" of Blacks that has led to much diversity in the socioeconomic background of many Black college students. Education has been pitched as the great equalizer, though many Blacks at predominantly white institutions are struggling to graduate. Most research aimed at solving this conundrum views socioeconomic status separate from cultural identity. This research attempts to capture the "socio-psychological" process of developing identity as an African American at a predominantly white institution. This research contributes to the field of African American post secondary education studies by examining socioeconomic status, cultural identity and collegiate persistence as interdependent variables.

This study uses Pierre Bourdieu's cultural capital theory as the theoretical framework. Cultural capital refers to background – knowledge base, skills, and attitudes – families of the dominant socioeconomic class transmit to their children (Lareau & Weininger, 2003). This theory proposes that in order for the dominant group to maintain its dominance some culture is valued or devalued within social institutions.

Qualitative research methods were used for this study. Using convenience criterion sampling, six African-American students from various socio-economic backgrounds were identified in the summer of 2008. All participants were seniors, scheduled to graduate in Fall of 2008 or May of 2009. Students were selected from the Eastside University (pseudonym), a premier research institution and predominantly white university. A focus group was conducted during the summer of 2008, supplemented by ethnographic interviews and case studies provided by Lorenzo Dubois Baber (2007). During the data analysis phases four themes emerged that highlighted the cultural identity changes in the participants: 1) the construction of an ethnic identity; 2) the conversion of various forms of cultural capital; 3) the experience of stereotype threat and racism; 4) and the progression towards blended perspectives.

This research is meant to add significant data regarding the heterogeneity of the Black community and how the differences in cultural identity are portrayed on predominantly white campuses. Much of the previous research on Black student persistence is based on other forms of capital such as social, human, and financial, and has a tendency to assume that Black's share a collective identity. As the Black underclass and middle class both continue to grow wider apart it is inherent that researchers study this phenomenon transitionally. This research does that and provides analysis and recommendations for helping future generations of Black students to persist on predominantly white campuses.

Introduction of Inquiry

Institutions of higher learning are in essence the American dream encapsulated in concrete and cinderblock. They are the places where the fields can be leveled, success can be achieved, and where the hopes and dreams of equal opportunity rest. In short, a college degree is the great equalizer. Some interpersonal and institutional racism seemingly will always exist but the completion of a university degree immediately boosts ones social, financial, and cultural capital as well as, their socio-economic status, and chances of success in life.

It was once believed that college was a place where merit and individual ability alone could assure a positive, successful outcome. However, much evidence has been found to the contrary that indicates plenty of other factors are closely tied to an individual's success at an institution of higher education (Lindsay & Justiz, 2001**;** United States Department of Education, 2005). Much to the chagrin of the African American freedom fighters of the past who paved the way for equal rights legislation such as Brown v. Board, African American's are graduating from college at a significantly lower rate than Whites (JBHE, 2006). Students from low income backgrounds are statistically less likely to achieve a baccalaureate degree when compared with students of high income background. This is significant when considering that between 1980 and 1998, the population of the African American underclass has tripled from 900,000 to 2.7 million.

Statistics show that students stemming from this segment of the population are the least likely to attend college and are even less likely to graduate. Conversely, Black students from middle to upper class income backgrounds are attending college in record numbers. However, when studied, researchers tend to group all the segments of the Black population with no regards for the differences in the socioeconomic backgrounds of each sector (e.g., Feagin, Vera, & Imani, 1996; Cabrera, et al., 1999; Reason & Rankin, 2005).

Many scholars have examined why only 43 percent of Black students graduate from college within six years. They often point to the affects of social, financial, and human capital on the success, resiliency, and persistence of African American students (Wilson, 1987; Gates & West, 1996; hooks, 2000; Dyson, 2005). However, this research specifically examines the affects of cultural capital and the formation

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[1] African American underclass – welfare dependent, marginally educated, and chronically unemployed

of cultural identity on the persistence of Black seniors at predominately white institutions (PWI's).

Pierre Bourdieu's cultural capital theory has been used by researchers of secondary school systems to consider the influence of social class differences on educational experiences for African Americans (Roscingo & Ainsworth-Darnell, 1999; Lareau & Weininger, 2003). Lareau and Weininger define cultural capital as background – knowledge, skills, and attitudes – that families transmit to their children. This theory proposes that in order for the dominant group to maintain its dominance certain culture is valued or devalued within social institutions.

Research Questions

The population of Black students attending predominantly white institutions is largely heterogeneous and does not maintain the collective cultural identity often associated with people of color. Because of this distinction this literature will add to the scholarship regarding post secondary education of Black students with an emphasis on cultural identity formation. The following questions will be addressed:

- How does socioeconomic status affect cultural identity formation?
- What culture is valued/devalued at predominantly white institutions?
- How have students relationships with their parents changed since high school?
- How have students relationships with their closest friends changed since high school?
- How have students personal romantic relationships changed since high school?

Significance of Study

As we enter into the 21st century we face the prospect of having the nation's first Black president. This is remarkable progress seeing as how a mere sixty years ago Blacks were hardly allowed to vote. Blacks were granted access and before long a Black man has navigated himself through the political system and has positioned himself one election away from the top spot in the government. This progress has spilled over onto the educational field as well. There are more Black undergraduates, researchers and doctors than ever before. However, there are also numerically more Black dropouts than ever before. If we operate under the assumption that education is the great equalizer it is the duty of the educator, the researcher, and the scholar to find what it takes to help more African Americans achieve higher education. Most resources have been put into getting Black students from high school into college programs but the more imminent problem is how to go about keeping them there.

Most of the competitive research oriented schools in the nation are Predominantly White Institutions (PWI's) and African American's are attending these colleges at

the highest rate ever. It is important to find what helps to keep Black students in school in order to help close the educational achievement gap and eventually the income and wealth gap. Scholars have linked educational achievement with the formation of capital. Capital is the most important predictor of the success or failure of a student (Orr, 2003).

Socioeconomic status has often been examined as a stagnant commodity, when in fact it is actually in a state of constant fluctuation. One may take a snapshot of a particular Black family earning middle class wages, but lack wealth. What ream on the socioeconomic ladder do they rest? Economically, their futures are uncertain and without wealth they lack liquid capital, which can be used to form other types of capital (Orr, 2003). As a result of this, a Black student emerging from a middle class background may be admitted into a PWI with no financial aid and end up dropping out due to financial problems.

However, what is even more undiscovered and underesearched is how that very same student is culturally identified by the university and how he or she cultural identifies him or herself. In their particular neighborhood they may be perceived in a certain way, maybe upper middle class and may even fit into what Marable describes as the "Black Elite" (1983), but once they enter the PWI are they are simply a Black face, forced to discover a new cultural identity or modify an existing one? What brand of "Blackness" do they exhibit? Are they influenced by the predisposed scripts placed on Black bodies?

Most scholars up until this point have grouped cultural capital somewhere between human and social capital but this research intends to distinguish of cultural capital as a separate entity.

Conceptual Framework and Review of Literature

In order to build a conceptual framework for the correlation between socioeconomic status, cultural identity and the college persistence rates of African American students at predominantly white institutions, the review of literature is sectioned into four main areas: 1) the current socioeconomic state of Black America; 2) historical theories of African American identity and higher education; 3) theoretical perspectives on college persistence; 4) and incarnations of cultural capital theory in educational settings. Each piece of literature contributes theoretical ideas that help to shape an overall conceptual framework for this study.

The Current State of Black America

There are currently two Black Americas. Manning Marable writes of a "Black elite…a privileged social stratum, who were often distinguished by color and caste; who praised the master publicly if not privately….who sought to accumulate petty amounts of capita; at the expense of their Black sisters and brothers; whose dream of freedom was one of acceptance into the inner sanctum of white economic and political power," (Marable, 1983).

Marable speaks of a divide within the Black community that pits the Black majority against an elite minority. This divide has been more recently concretized by Bill Cosby in his infamous *pound cake* speech, in which Cosby lambasted people of lower economic standing for everything from giving their children "names like Shaniqua, Taliqua and Muhammad" to berating parents for not parenting "properly" (Dyson, 2005). Dyson continues much like Marable to describe how the alienation of one segment of the Black population over another leads to disunity within the Black community and only serves to further perpetuate negative stereotypes. Dyson even subtitles his book the "Afristocracy Versus the Ghettocracy."

The division between Blacks is indicative of the latest economic development within Black America. Desegregation, the Brown V. Board decisions and America's commitment to superficial de-racialization has led to the largest African American middle class in history. However, in the last forty years there has simultaneously been the largest development of the African American underclass (Wilson, 1987; Gates, 1998). This is the same underclass that Cosby criticizes and that Dyson defends upon the basis of systematic racism. The debate as to whether or not the socioeconomic problems associated with Black people are systematic or self initiated is the debate that scholars have waged entering the 21st century.

The Socioeconomic Issues

The socioeconomic problems associated with African American's are headlined by three major problems: the income gap, the wealth gap, and the educational achievement gap between Black American's and White Americans (Wilson, 1987; Gates & West, 1996; hooks, 2000; Dyson, 2005).

Recent research has shown that, depending on the data source used, white households in the United States have somewhere between five and ten times the net worth of Black households (Barsky, Bound, Charles, and Lupton, 2002). However, white households are *only* earning twice the income of Black household, suggesting that the racial wealth gap is too vast to be purely attributed to disparities in income. The reason this gap exist is still under speculation, but the answer will stem from one of three sources. The first is the aforementioned difference in income levels of whites and Blacks. The second can be attributed to the transfer of wealth from generation to generation and the result of past economic conditions disproportionately affecting Blacks. The last is the efficiency in which savings are converted into wealth, for example converting savings and income into property (Charles and Hurst 2002).

The majority of most American's money is tied into property; homes and commercial property (Charles and Hurst 2002). However, the Federal Housing Authority has played a major role in disallowing Black's access to the housing market through discriminatory practices such as redlining and loan deferments. Black's were essentially shut out of the housing market until the mid 1960's when the legislation was passed to drastically reshape the FHA (Gotham, 2000). And even after reshaping, Blacks were still systematically shut out of the suburbs and cornered into congested urban areas (Gotham, 2000). From the time after the Revolutionary

War until the 1960's whites essentially owned all the land in the U.S. and as a byproduct all of the wealth of the nation. This wealth has since been passed down through the generations to create the gap that is now present (Charles and Hurst, 2002).

Many argue that the educational achievement gap is a result of the wealth gap (Orr, 2003). However, the academic achievement gap offers its own independent set of issues that often feed back into the widening wealth gap in somewhat of a never ending cycle. The achievement gap is mostly measured by test scores. Black's routinely score in the lowest quartiles on standardized test, are more likely to drop out than white students and go to college at lower rates than white students. Even though Black's are attending college in record numbers they are only graduating forty percent of the time (*Journal of Blacks in Higher Education,* 2004).

John Ogbu has championed since the 1980's that the reason African American's lag behind in school is the notion of intelligent behavior equating to "acting white." In his most recent research experience, Ogbu (2003) examines African American students from an affluent Ohio suburb to see what variables play into academic failure. He found that "these kids who come from homes of doctors and lawyers are not thinking like their parents. They are looking at rappers in ghettos as their role models," (*Journal of Blacks in Higher Education*, (2003). Ogbu much like Cosby, places the blame on Black parents. He found that parents did not spend sufficient time on homework with children and did not pay adequate attention to their educational progression.

Conversely, students from impoverished neighborhoods with lower levels of capital, social, human and financial tend to fair worse in school than their white peers for similar reasons and some directly related to poverty. Bordieu (1986) created theories regarding the convertibility of capital. Some capital is more liquid than others. Financial capital can easily be converted into other forms such as social and cultural capital. Financial capital can easily expand ones access, network, place, and chances of success. Orr (2003) theorizes that the given two families of similar incomes, the children belonging to the wealthier family are more likely to attend college. Orr bases her theory off the fact that wealth is often related to homeownership and the ability of homeowners to take out a second mortgage to afford tuition. Orr gives further examples of the liquidibility of financial capital and its role in educational success.

As a result of the disparities between the different segments of the Black population it must be noted that Black students are entering predominantly white institutions with wildly different cultural identities. There is no longer the same sense of unified cultural identity that once permeated through Black America. After desegregation some Blacks pushed forward and others lagged behind leading to the disparities that Marable (1983) describes. This assumption is critical to guiding this research because as defined by Lareau and Weininger (2003) the cultural capital theory is hinged on the belief that some culture is valued more than others.

Historical Theories of African American Identity and Higher Education

"One ever feels his twoness-an American, a Negro; two souls, two thoughts, two unreconciled strivings; two warring ideals in one dark body, whose dogged strength alone keeps it from being torn asunder," (DuBois, 1897, p. 194.) W.E.B. Dubois's prediction at the end of the nineteenth century regarding the future of the Negro in America rivals Aristotle in its accuracy. African American's have always struggled with how to portray authentic Blackness and still be an American. This notion of double conciousness still persists for African American students as they struggle to formulate an identity at PWI's. DuBois is credited with pioneering the study of Black educational experiences on PWI campuses. In 1900 he published a social study, *The College-Bred Negro* (1900) along with a follow up study *The College-Bred Negro American* (1910), in which he sent a comprehensive survey to African American students, African American college graduates, and administrators at various types of institutions to access their experiences in higher education. He posed questions regarding the hindrances that they faced on campus and asked white administrators questions regarding the institutions attitude toward African American students. DuBois found as would be expected considering the time in which the study was administered, that prejudice and lack of acknowledgement of Black students was the main problem Blacks faced. For its time this research was groundbreaking because it was the first to elicit responses from African Americans discussing the psychosocial barriers to higher education.

Racial Identity Formation

The Cross (1991) model of psychological nigrescence suggest that there are five distinct stages in the formation of Black racial identity. These stages are preencounter, encounter, immersion-emersion, internalization, and internalization-commitment. The *Preencounter stage* as described by Cross (1991) is the individual seeking assimilation into the dominant culture by absorbing the beliefs and values of the dominant culture. The individual deemphasizes their own culture looking to seek acceptance into the dominant culture. The *Encounter phase* is spurned by the social rejection of the Black individual by the dominant culture which causes them to then seek visible symbols of ones own racial identity. This in turn leads to the *Immersion/Emission stage* in which the African American individual actively seeks African American peers that exhibit what one believes to be authentic blackness (Cross, 1991). During the *Internalization stage* the individual exhibits a level of comfort within their own racial identity and is able to respect and acknowledge the culture of other racial groups. The last stage is the *Internalization-Commitment* phase in which the individual has found ways to use racial identity as the "point of departure for discovering the universe of ideas, cultures and experiences beyond blackness in place of mistaking blackness as the universe itself" (Cross et al., 1991, p.330). This process described by Cross is what many Black students face at predominantly white institutions where the struggle to find their racial identity.

Acting White and Stereotype Threat

"Ethnic identity development is a complex, multifaceted, and dynamic process. It has both public and private, individual and communal, conscious and unconscious, positive and negative, past and present, cognitive and emotional, expressive and symbolic dimensions" (Gay, 1987 p. 35).

The above quote illustrates the unique problem Black students face when forming cultural identity on PWI campuses. In addition to the general assimilation into campus life, Black student deal with the perceived notion of Black racial inferiority linked to the history of discrimination. This leads to what scholars have deemed "the burden of acting white" or "stereotype threat" (Fordham and Ogbu, 1986). In deference to the social norms theory, individuals will adapt their behavior to conform to perceived norms (Berkowitz, 2000). The particular behaviors that are ascribed to a certain group distinguish the group from others and act as a congealing mechanism providing the group with a collective identity (Miller, et. al. 2000). This establishes the norm of the in crowd or in other words, authentic blackness as defined by the group itself.

Fordham and Ogbu (1986) claimed that a major obstruction to Black academic success is the inclination for Black students to fulfill their stereotypical roles and to avoid academic success because of its association with whiteness. This cultural opposition has been one of the leading theories for explaining the Black-White achievement gap. Fordham and Ogbu's (1986) research was particularly groundbreaking due to the discovery of surprisingly low SAT's scores for Black students compared to whites even when controlled for socioeconomic status. This led to the development of the cultural ecological theoretical framework which asserts that the historical context and conditions of an ethnic group's incorporation into a dominant society shape the way the minority group views what is associated with the dominant group. When this framework is applied to Black Americans they represent the involuntary minority and are "cynical and embittered" because relative to Whites they do not receive comparable returns for their hard work (Fordham and Ogbu 1986). As a result of this, Blacks develop an oppositional social identity that defines "certain activities, events, symbols, and meanings as not appropriate for them because those behaviors, events, symbols, and meanings are characteristic of white Americans" (Fordham and Ogbu 1986 p.181).

At predominantly white institutions scholars believe that it is possible that Black student's success is being undermined by the pressure from peers to underachieve to preserve their blackness. However, Horvat and Lewis (2003) have shown how the burden of "acting white" can be used in a positive manner. As a result of the alienation experienced by high achieving Blacks at the hands of low achieving peers, there emerges a subculture of students who value education. Students can then find a way to manage their academic success and receive encouragement from supportive peers, allowing them to maintain normal social lives as well as excel academically.

In addition to the possible rejection from peers for "acting white" many high achieving scholars also carry the burden of stereotype threat. Stereotype threat is "being at risk of confirming, as self-characteristic, a negative stereotype about one's group," (Steele, 1995). Aronson and Steele find that stereotype threat affects high achieving Black students in two ways. It adds pressure to students that may directly hinder academic performance and if it is "a chronic feature of the school performance domain it may force the affected students to disidentify with that domain," (Aronson and Steele, 1998). Aronson and Steele (1998) argue that stereotype threat mostly affects those who care the most about school. Those who are not achieving may not care much about being stereotyped or behaving stereotypically.

Stereotype threat is purely a psychological impediment to African American academic success. The threat of being stereotyped leads many students to question their academic ability and to fear social marginalization. Social marginalization cannot be overlooked because as a result of the stereotypes associated with "blackness" many members of an institution expect Black to be portrayed in a certain way. Implying that in a lot of ways being an intelligent African American with a mind for school and not having stereotypically Black attributes can lead to alienation from members of all social groups, including ones own.

Theoretical Perspectives on College Persistence

Quite possibly the first scholar to develop a theory regarding college persistence was William Spady (1970). Spady theorized that students withdraw from college due to a lack of shared values and normative support. He noticed that a lack of reverence for the value of education and the lack of family, close friends and emotional and financial support led to the departure of many college students before attrition. Bean (1980) building on Spady's ideas developed a model that focused on how students background variables such as socioeconomic status and "organizational determinants" such as staff/faculty relationship, housing, and campus organizations influenced a students commitment to an institution. He confirmed that a students level of commitment was the most important variable related to drop out rates, (Bean 1980).

Bean later does studies focusing specifically on under represented minorities in college. He finds that the approval and support of parents and the community is integral for the African American attrition, (Bean, 1990). "When parents approved of students attending school, the students had a greater sense of academic and social integration, perceived their education to be of greater utility, and felt less alienated on campus" (Bean, 1990, p.167).

However families can be an asset or a liability (Guiffrida, 2005). If parents are not emotionally or financially supportive African American students have a higher tendency to drop out. Herndon and Hirt (2004) point out that as an asset parents are the original source of educational persistence. They are the first to instill the motivation and the expectations for what it will take to be successful in college. Herndon and Hirt point to guidance in the form of an older relative, a mentor,

or a college administrator as the number one variable most necessary for African American's to graduate from predominantly white institutions.

Building even further on Bean's Model of Student Attrition, Tinto's research (1975, 1987, and 1993) focuses on the separation from the family and the adaptation of a new learned set of values during the early years of college. Tinto begins with the idea that students enter college with values that are shaped by the family that include social skills commitment to academics. These attributes are then shaped and reassessed by the formal and informal experiences of "the academic and social systems of the institution," (Baber, 2007). Tinto shaped his model into a three stage process for students; separation, transition, and incorporation. The separation stage is the stage in which the student begins parting with past habits and values. The transition stage is when the student begins to cope with the stress of leaving what is familiar and has not quite fully integrated into the new environment. The final stage is the incorporation stage in which the student is now recognized as an institutional member. Tinto's model does not allow for any variation such as voice, religious values or beliefs, or strong familial ties.

Cultural Capital Theory in Educational Settings

In a society based upon the ideals of the American dream, in which anyone can achieve any level of success they choose, the education system is entrenched in the idea of meritocracy. Ones own merit and individual effort is supposed to be enough to achieve success. However, there are many non merit based factors that uneven the playing field such as the strength of ones network, inheritance, access to education, as well as race and gender. These factors illuminate meritocracy in the higher education system as the myth that it is. Certain people from certain places have certain advantages that ultimately play major roles in their success or failure.

Defining Cultural Capital

Bourdieu's cultural capital theory is a framework most often used when assessing power within a social structure. Cultural capital can exist in three states: embodied (disposition of mind and body), objectified (cultural goods), and institutionalized (educational qualifications), (Bourdieu, 1998). The embodied state of cultural capital is personified within the individual. This is the culture that is inherited from family, traditions, and socialization and is linked to one's habitus. The objectified state represents things that can be transmitted physically in exchange for financial capital or symbolically as cultural capital. For example owning a Van Gogh painting signifies a certain degree of symbolic or objectified cultural capital but interpreting its meaning requires a level of embodied capital. The institutional state of capital is usually used in relation to academic credentials or qualifications. Having a certain degree implies a certain status which can be easily converted into financial capital in the labor market (Bourdieu, 1986).

Bourdieu and Passeron (1977) claim that institutions unevenly draw from certain cultures more than others causing the use of a particular linguistic style, rhetoric,

or curriculum which children from higher social stratums may already be familiar with before entering the institution to be positive cultural capital. These cultural resources that are learned at home serve the student at the institution enabling the student to be ahead of other students based entirely on embodied capital alone.

Bourdieu's cultural capital theory is often criticized when used to explain the academic disparities between Blacks and Whites (Yosso, 2005). Some feel that the theory offers a pessimistic view of Black communities, portraying them as places full of cultural disadvantages instead of praising the culture that exists. These scholars base their criticisms on the fact that socially marginalized people do possess skills, knowledge and ability, some of which may even be more substantial than other more well off groups. However, as Celius and Oyserman (2001) argue, African Americans are not a homogenous group and those stemming from the Marable (1983) defined "underclass," possess different cultural attributes than the "Black elite." As a result of this, the cultural capital model can be adeptly applied to the study of the academic achievement gap because it accounts for the differences between classes of African Americans.

Research Methods

This research attempts to capture the "socio–psychological" process of developing identity as an African American at a predominantly white institution. In your typical study of educational persistence there is a process of statistical analysis that weighs input versus output to come to a sort of conclusion or finding. This type of quantitative data is useful when assessing trends but is very limited when examining the interpersonal relationships amongst students and the relationship between students and an institution. For this reason this research will require mostly qualitative research focused on descriptive data.

Research Design

This research will include focus group interviews, supplemented by the analysis of preexisting data and life history interviews. Focus group research allows for the researcher to study people in a more natural setting than a one on one interview. Focus groups allow for group interaction and the fostering and expansion of new ideas and concepts. In addition to this focus group are low in cost and produce results very quickly (Marshall & Rossman, 1999). A limitation to focus group research is the tendency for the discussion to lose focus and for participants to wander off topic. It is easy for the researcher to lose control of a focus group discussion.

The life history interviews will allow the researcher to delve deep into the past of the participants to determine how their original cultural identity was defined. The participants will be asked to paint a picture of who they are by detailing important themes in their lives that reflect the development of their personalities and relationships with others. These interviews will add substance and context to many of the answers to the focus group discussion as well as allow show the socioeconomic variation amongst participants.

Unit of Analysis

This study asks the participants to think back into their past and recollect certain memories of themselves. Whenever doing research based on subject recollection it is imperative to provide context in which they can compare two distinct forms of themselves. The participants of the study are all seniors who culturally identify as Black and they are asked to recall how they culturally identified as seniors in high school four years ago. For the purposes of this research I will provide three constants to provide context for the participants to compare themselves; a) their relationship with parents; b) their relationship with close friends; c) their relationship with boyfriends/girlfriends.

Institutional Context

The institution selected for this study is a public, four–year, doctoral research institution located in the Mid–Atlantic region of the United States. The campus is located less than ten miles from one major metropolitan area and approximately forty miles from another. The school is located in a county rich with affluent African American's however contrary to conventional wisdom is still rife with crime and poor public grade schooling.

Eastside University (pseudonym) has an enrollment of over 36,000 students. The school admits 4,000 first year students and approximately 2,200 transfer students yearly. Eastside has been dubbed a "public ivy"[2] because it is said one can achieve an ivy league education for a public school price there. Most college ranking publications deem the University to be "mostly selective."

Eastside University is a premier research institution offering 127 undergraduate degrees and 112 graduate degrees in thirteen different colleges and schools, including a high ranking business school, journalism school, and the top ranked criminology school in the country. The school has research partnerships with NASA, the National Science Foundation, the National Institute of Health, the Department of Homeland Security, and the National Security Agency.

Eastside University provides ideal context for conducting this research. African American students admitted to the University generally have demonstrated the ability to excel academically. The school is predominantly white, having a 32% non–white population. Additionally, the diversity of the socioeconomic status of the many students on campus provides for valuable research opportunities.

Data Collection Procedures

When conducting qualitative research it is most important for the researcher to select participants who provide the investigator with the best insight into the stated research question (Bogdan and Biklen, 1998). For the purpose of this research only six participants were chosen because as Patton (2002) suggests the sample size

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[2] The Public Ivies: America's Flagship Public Universities
   Howard Greene, Matthew W. Greene

depends on what the investigator is researching and what resources the researcher has to conduct the study. "The validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size" (p. 245).

Sufficiency and salience are used to determine the number of interviews/ participants needed in a qualitative study (Stage and Manning, 2003). "Sufficiency" is achieved when the number of interviews accurately reflects the range of experiences in the field. "Saturation" is achieved when information begins to become redundant and when multiple respondents repeat similar information throughout the interviews.

The focus group includes three boys and three girls, of varying socio-economic status. Respondents were selected from a pool of twenty survey participants. On June 15th, 2008 a criterion guided convenience sample was distributed at the Stamp Student Union. The Eastside University students that were chosen for this study all met the following criteria:

• Of African American descent (or culturally identify as Black)
• A senior in class standing
• Signed and returned a consent form

Validity

Validity is the strength of qualitative research because; the researcher is the collector and the interpreter of the data. What the investigator perceives to be reality can be documented as reality, as opposed to purely examining quantitative data that contains narrative support. However, there is always the question of whether what the researcher is interpreting is what is really occurring. One can reduce concerns of internal validity by regularly checking with the participants to see if their feelings and beliefs are accurately reflected through the data. Pershkin (2003) suggests that it is impossible for qualitative researcher to remove themselves from the data collection process as they are the instrument. As a result of this, true objectivity is impossible to obtain and subjectivity must be acknowledged and monitored throughout the research process. As an African American college student researching other African American college students I pose a critical threat to internal validity. However, in my best attempt to minimize my bias I will attempt to be reflexive in my analysis of the data. My data will be peer reviewed and member checked; allowing participants to review raw data samples to judge the accuracy of my interpretation.

Triangulation of Data

Triangulation of data allows for the merge of several data sources to check for validity and consistency (Merriam, 2002; Patton, 2002). This research uses three data sources, ethnographic interviews, focus group discussion, and Baber's (2007) case study. The ethnographic interview poses mostly semi-structured, open ended questions relating to the participants past. The responses given by most should contextualize the answers received during the focus group discussion. Baber's

(2007) case study is an example of similar study done at a PWI on first year Black students only. His data will close out the triangulation strongly because if I were to find vastly different answers from his research to mine then an error would be most likely the reason.

Data Analysis and Interpretation

Because I will be utilizing the actual responses from my participants to formulate my data, it is imperative that I devise some sort of coding system to categorize responses. This is still in the developmental phase but I do acknowledge that this must be done. For example I can match a theoretical pattern such as double consciousness (Dubois, 1897) with an empirical pattern that emerges in my research. For example every time a participant mentions having to bear the burden of being a student and a "Black student" I would record it in some sort of coded form. It is quite possible that I will display these codes in table or chart form in my raw data but for the polished product, the data will be presented in narrative form with quotes used as support. I will also include the life history interviews for each member of my focus group.

Limitations

I expect to find that some participants will have difficulty divulging sensitive socio-economic information. However, the ability to define a concrete socio-economic bracket to place each one of my participants is crucial to the completion of this research. I also may have to explain to the participants the different types of capital in order for them to truly be able to tackle some of the focus group discussion topics. I will also ask some gender specific questions in the focus group discussion which may make some uncomfortable, but I expect nothing more than a slight rivalry of the sexes to occur.

One issue that may arise as a result of this research is the institutions role in hindering African American student graduation. Students may label certain professors, other students, administrators, or advisors "racist," which would represent the university in a poor light. For this reason in the final paper the name of the institution will be a pseudonym. Private information may be disclosed during the data collection process and all of the participant's names will be fictitious as well.

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Minority College Students' Perceptions of College Preparation Experiences and Their High School Counselors: One Year Later – A Revised Perspective

Brittney Chisley

Mentor: Dr. Cheryl Holcomb-McCoy, Counseling and Personnel Services University of Maryland, College Park

Abstract

There are major problems with high schools preparing minority students for college. These problems stem from many issues, one being the lack of school counselor training in college preparedness. The need for this research is showed by the lack of literature on this topic. This paper will present the results of a study examining minority college students' high school experiences related to college-going and their perceptions of high school counselors in the process of college admission and preparation. A survey was given to the scholars of Ronald E. McNair Post Baccalaureate program at the University of Maryland College Park. The participants (n = 15) completed the online 68-item survey. The survey included items that asked the students about their high school college preparation courses, activities that prepared them for college, and their high school counselor's involvement in their college readiness process. The results from my research demonstrated that current college students did not feel that various high school experiences and courses prepared them for college. The results also found that parents/guardians and high counselors were considered the most influential in current college students decisions regarding college preparation and overall decision to further their education.

Purpose and Research Questions

The statement of the purpose of this research was to identify contributing factors in minority high school students' decision to attend college or some form of higher education. While identifying these contributing factors, the researchers of this study addressed the following questions:

1. What types of college preparation experiences (academic, social, and family) did minority college students experience in high school?
2. What are minority college students' perceptions of their high school counselors' role in preparing them for college?

The purpose for this study is to find possible reasons why academic achievement may be challenging for some urban African American high school students in choosing to continue on with education after high school. This study will also show

important roles high school counselors can play in ensuring urban African American high school students' academic success. The difficulty for this research is trying to find previous studies and credible sources to support the claims suggested in this study. This study was performed due to lack of research for the given subject.

Summary of Literature Base

All youth should be able to take advantage of educational opportunities beyond high school. However, the pathway to college for students in the U.S. is marked by vast disparities in college awareness, preparation, and access (McDonough, 2004). Although comparable percentages of African American and White high school sophomores expect to finish college (Nettles & Perna, 1997), smaller percentages of African Americans and Latinos than of Whites actually enroll. Only 32% of African American and 23% of Latino high school graduates between the ages of 18 and 24 were enrolled in college in 2003, compared with 42% of Whites (National Center for Education Statistics [NCES], 2005). Also, even more disappointing is the fact that only 17% of Native American high school graduates attend any level of college, compared to the national college going rate of 67% (Benally, 2004).

From an economic perspective, for the past 30 years, high school graduates from the top income quartile have enrolled in college at a rate 25–30 percentage points higher than students from the lowest income quartile (Hawkins & Lautz, 2005). And in 2004, the U.S. Department of Education reported that 82% of students whose parents were college-educated enrolled in college directly after high school, but only 54% went to college if their parent had completed high school. Clearly, based on the preceding statistics, there is a burgeoning college access and preparation gap between racial and economic groups.

As stated previously, the need for this research is showed by the lack of literature and studies on this topic. There is a study underway that will start during the fall of 2007. This project will be performed by the College Board along with the University of Maryland College Park's Department of Counseling and Personnel Services. The title of this 3-year longitudinal study is as followed: Investigating the Influence of School Counseling Programs on Urban, Low-Income, Minority Students' College Preparation. The participants of this study will include Students and school counselors from urban high schools with racial and economic diversity. This study will examine the influence and effect of school counselor programs and activities on the college preparedness of low-income, minority, urban high school students.

Methods

Participants

The participants of this study were students of the Ronald E. McNair Post Baccalaureate Program at the University of Maryland College Park. The students were chosen due to the time period given, six weeks, to perform this study. The program

includes rising juniors and seniors. Students of this program have backgrounds of either being low income, first generation college students, or underrepresented in their field of study. The Ronald E. McNair program includes in total 29 students. The genders of the students are seven men and twenty-two women. The minorities included in this program are African American, Hispanic, and Asian American.

Instrument

The materials used for this study were the Ronald E. McNair students, Survey Monkey, Statistical Package for the Social Sciences (SPSS). The students of the Ronald E. McNair program served as a sample sized of the population of students who have graduated from high school and have made it to a college institution. Survey Monkey is survey software that allows anyone to create professional online surveys. This software was chosen because it was an easy, fast, secure, and a secretive way to respect the privacy of the participants in the survey. SPSS is a computer program used for statistical analysis. SPSS was chosen because it combines the broad range of capabilities of the analytical process. The analytical process includes: Planning, data collection, data access, data management and data preparation, data analysis, reporting, and deployment. SPSS allows the researcher to produce decision-making information quickly. The results from the data in SPSS, allows the researcher to find key facts, patterns, and trends in the study.

Design

This study will use a survey design in which relationships between variables will be explored.

Procedure

The researcher gathered the email addresses of Scholars from the graduate assistant working with the McNair Scholar Program. As previously mentioned, the survey was developed using Survey Monkey. The survey was distributed to all 29 Scholars via email. The email contained an introduction to the survey's purpose and directions for completion. A follow up email was sent to all participants a week later. To encourage the students to participate, the researchers simply explained to the students the basis of my research and the importance of the study.

Results

When reviewing the data of the demographics from the study, there were many similarities and differences. As stated previously, the participants were chosen due to the time period given to perform this study. The genders of the students were seven men and twenty-two women. Only 15 of the 29 participants completed the online 68-item survey. For the first question, are you male or female, 1 (6.3%) male and 15 (93.8%) females responded. The second question, what is your age, 7 (43.8%) were from the 18-20 range, 8 (50%) from the 21-23 range, and 1 (6.3%) was from the 27-older range. The third question, what is your university classification, 6 (37.5%) were juniors, 7 (43.8%) were seniors, 2 (12.5%) were super seniors, and 1 (6.3%) was

a graduate student. Majority of the students, 12 (75%) were African American while the other represented ethnicities were Asian American 1 (6.3%), Latino/Hispanic 1 (6.3%), and 1 (6.3%) classified themselves as other. Half of the respondents, 8 (50%), reported their cumulative grade point average was between 3.1-3.5 The question, what was the highest level of education obtained by your mother and father, showed very different views. The question gear towards the participants' mother, majority of the respondents, 5 (31.3%) reported their mother had some college (community/junior college or some 4-year college study). The question gear towards the participants' father, majority of the respondents, 4 (25%) reported their father was a high school graduate or received a GED. The final question, how many siblings (brothers and sisters) attend college or are college graduates, the results show 5 (31.3%) respondents either had none or one sibling.

    The following data tables were the questions focused towards the participants' college readiness.

    Table 1.0 (Below) would be appropriate for displaying the results of the Honors and Advanced Placement courses taken in high school by the scholars. This table shows the majority of the scholars, in bold, took 5-6 Honors/ Advanced Placement courses. This table shows the scholars were able to take advanced classes during their high school career.

Table 1.0 Frequencies of Honors/ Advanced Placement Courses Taken in High School by Scholars

Number of courses	N	%
0	1	6.3
1–2	5	31.3
3–4	3	18.8
5–6	6	37.5
7–8	1	6.3
9 or more	0	0.0

    Table 1.1 (Page 92) would be appropriate for displaying the results of the Standardized Tests taken in high school by the scholars. This table shows the majority of the scholars, in bold, took the SAT I during high school more than any other of the other standardized tests. This shows many of the scholars were required to take the SAT I over any the other standardized tests.

Table 1.1 Frequencies of Standardized Tests Taken in High School by Scholars

Standardized Tests	n	%
PSAT	9	60.0
SAT I	13	86.7
SAT II	5	33.3
ACT	9	60.0
Advanced Placement	7	46.7
PLAN	0	0.0

    Table 1.2 (Page 93) would be appropriate for displaying the results of the Math, English and Science courses taken in high school by the scholars. This table shows the majority of the scholars, in bold, took Pre-calculus, English Literature, and Biology in high school.

    Table 1.3 (Page 93) would be appropriate for displaying the results of the first time the scholars too the SAT/ACT in high school. This table shows the majority of the scholars, in bold, took the SAT/ACT in the 12th grade. This shows there was some reason the scholars

Table 1.2 Frequencies of Math, English, and Sciences Courses Taken in High School by Scholars

Course	n	%
Algebra I	2	12.5
Algebra II	5	31.3
Geometry	2	12.5
Trigonometry	2	12.5
Pre-calculus	7	43.8
Calculus	3	18.8
Statistics	4	25.0
Other– Applied math/ SAT class	1	6.3
Composition	6	37.6
American Literature	3	18.8
English Literature	9	56.3
British Literature	1	6.3
World Literature	2	12.5
Other– AP English	2	12.5
Don't know	1	6.3
Biology	7	43.8
Earth Science (Environmental)	1	6.3
Chemistry	5	31.3
Physics	6	37.5
Other– Don't know	1	6.3

Table 1.3 Frequencies of the First Time Scholars Took the SAT/ACT

	n	%
Never took either test	1	6.3
7th grade or earlier	2	12.5
8th grade	1	6.3
9th grade	1	6.3
10th grade	3	18.8
11th grade	3	18.8
12th grade	5	31.3

Table 1.4 (Below) would be appropriate for displaying the results of the various people the scholars spoke with in high school about college admissions. This table shows the majority of the scholars, in bold, spoke with people like family, friends, counselors, teachers, and many others. This table shows the students were able to find a person they could relate to and discuss college admissions.

Table 1.4 Frequencies of People Whom the Scholars Spoke With About College Admissions

	n				%		
	Many Times	Once or Twice	Never	Total #	Many Times	Once or Twice	Never
Parents/ guardians	13	1	0	14	92.9	7.1	0
High school counselor	10	1	3	14	71.4	7.1	21.4
High school teacher	6	6	2	14	42.9	42.9	14.3
Friends or other students	12	1	1	14	85.7	7.1	7.1
Siblings	7	4	3	14	50.0	28.6	21.4
Other relatives	6	6	2	14	42.9	42.9	14.3
Family friends	6	4	4	14	42.9	28.6	28.6
College recruiter	6	4	4	14	42.9	28.6	28.6
High school coach	4	4	6	14	28.6	28.6	42.9
Private college counselor	1	4	9	14	7.1	28.6	64.3
Clergy Member	3	3	8	14	21.4	21.4	57.1

Table 1.5 (Page 95) would be appropriate for displaying the results of the various educational setting preferred by the scholars after graduating. This table shows majority of the scholars wanted to attend a public or private university out of state.

Table 1.5 Frequencies of Educational Settings that the Scholars Preferred after High School Graduation

Educational Setting	n	%
Didn't consider any schools	0	0.0
U.S. Military Academy	1	7.1
A 2-year Community or Junior College	1	7.1
Public or Private University (In-state)	5	35.7
Public or Private University (Out of state)	6	42.9
A technical or trade school	0	0.0
Transferring from one institution to another	1	7.1

Table 1.6 (Below) would be appropriate for displaying the results of the first person to give advice to the scholars on taking courses to gain college admission. Majority of the scholars received advice from their high school counselors.

Table 1.6 Frequencies of the FIRST Person Who Gave the Scholars Advice on Taking Courses to Gain College Admission

	n	%
Middle school counselor	0	0.0
High school counselor	9	64.3
Parents/guardians	3	21.4
Friend	0	0.0
Siblings	1	7.1
Other relatives	0	0.0
High school coach	0	0.0
Other	1	7.1

Table 1.7 (Below) would be appropriate for displaying the results of the counselor's role in preparing the scholars for college. With regards to gaining admission to a state college or university, college of the scholars choice, and completing applications for college; majority of the scholars felt their counselor prepared them extremely well. For securing funding for college and writing college essays; the majority of the scholars felt their counselors did not prepare them at all. For choosing the "right" college the scholars felt their counselor prepared them somewhat. In the area of gaining admission to a community college, majority of the scholars felt their counselor's role was either somewhat or not well at all.

Table 1.7 Frequencies of High School Counselors' Role in Scholars College Preparation

	n and %				
	Extremely Well	Somewhat Well	Not Well	Not Sure	Total #
Gain admission to a state college/ university	6 (42.9%)	4 (28.6%)	4 (28.6%)	0 (0%)	14
Gain admission to the college of your choice	7 (50%)	3 (21.4%)	4 (28.6%)	0 (0%)	14
Completing applications for college	7 (53.8%)	2 (15.4%)	4 (30.8%)	0 (0%)	13
Secure funding for college	2 (14.3%)	5 (35.7%)	7 (50%)	0 (0%)	14
Writing college essays	3 (21.4%)	3 (21.4%)	7 (50%)	1 (7.1%)	14
Choosing the "right" college	4 (28.6)	5 (35.7%)	5 (5.7%)	0 (0%)	14
Gain admission to a community college	2 (14.3)	4 (28.6%)	6 (42.9%)	2 (14.3%)	14

Table 1.8 (Page 97) would be appropriate for displaying the results of the rates in which the scholars felt they were prepared after graduating from high school. When asked going to a 4-year college in state, the majority of the scholars felt they were very prepared. But when asked about going to a 4-year college out of state, majority of the scholars felt they were not prepared at all. When going to a college, the majority of the scholars felt they were very prepared. They only question the scholars were not sure on was about being prepared for trade school.

Table 1.8 Frequencies of Scholars' Perceptions of Their College Preparation After Graduating From High School

I believe I was prepared to…	n and %					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total #
Go to a 4-year College (In-State)	7 (50%)	3 (21.4%)	3 (21.4%)	1 (7.1%)	0 (0%)	14
Go to a 4-year College (Out of State)	3 (21.4%)	3 (21.4%)	5 (35.7%)	1 (7.1%)	2 (14.3%)	14
Go to a community College	7 (50%)	1 (7.1%)	3 (21.4%)	1 (7.1%)	2 (14.3%)	14
Go to a Trade School	4 (28.6%)	2 (14.3%)	2 (14.3%)	1 (7.1%)	5 (35.7%)	14

Table 1.9 (Below) would be appropriate for displaying the results of the scholar's satisfaction of the high school counselors. Majority of the scholars were very satisfied with their counselors in all areas.

Table 1.9 Frequencies of the Scholars' Satisfaction with their High School Counselors

My counselor was…	n and %					
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Total #
Concerned about my future	8 (57.1%)	1 (7.1%)	1 (7.1%)	3 (21.4%)	1 (7.1%)	14
Knowledgeable about colleges/ universities	9 (64.3%)	3 (21.4%)	0 (0%)	2 (14.3%)	0 (0%)	14
Knowledgeable about the college admission process	9 (64.3%)	3 (21.4%)	0 (0%)	2 (14.3%)	0 (0%)	14
Believed that I could go on to college	9 (64.3%)	2 (14.3%)	1 (7.1%)	2 (14.3%)	0 (0%)	14
Dependable	9 (64.3%)	1 (7.1%)	0 (0%)	2 (14.3%)	2 (14.3%)	14
Easy to talk to	8 (57.1%)	3 (21.4%)	1 (7.1%)	1 (7.1%)	1 (7.1%)	14
Good listener	8 (57.1%)	3 (21.4%)	1 (7.1%)	1 (7.1%)	1 (7.1%)	14
Responsible for getting me into college	5 (35.7%)	4 (28.6%)	2 (14.3%)	3 (21.4%)	0 (0%)	14
A resource for college information	7 (50%)	4 (28.6%)	0 (0%)	3 (21.4%)	0 (0%)	14

Table 2.0 (Page99) would be appropriate for displaying the results of what the high school counselors helped the scholars with college. The only disagreement the scholars had with their counselors was in the area of writing a college essay.

Table 2.0 Frequencies of the High School Counselors' Performance

My counselor helped me to…	N						
	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	N/A	Total #
Enroll in a SAT prep course	3 (20%)	4 (26.7%)	3 (20%)	2 (13.3%)	0 (0%)	3 (20%)	15
Enroll in college-track courses	4 (26.7%)	5 (33.3%)	2 (13.3%)	1 (6.7%)	0 (0%)	3 (20%)	15
Write a college application essay	2 (13.3)	3 (20%)	5 (33.3%)	3 (20%)	2 (13.3%)	0 (0%)	15
Complete a college application	6 (40%)	5 (33.3%)	1 (6.7%)	3 (20%)	0 (0%)	0 (0%)	15
Explore different types of colleges and universities	7 (46.7%)	3 (20%)	2 (13.3%)	3 (20%)	0 (0%)	0 (0%)	15
Explore financial aid options	5 (33.3%)	3 (20%)	4 (26.7%)	3 (20%)	0 (0%)	0 (0%)	15
Prepare for college	4 (26.7%)	5 (33.3%)	1 (6.7%)	3 (20%)	1 (6.7%)	1 (6.7%)	15
Decide which college to attend	5 (35.7%)	2 (14.3%)	4 (28.6%)	3 (21.4%)	0 (0%)	0 (0%)	14
Understand the college application process	3 (20%)	8 (53.3%)	1 (6.7%)	2 (13.3%)	1 (6.7%)	0 (0%)	15
Do better in school	8 (53.3%)	2 (13.3%)	2 (13.3%)	2 (13.3%)	0 (0%)	1 (6.7%)	15

Discussion and Conclusion

What types of college preparation experiences (academic, social, and family) did minority college students experience in high school? With regards to the research being reviewed in this study, the experiences the scholars had academically, socially, and with family all varied. As the researcher analyzed the data, they concluded; Academically, as shown by the data, the researchers of the study interpreted the responses given by the scholars as inadequate preparation as a whole by the school systems to influence the students to further their education. Socially, the researchers interpreted the responses as students using resources other than those provided the schools (i.e., parents/guardians, relatives, friends/peers, etc.). And family played a significant role in the majority of the students' preparation and influence for future education.

What are minority college students' perceptions of their high school counselors' role in preparing them for college? The researchers concluded, from the responses of the survey, a majority of the college students' felt their high school counselor assisted them adequately with the college admissions process. However, respondents also felt their high school counselors were not providing assistance with particular aspects of college preparation courses, writing college essays, and financial aid options.

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Rehabilitative Methods and the Affect on Juvenile Delinquents

Kelie Darbouze

Mentor: Dr. Wallace Southerland III, Associate Director
McNair Scholars Program
University of Maryland, College Park

Abstract

The purpose of this inquiry is to examine current rehabilitative programs and therapeutic methods employed to assist juvenile delinquents with re-entering mainstream society. Specifically, this research will examine the techniques, the rehabilitative programs, and the use of therapeutic models to assess the effectiveness of programs in addressing the personal needs of juvenile delinquents. Examples of the techniques, rehabilitative programs, therapeutic models are: substance abuse treatment, job placement, skills training, housing, social interactions with peers and family, and proper therapeutic treatment.

The type of research that will be conducted is evaluation research which looks at the merit of social programs (Ruane, 2005). Understanding the value of rehabilitative methods will help to ensure which types of methods have greater chance in rehabilitating juvenile delinquents. The rehabilitative methods that will be examined in this inquiry are therapeutic methods which include group therapy, group housing, and family counseling. The inquiry will look at vocational and skill training as rehabilitative methods. This goal of this inquiry is not to discredit all rehabilitative methods but to show the rehabilitative method trends more frequently used with juvenile delinquents. This inquiry was solely based on a critical and extended analysis of research in the literature.

Introduction

In today's society crime is an aspect of life that is present whether it is acknowledged or ignored. Crime is being committed more frequently and more often by adolescents. Juvenile delinquency has been on the rise and yet as delinquency rises so does the number of delinquents that go to correctional facilities to serve time for the crimes they have committed. Research shows that previously incarcerated youth return to the justice system at alarmingly high rates (Sametz, Ahren, Yuan, 1994). Eventually incarceration youth have to come out of the correctional facilities and be re-intergraded back into mainstream society once time has been served. This inquiry attempts to examine current rehabilitation methods and the affect on juvenile delinquents.

Problem Statement

Juvenile delinquents are coming into the juvenile justice system with an array of problems that have caused them to commit delinquent acts (Mincey, Maldonado, Lacey, &Thompson, 2008). Once juvenile delinquents finish their sentience, they must re-enter society. Correctional facilities that over see the rehabilitation process for juvenile delinquents have to address problems that include:

a. Receiving adequate treatment that rehabilitates the juvenile offender so they are less likely to recidivate
b. Making sure the juvenile delinquent has realistic and obtainable resources and means to make it in society
c. Making sure the juvenile delinquent is fully aware and ready for the transition back into society

Many juvenile delinquents, male and female are faced with issues such as poverty, substance abuse, and being victims of child abuse and rape (Mincey et al., 2008). Any of these issues can trigger the juvenile to lash out and commit delinquent acts. The question is what happens next? The juvenile delinquent commits the delinquent act, is found guilty, and they serve time in a correctional facility. They go through the juvenile justice system and they get the opportunity to have a second chance. Juvenile criminal offenses are a significant societal problem with great financial and social costs (Bradshaw & Roseborough, 2005) .What is the next step for these juvenile delinquents once they get out of the system and try to reintegrate back into society?

Purpose of Inquiry and Inquiry Questions

The purpose of this inquiry is to examine current rehabilitative programs and therapeutic methods employed to assist juvenile delinquents with re-entering mainstream society. Specifically, this research will examine the techniques, rehabilitative programs, and the use of therapeutic models to assess the effectiveness of programs in addressing the personal needs of juvenile delinquents such as substance abuse treatment, job placement , skills training, housing, social interactions with peers and family, and proper therapeutic treatment. The following research questions guided this inquiry:

a. How do juvenile delinquents adjust to life and cope with the consequences of their actions?
b. What is being done to help juvenile delinquents lead a more positive life as opposed to recidivating to crime and or delinquent acts again?
c. Are rehabilitative methods effective enough to cause juvenile delinquents to live better lives or possibly lead lives filled with criminal activity?

Significance of Inquiry

The development of effective programs and interventions to reduce juvenile recidivism is a national priority (Bradshaw & Roseborough, 2005). This inquiry is significant because the inquiry will examine therapeutic methods and vocational education that are used to help juvenile delinquents re-enter back into society. The main purpose of rehabilitation is to rehabilitate the juvenile delinquent and lessen the amount the juvenile delinquent recidivates. Chronic juvenile offenders often lack the means to become productive citizens (Sametz, Ahren, &Yuan, 1994). This inquiry will review programs and therapy methods to determine if they help the juvenile delinquent maintain a healthy lifestyle and confidently live crime free or give them alternatives to do so. This inquiry will look at programs and therapy techniques to examine the methods that are used that are ineffective.

Theoretical Framework

To understand the bases for this inquiry, the foundational theories must be examined to help explain juvenile delinquency and rehabilitative methods. To explain areas of subject matter the researcher will be relying on a dual theoretical framework which includes the rehabilitation model and three theories that aid in explaining juvenile delinquency. The three theories that will be used in this inquiry include Strain theory by Merton (1938), Control theory by Hirschi (1969), and Differential Association theory by Sutherland (1947).

Delimitations of the Inquiry

The way in which the researcher established boundaries to make this inquiry manageable was not examining every type of rehabilitative method. The types of rehabilitative methods that were examined in this inquiry included: group therapy, group housing, family therapy, and vocational education. This inquiry looked specifically at juvenile delinquents who were given the opportunity to re-integrate back in to mainstream society as opposed to the population of juvenile delinquents who remain in the justice system. This inquiry exclusively looked at the aforementioned rehabilitative methods and the immediate effects the rehabilitative methods had on the juvenile delinquents in relation to being rehabilitated to re-enter mainstream society again and practical alternatives to recidivating. This inquiry did not critique ways in which structurally and foundationally the rehabilitative methods, interventions, and programs were established or ran to rehabilitate juvenile delinquents.

Limitations of the Inquiry

Due to the nature of this inquiry, limitations must be acknowledged. First, a limitation to this inquiry is not having access to the juvenile delinquents to capture their perspectives. Because this inquiry is looking at rehabilitation methods and forms of therapy it would go against positive progression of treatment to ask

questions about what juvenile delinquents think about therapy methods used on them. In addition, the issue of being a minor and having the consent of a parent or guardian is required to further investigate the juvenile delinquent population. Another limitation was the amount of time allotted to conduct this inquiry. The nature of this inquiry requires completion and approval from the Institutional Review Board (IRB) and given the extensive time frame it takes to complete the whole process (IRB) it was not possible to collect actual data with human subjects. Therefore this inquiry relied solely on critical and extended analysis of the literature. Third, an additional limitation of this inquiry is that the type of research proposed is limited to a specific group within the population which does not allow open and direct access to studying juvenile delinquents. Open and direct access is not allowed because are considered a vulnerable group which must be protected. Furthermore, it is hard to gain access to facilities to observe the nature of the environment and the techniques that are used. Gaining access is difficult because while juvenile delinquents are being treated through rehabilitation a sense of safety is created for juvenile delinquents while they go through this process. Finally, another limitation is that there is patient –client confidentiality so certain issues of individual juvenile delinquent scenarios a researcher does not have access to if given the opportunity to interview specialists(counselors, therapists, and supervisors of treatment programs) .

Analysis and Discussion of the Literature

The purpose of the analysis and discussion of the literature and presentation of framework is to get a deeper understanding of rehabilitation methods and the effect on juvenile delinquents. Different alternatives for rehabilitation will be examined to show how the use of different forms of rehabilitative methods for juvenile delinquents helps reduce recidivism. Overall, this section will examine scholarly research studies and articles that address juvenile delinquency and rehabilitation in reference to juvenile delinquents, as well as therapeutic methods that that help with rehabilitating the juvenile delinquents which include: a) group therapy b) group housing c) family therapy. Vocational education is another area that will be examined in relation to juvenile delinquents with rehabilitation and reducing recidivism. This analysis will investigate all different types of rehabilitative methods aforementioned that can be used to rehabilitate juvenile delinquents so that as a result juvenile offenders do not recidivate.

Juvenile Delinquency

Juvenile delinquency is a major problem that effects America's youth. Child delinquents represent a significant concern for both society and the juvenile justice system (Lober, Farrington, Petechuk, 2003). To understand reasons how one can help rehabilitate juvenile delinquents researchers must delve into uncovering some of the reasons why children resort to acts of delinquency at such a young age. Child delinquency is an enduring and troubling phenomenon that requires more research and the efforts of a broader community to be fully understood and addressed (Lober,

Farrington, Petechuk, 2003). Generations of studies in criminology show that the best predictor of future behavior is past behavior (Lober, Farrington, Petechuk, 2003). For example, children who are in environments such as poverty stricken neighborhoods where children are exposed to other young children, adolescences, and adults committing criminal activity are more likely to emulate that behavior because it is deemed as acceptable. This example lends evidence to understanding Differential Association theory by Sutherland (1947) because this theory states that all behavior is learned , delinquent behavior learned in small groups, and delinquent behavior is learned from collective and specific situational events (Mincey et al., 2008).

Juvenile delinquency is a problem that has been occurring at younger ages within society at higher rates and more frequently (Lober, Farrington, Petechuk, 2003). One must begin to look at other factors that may trigger reasons why younger children are resorting to delinquency. Children showing persistent disruptive behavior are likely to become child delinquents and in turn, child delinquents are likely to become serious, violent, or chronic juvenile offenders (Lober, Farrington, Petechuk, 2003). As stated in the original study from (Kazdin and Kendall, 1998a), understanding the early emergence of problem behaviors may help in the creation of earlier, effective interventions for prevention of child delinquency (Lober, Farrington, Petechuk, 2003). For this reason, the issue of understanding re-occurring and persistent problems in behavior of children is essential to pointing out some of the risk factors that lead to juvenile delinquency.

The closer a child is to the mother; the less likely a child is to be at risk for delinquency (Lober, Farrington, Petechuk, 2003). This statement lends evidence and validation to understanding the Control theory by Hirschi (1969) because this theory states that social bonds are things that keep people from committing criminal acts having strong bonds with family and social institutions such as church and school can aid in juveniles not resorting to delinquency (Mincey et al , 2008) .

Additionally, many risk factors are interrelated that affect the reasons why some children commit delinquent acts at young ages. Early anti-social behavior, family characteristics are important predictors of early –onset offending (Lober, Farrington, Petechuk, 2003). Family characteristics include: anti-social parents, substance –abusing parents, history of family violence, large family size, and prevalence of physical abuse are some of the risk factors that play into children participating in juvenile delinquency (Lober, Farrington, Petechuk, 2003). When looking at reasons why children commit delinquent acts the issue of "peer pressure" must be addressed. Prior research suggests that peer associations are the most important proximate cause of adolescent delinquency (Payne & Cornwell, 2007). As stated in the original study conducted by (Coie & Miller- Johnson, 1995) youth who associate with deviant peers are likely to be arrested earlier than youth who do not associate with such peers (Lober, Farrington, Petechuk, 2003). Going back to the Control theory by Hirschi (1969) if a juvenile delinquent has strong social bonds that are negative and perpetuate committing criminal deviant acts the juvenile delinquent is more likely to be influence to participate in deviant acts with peers who engage in the

acts as well. The importance of having accomplices cannot be overstressed in child delinquency (Lober, Farrington, Petechuk, 2003).

Juvenile delinquency is a huge issue that has to be addressed because it is becoming more visible and accepted in today's society. Juvenile delinquency is a complex trend that must be critically dissected to begin to understand specifically all the reasons why children turn to delinquency. Unlocking the key to understanding juvenile delinquency is important because this deeply shapes ways in which juvenile delinquents who go through the juvenile justice system are rehabilitated. Also this shapes and creates ways in which prevention and intervention programs can be tailored to at risk youth before becoming juvenile delinquents

Rehabilitation

The rehabilitative model focuses on the treatment of the offender with the assumption that interventions such as probation supervision, work readiness, training, cognitive skills training, and behavior therapy will change behavior and reduce the frequency of juvenile offenses (Bradshaw & Roseborough , 2005). Rehabilitation is essential to juvenile delinquents and re-entry into mainstream society because being rehabilitated sets the foundation to lead a healthy lifestyle in the community once out of the juvenile justice system. The rehabilitation model is ideal over retributive model because the retributive model which primarily focuses on punishment as deterrence is not as effective (Bradshaw & Roseborough, 2005).

Rehabilitation is practical because some rehabilitative methods addresses the personal needs of juvenile delinquents and gives juvenile delinquents realistic options to make it in society with out having to recidivate. The rehabilitation model ties into the Strain theory by Merton (1938) which states that in life there are "goals and means" and everyone wants to achieve their own version of the American Dream. When one does not have the means to obtain goals, sometimes one is forced to resort to illegal means to achieve one's goals. Therefore, rehabilitation is vital because it teaches one through the process of rehabilitation there are necessary steps that are taken to obtain goals and the means of getting one's goals accomplished in a legitimate way.

Juvenile delinquents' receiving proper rehabilitative methods is important because this lessens the likelihood of juvenile delinquents that will recidivate and have to re-enter the juvenile justice system. Child delinquents are expensive to taxpayers and society (Lober, Farrington, Petechuk, 2003). Due to the fact that juvenile delinquents are rehabilitated through local, state, and federal funded programs and interventions, the money that supports these interventions are tax payers. Rehabilitative methods have to be realistic to implement and teach juvenile delinquents how to make it in society after being treated. The need for rehabilitative methods to be effective is essential so that more money does not have to be wasted on programs that do not properly rehabilitate juvenile delinquents.

Furthermore, rehabilitation is a major factor for juvenile delinquents' successful re-entry into mainstream society. Effective intervention plays an essential role in any strategy designed to diminish the rates of juvenile delinquency (Lipsey, Wilson,

Cothern, 2000). Rehabilitation is a necessary resource that is provided to juvenile delinquents to help ease the re-entry process back into society. Effective rehabilitation is important because it helps to eliminate the vicious cycle of recidivism and proper rehabilitation can lead to juvenile delinquent population not resorting to adult criminal activity.

Discussion of Therapeutic Methods

Group Therapy

The research journal titled "Advantages of Group Therapy in Relation to Individual Therapy for Juvenile Delinquents" looks at the reasons why group therapy is a better alternative and more effective than individual therapy (Yong, 1971). The journal gave reasons why group therapy is very advantageous to use especially with males. To begin, a main reason why group therapy works more so than individual therapy because it allows the therapist to take a moderator role and allow the juvenile delinquents to challenge themselves to figure out issues they deal with and overcome (Yong, 1971). This means that the therapist is at the therapy session, but juvenile delinquents take an active role over the therapist. In addition, group therapy creates a foundation for commonalities amongst the juvenile delinquents; this allows the juvenile delinquents to draw upon common experiences as opposed to being singled out (Yong, 1971).

In comparison to individual therapy sometimes juvenile delinquents can be unresponsive so individual sessions are not as productive, where as in group therapy a huge shift takes place because of all the non-verbal communication and active listening of the juvenile delinquents (Yong, 1971). This active listening creates a break through in rehabilitation because the juvenile delinquents are seeking answers and support from each other. In addition, another reason why individual therapy is ineffective is because the therapist is viewed as the authoritative figure and juvenile delinquents have a hard time listening and or respecting that person. Nevertheless, when it is a group setting the group mates have more respect for each other because all the juvenile delinquents are in similar situations it is easier for the juvenile delinquents to bond because they have similar experiences (Yong, 1971).

This research is important because it shows the positive effects of group therapy. This is research study is compelling in relation to the current inquiry because this shows that if group therapy has a better success rate it should be used more often than other methods to help rehabilitate the juvenile delinquents. The research shows that the juvenile delinquents are more participatory, therefore this would be a better means of therapy to use. This in turn, can help reduce the juvenile delinquents from recidivating. Because juvenile offenders are able to draw on each other experiences of the other group mates, this makes the therapy sessions more meaningful and this rehabilitation method is more effective.

A limitation to this research journal is that it just focused on how males are affected by group therapy in relation to individual therapy. This journal did not talk about female juvenile delinquents and the effect that group therapy may have on

them. No knowledge on the female perspective is given. This could lead to future research in evaluating the effects of group therapy with females in relation to how group therapy affects males.

Group Housing

Group housing or Residential fallibilities offer a strong advantage for juvenile delinquents while going through the rehabilitation process. Many of the research articles discuss how rehabilitation is a process and sometimes going back to the same environment is not advantageous when trying to make a change in one's life. Because group housing is unique in offering a lot of services that juvenile delinquents need, they can get the services they need and have a safe environment to help with the transition process back into society. Research has shown that rehabilitation plays an important role in reducing recidivism (Mincey et al, 2008). This lends evidence to show that because rehabilitation is important in eliminating future crime, having group housing in necessary because it offers an array of advantages. Juvenile delinquents are not committing more acts of crime because they have a positive environment to flourish in rather than going back to the original environment that thrived delinquency.

Family Therapy

Family involvement and therapy is an important part of the rehabilitation process for juvenile delinquents. Research has shown that for many juvenile delinquents they come from families where there are many siblings so time is stretched and each child does not get adequate attention. Also the parents are not involved because of other issues such as substance abuse, incarceration, and or poverty. Supportive families help the former offender overcome difficult program experiences while going through the rehabilitation process (Mincey et al, 2008). Family therapy also allows the whole family to be rehabilitated because the family gets the opportunity to process the situation of their former delinquent child. Family therapy helps to explain the control theory (1969) because the therapy process allows for strong social bonds to be created through therapy so; juvenile delinquents are less likely to recidivate because they are rebuilding a strong foundational relationship.

Discussion of Vocational Education

The article titled "Education: Don't Leave Prison Without It" was interesting because it talked about the use of vocational education for juvenile delinquents. It talked about vocational programs can be something that changes these offenders lives once they come out the facilities (Conlon, Harris, Nagel, Hillman, & Hanson, 2008). This research study was done in Oregon at two of the largest correctional schools in Oregon which include William Lord High School at MacLaren Youth Correctional Facility and Robert Farrell High School at Hillcrest Youth Correctional Facility (Conlon et. al 2008). These are schools that are accredited and comprehensive high schools with strong Career and Technical Education (Conlon et al, 2008). Research shows that educational attainment is significant factor in

reducing recidivism (Conlon et al, 2008). The article talked about how the success of the juvenile delinquents once they come out of these facilities is depended on upon having dedicated staff but also having all the necessary resources the juveniles need to become successful one they re-enter back into mainstream society (Conlon et al, 2008).   A major part of this is transition services because they provide career counseling, job placement, find living arrangements, and developing hard and soft employment skills (Conlon et al, 2008).

 This type if treatment is key because if the juvenile delinquents have an easier time transitioning back into society, knowing that they came live successfully they are less likely to commit a delinquent act or recidivate. The high schools offer an array of services with is key to juvenile delinquents success. One program that is extremely used and popular is the welding program. Nearly every young man who has received multiple certificates in a variety of welding skills before being paroled is employed and successful in the community (Conlon et al, 2008). Juvenile delinquents are more confident when they have a skill or trade that they are trained, thus making it easier to transition back into society. Research has demonstrated that reduced recidivism rates are secondary outcome of successful education program in youth corrections (Conlon et. al 2008). Education is a critical component of an overall plan for rehabilitation of juvenile offenders (Conlon et al, 2008).

Methods for Collecting and Analyzing the Literature

The purpose of the section is to review the methods employed to prepare this conceptual paper. In addition, this section will propose research methods for future empirical inquiry.

The methods used to collect and analyze the literature were using the university online database services and the library specifically identifying books and journals that dealt with rehabilitation and juvenile delinquents. The researcher met with the Criminal Justice Librarian to seek additional guidance for sources in this research inquiry. The main databases that the researcher used came from Criminal Justice Abstracts and Criminal Justice Periodicals. In addition, the researcher looked for sources in other areas of data bases that included Psychology, Family Science, Sociology, and General/ Multi-disciplinary to help broaden the search for relevant information.

Future research will employ qualitative methods over quantitative or mixed methods because future investigation will be designed to capture and convey the experiences of the subjects dealing with their personal narratives, statements and feelings (Ruane, 2005). For this inquiry and future research a qualitative method is the best method to use because of the nature of this research. The researcher will be conducting evaluation research which seeks to judge the merits of a social program (Ruane, 2005). Therefore, because the researcher is looking to understand the effectiveness of rehabilitative methods with juvenile delinquents this is the best method to collect that data.

The researcher analyzed the literature for this current inquiry by identifying themes that related to the inquiry questions. The common themes that helped the researcher analyze the literature included: (a) recidivism and positive affects of rehabilitation on juvenile delinquent; (b) readiness to re-integrate back in to society; and (c) behavioral changes in the juvenile delinquents. The aforementioned themes were used to evaluate the effectiveness of the rehabilitative treatment and to analyze the literature in relation to answering the inquiry questions.

Data Collection and Data Sources for Future Research

 Interviews and surveys will be used to collect data for the future research study. The interviews and surveys will be done in thirty minute intervals and will consist of open–ended questions. These methods are best for collecting data in this future research study because the researcher is conducting evaluation research. The methods employed are best for collecting the data will ensure that the inquiry questions on future research will be answered. These forms of data collection allow for in depth analysis and being able to code surveys to look for common themes and trends in the results. Data sources that will be used for this future research include but not limited to:

1.   Counselor – who works at a court mandated group home for female juvenile delinquents in Baltimore
2.   Juvenile Female Delinquents – who live at the court mandated group home in Baltimore
3.   Probation Officer – who works in with juvenile delinquents in Washington, DC
4.   SAMSHA representatives – who deal substance abuse issues with juvenile delinquents

Data Analysis Strategies for Future Research

The researcher will use three main methods to analyze the data for future research. First, the researcher will look at what the each of the interviewees say about the affects of rehabilitation methods on juvenile delinquents and look at what each interviewee gives as a viable solution. This will allow the researcher to look for similarities and differences within their answers. In addition, the researcher will look for common themes in the interviews that were also present in the literature to see if the themes are consistent. The themes that the researcher will use are as follows: (a) recidivism and positive affects of rehabilitation on juvenile delinquents; (b) readiness to re-integrate back in to society; and (c) behavioral changes in the juvenile delinquents. Finally, the researcher will look for patterns in the answers of the survey of subjects (i.e. juvenile delinquents) for the analysis. This will allow the researcher to be able to distinguish themes that the researcher is looking to answer in relation to the research questions.

Strategies for Minimizing Bias and Error

Strategies Related to this Inquiry

The current strategies were used by the researcher is this inquiry to help minimize error. The strategies used in this inquiry are as follows:

1. Using peer reviewed and scholarly journals for reliable sources
2. Meeting with the criminal justice librarian to help navigate and find good sources
3. Using different data bases other than criminal justice data bases to find sources

Strategies Related to Future Inquiry

The strategies that the researcher will take for future research include the strategies used for the current inquiry, the interview and survey questions will be reviewed by others to get suggestions and feedback, pilot study will be conducted to a similar group of subjects to test to see if the instruments used are properly used, and the researcher will take an objective role. These strategies will be employed to reduce error and bias in future research.

Ethical Considerations for Future Research

The researcher will take all necessary steps to ensure that all procedures for the future research will be done in an ethical manner. The researcher will do the following to deal with ethical considerations: the researcher will go through the entire Institutional Review Board (IRB) required by the university to get permission to conduct this future research, there will be a consent form made for the juvenile delinquents under the age of eighteen, all subjects will be informed of what the study entails and have the right to decline from participation at any time, the identities of all subjects will not be compromised, and subjects privacy rights will be protected. The researcher will also consider ethical considerations by giving credit where it is due by citing all necessary work, scholarly articles, research, and ideas.

Findings, Conclusions, and Recommendations for Future Research

Throughout this section the findings from the literature will be addressed to answer the inquiry questions, conclusions about what literature presents, and recommendations for future inquiry will be addressed.

Findings

RESEARCH QUESTION 1:
How do juvenile delinquents adjust to life and cope with the consequences of their actions?

FINDING:
The findings from the literature suggest the overall rehabilitation process is a copping mechanism in and of itself. This process allows the juvenile delinquent to feel an array of feelings. But the key is addressing any and all feelings felt while going through the process of rehabilitation.

RESEARCH QUESTION 2:
What is being done to help juvenile delinquents lead a more positive life as opposed to recidivating to crime and or delinquent acts again?

RESEARCH QUESTION 3:
Are rehabilitative methods effective enough to cause juvenile delinquents to live better lives or possibly lead lives filled with criminal activity?

FINDINGS FOR RESEARCH QUESTIONS 2 AND 3:
For the purpose of this inquiry the findings for questions two and three will be answered together because the results were the same. The rehabilitation model has been used more frequently with juvenile delinquents because the foundation of what the model practices and it helps to reduce recidivism of juvenile delinquents (Cole & Smith, 2005). Rehabilitation offers a wide variety of therapy methods, educational, and vocational training. Therefore juveniles have a better chance in making in society because they are given resources that promote change and success rather than resorting back to delinquency. This creates strong social bonds, and eliminates the strain (Hirschi 1969; Merton, 1938).

Conclusions

CONCLUSION 1:
A main conclusion from this inquiry is that there has to be a separation of treatment for first time offenders and chronic offenders (Lober, Farrington, Petechuk, 2003). Many times the same rehabilitation methods are used for both groups. This is ok but that the fact is that chronic offenders tend to commit more crimes and more serious crimes. So the duration of treatment and even specific methods used have to be purposeful for chronic offenders.

CONCLUSION 2:
Rehabilitation and the success rate of the juvenile delinquent is contingent upon everyone involved in the rehabilitation process willing to make the changes and sacrifices necessary to achieve the goal of a rehabilitated juvenile re- entering society as healthy citizen (Mincey et al ,2008). This plays a major role in the success or failure of juvenile delinquents.

Recommendations

RECOMMENDATION 1:

Recommendations for future research look at the structural analysis of rehabilitation programs. Specifically research should focus on skills training of personnel hired to work with juvenile delinquents. This is important because major part of juvenile delinquents succeeding through rehabilitation is having adult figures who want to support them, advocate for success in their lives and other juvenile delinquents (Vasquez, 2000).

RECOMMENDATION 2:

Implementation of rehabilitation methods is another important consideration that must be addressed. This is because many times with vocational education, even though it does give juvenile delinquents job skills vocational education prepares juvenile delinquents for some jobs that they will not be able to obtain (Cole & Smith, 2005). This consideration is imperative because this could bring about further occurrences of delinquency. The strain theory states that if one does not have the means (specifically – getting the job that one was trained for) then ultimately the goals can not be reached to have a legitimate job. Therefore a "strain" is created and the likelihood a delinquency happening again is more than possible.

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Case Study on 4 Subjects to Determine the Best Determinant of VO$_2$max: % Body Fat or Dietary Habits: 2008

Oluwabunmi I. Fakilede

Mentor: Dr. James Hagberg, Professor for Exercise Physiology Research, University of Maryland, College Park

Abstract

The maximal oxygen uptake (VO$_2$max) is very important because it is used to evaluate cardiorespiratory endurance and aerobic fitness. Without knowledge of their VO$_2$max value, an obese person may not know how much at risk they are for cardiovascular diseases such as coronary heart disease which buttresses the need 'in such an increasingly obese society, of knowing your VO$_2$max which can be very beneficial' (Wilmore and Costill, 1999); due to the fact that it provides you with a baseline idea of your cardiovascular health and aerobic fitness level.

The purpose of this study is to determine whether there is a relationship between an individual's percent body fat and their dietary habits in reference to their VO$_2$max value. To determine if this relationship existed, a mixed method of quantitative and qualitative statistical analysis was carried out on four active individuals ranging from ages 18–30. For the purpose of this study, an R square value of 0.5 or more suggests a relationship between the VO$_2$max value, and dietary intake value. With an R squared value of 0.89, percent body fat depicts the most significant relationship with VO$_2$max. % Body fat is very important because the body uses fat for insulation, thermoregulation and, most importantly it is a form of energy storage. The most significant dietary components were carbohydrates (R^2 = 0.50), total percentage of caloric intake from fats (R^2 = 0.75), fruit (R^2 = 0.65), grain (R^2 = 0.78), and total fiber (R^2 = 0.62). This study was based on only 4 subjects. As a result, data analysis can only be used to suggest relationships and guide future experiments, not to make conclusive statements or to state a level of significance.

Problem Statement

The research literature suggests that runners who ingest a low fat diet ingest fewer total calories, which may reduce their endurance when compared to athletes who ingest a high fat diet that falls within the standard daily caloric intake (Horvath et al., 2000). Maximal oxygen uptake (VO$_2$max) is very important because it is used to evaluate cardiorespiratory endurance and aerobic fitness. Therefore if high fat diets can increase endurance, then it is possible that an individual's dietary intake could affect an individual's maximal oxygen uptake (VO$_2$max). % body fat is usually associated with VO$_2$max, but it is also possible that there might be a relationship

between dietary intake and VO$_2$max in comparison to % body fat. One may also believe that dietary choices may be a determinant of VO$_2$max because "you are what you eat." The dietary choices we make affect how much sugar, fat, and energy among other things that are available in our body. Hypothetically speaking if an individual's dietary habits were very bad, then that could cause them to have less energy stored, they probably would not be able to achieve a true measurement of their VO$_2$max.

Purpose of Study

Without knowledge of their VO$_2$max value, an obese person may not know how much at risk they are for cardiovascular diseases such as coronary heart disease which buttresses the need 'in such an increasingly obese society, of knowing your VO$_2$max which can be very beneficial' (Wilmore and Costill, 1999); due to the fact that it provides you with a baseline idea of your cardiovascular health and aerobic fitness level. The purpose of this study is to determine whether an individual's % body fat or dietary choice is a better indicator of an individual's VO$_2$max. To determine this, a mixed method of quantitative and qualitative statistical analysis was evaluated on people ranging from ages 18–35 with no cardiac complications.

Significance of Study

This study is significant in terms of cardiovascular health. Many scientists in the field of cardiovascular health measure and analyze VO$_2$max. To determine the factors that affect VO$_2$max, this study investigated the correlation between VO$_2$max, % body fat, and dietary choices. Although it may be obvious that there is a relationship between the three, the purpose of this study was to determine if the relationship is significant enough to suggest a causative affect, and generate hypotheses for future experimental studies. Results of the study can lead to a better understanding of why people who weigh the same have different VO$_2$max values, and why people with similar % body fat have different VO$_2$max values. It is known that though all bodies are structurally similar they may process things differently. However, how much of that difference is significant enough to suggest a relationship with VO$_2$max. For example: everyone doesn't process sugar the same way, so how does the way they process sugar affect their maximal oxygen uptake?

Theoretical Framework

The methodology of the research is based on the skin fold test, USDA nutritional calculator, and the Fick equation which states that:

VO$_2$max = Heart rate x Stroke volume (Arterial–venous oxygen difference)

This equation is used to measure the maximum intake of oxygen through the lungs, then the uptake of oxygen through the blood and the consumption/utilization of oxygen in the muscle. There are two methods that can be used to assess

the values for the Fick equation: the manual Douglas Bag method or the automated computer system. Introduced in 1911, the Douglas Bag method remains the "gold standard" for assessing metabolic and cardiorespiratory responses to exercise today. For the purpose of this study we will focus only on the Douglas bag method, though training was received on how to use both systems during summer research experiences.

Summary of Methodology

Based on our overall understanding of VO_2max, we used a treadmill to test our subjects. Our subjects were allowed to pick the face piece; either a mask or mouth piece, they would be most comfortable using for the study. Then we conducted a series of incremental exercise tests on each subject as we monitored their heart rate in hopes of achieving VO_2max. This study was limited by time and the number of subjects who were available and wanted to partake in the study. The dietary logs of our subject were calculated through computer software and Microsoft Excel. The subject's dietary logs were limited by their ability to accurately recall everything they ate in a descriptive manner that was easy to calculate.

Due to the intense nature of this study, all subjects were screened and evaluated before they participated in the study. They were then asked to sign a consent form to show that they fully understood the nature of the study. Typically our ideal subjects were males and females who were between the ages of 18 and 30 and were active. We requested that all subjects fast overnight prior to undergoing our exercise tests.

Literature Review

Maximal oxygen uptake (VO_2max) can be used to determine an individual's fitness level because it measures an individual's maximum ability to intake oxygen to the lungs, transfer it in the blood, and consume it at the muscular level (Mitchell et al., 1957). An individual's VO_2max is based on their absolute ability to efficiently use and carry oxygen throughout the body while performing incremental progressive exercise (Mitchell et al., 1957). To measure VO_2max, an individual exerts a maximal effort during physical exercise that uses large muscle groups in a rhythmic fashion. Typically an individual is exercising on a treadmill or cycle where the work effort incrementally increases, and as they exercise they are connected to a ventilation system that measures the concentration and volume of carbon dioxide and oxygen that they inhale or exhale (Levine, 2008).

Basically the Fick equation tells us that our maximal oxygen uptake is equal to the concentration of the arterial oxygen minus the concentration of the venous oxygen multiplied by the cardiac output (Levine, 2008).

Based on the Fick equation we can expect athletes to have a higher VO_2max than non-athletes because the physical repetitive challenges that they are conditioned to withstand causes them to have a significant difference in their cardiac output due to their increased stroke volume. The reason why their cardiac output would be

higher is because of the rigorous activities that they encounter on a daily basis, which trains the heart to increase the size of the cardiac chamber. Clearly, being able to consume oxygen at a high rate during exercise is advantageous because it increases an individual's endurance so they can perform physical activities for a longer period of time (Levine, 2008).

Basset et al. conducted a study and found that the differences between the two systems are minimal. They concluded that the automated system was very accurate and precise (Basset et al, 2001). But based on personal experience in the lab, we chose to conduct the present study using the Douglas bag method.

Procedures

RESEARCH QUESTION:

Based on an individual's dietary habits and % body fat: which is a better determinant of VO_2max?

All subjects were interviewed, evaluated, and signed consent forms before they were allowed to participate in the study. Subjects were then given dietary logs, and asked to complete a detailed description of everything they ate over the course of three days, which had to include a day during the weekend, and two weekdays. A skin fold test was performed on each subject to determine their % body fat. For this study we used the Jackson and Pollock (1978) method of measuring % body fat. The Jackson and Pollock skin fold test is based on measuring subcutaneous skin fold thicknesses at seven anatomical sites: chest, abdomen, thigh, subscapula, triceps, axilla, and suprailium (Adams and Beam, 2008). The seven sites were measured with skin fold calipers to determine the millimeters of subcutaneous fat present at each site. All VO_2 studies were based on the Douglas Bag method, and calculated through formulas for assessing metabolic responses to exercise via indirect calorimetry using an Excel spreadsheet. All environmental conditions were evaluated and recorded prior to the study.

The Douglas Bag method collects air that is expired over a short period of time during aerobic exercise. When using the Douglas bag method a subject was connected to the system though a mouth piece or a mask based on their preference. The mouth piece is connected to a tube that leads to the Douglas bag. The collection of air within the bag was controlled by a valve. These valves allow the test administrator to open and close the passage of air in and out of the bag. As the test administrator synchronizes their clock, the subject walks/runs on the treadmill as they breathe normally through the mouth piece.

As time continues, the intensity of the exercise is gradually increased by raising the treadmill incline, which causes the subject to work harder to maintain their current pace. Expired gases are collected in consecutive one-minute bags throughout the exercise. After the exercise is over and the subject has reached a state of exhaustion, the bag volume and concentrations of O_2 and CO_2 within the bag are measured, calculated, evaluated and used to calculate the subject's VO_2 and

VCO$_2$ at each stage, with the highest level of VO$_2$ obtained during the final stage considered the VO$_2$max (Douglas, 1911, University of Maryland Exercise Physiology Laboratory Manual, 2004).

The subjects' dietary logs were then entered into computer software located on the United States Department of Agriculture (USDA) website under pyramid tracker (http://www.mypyramidtracker.gov/). The program was used to analyze the nutritional content of the individuals' diets. The data were then converted to numerical values and entered into an Excel sheet. Within Excel all the different dietary components were graphically analyzed in relation to VO$_2$max.

Results

Table 1 VO$_2$max in comparison to % Body fat

Subjects	Sex	Age	Weight	Height	VO2max	%body fat
1	Female	23	60.7	168.5	57.7	17.5
2	male	25	102.9	184	53.7	17.95
3	male	25	76.3	172	51.4	15.5
4	Female	20	70.9	152	32.2	32.5

This table shows our 4 subjects' VO$_2$max in comparison to their % Body fat

Figure 1 This graphs shows VO$_2$max in comparison to % Body Fat

This graph and the strong statistical correlation suggest that there is a relationship between VO$_2$max and % Body Fat

Based on the slope of the trendline in the graph above, the slope equation is:

y = -1.3661x + 77.249

Therefore, if the % body fat value is 40, it is plugged in as the x-value in the equation above, which gives a y-value of 22.605 which shows that the % body fat value is inversely proportional to the VO$_2$max value.

Table 2 The subject's dietary breakdown of food intake in (mg, cups, oz, %, gm, Kcal)

Participants	VO$_2$max	%body fat	Grain (oz)	Vegetable (cups)
1	57.7	17.5	5.93	7.7
2	53.7	17.9	5.86	2.5
3	51.4	15.5	5.7	0.83
4	32.2	32.5	5.6	0.96

Participants	Saturated Fat%	Saturated Fat%	Cholesterol (mg)	Sodium (mg)
1	4%	4%	9.5	2263
2	12.03%	12.00%	537	4186.33
3	10.33%		255.3	2285
4	13.13%		426.3	3486

Participants	Saturated Fat (gm)	Vitamin A (mcg RAE)	Vitamin C (mg)	Potassium (mg)
1	7.47	639.13	145	2404.66
2	43.4	847.03	98.47	3911
3	12.1	859.8	20	1634.66
4	33.7	591.96	24.3	1560.66

This table shows an average of each subject's dietary habits over the course of three days. The information was derived using the USDA pyramid tracker calculator.

Table 2 *Continued*

Participants	Fruit (cups)	Milk (cups)	Meat & Beans (oz)	Total Fat %
1	1.6	0.46	5.5	24%
2	1.43	0.53	8.66	31%
3	0.3	1.73	4.23	33%
4	0.03	1.06	7.63	38%
Participants	Food Energy (kcal)	Protein (gm)	Carbohydrate (gm)	Total Fat (gm)
1	1605	75.33	241.33	43
2	3142	113.6	232.66	113.03
3	1298	59.33	163	48.53
4	1766	89.33	160	85.9
Participants	Iron (mg)	Calcium(mg)		
1	19.2	870.87		
2	17.8	955.13		
3	28.3	766.5		
4	13.2	704.67		

Figure 2 Graphical representation of all the dietary components whose R squared value suggests a significant relationship between VO_2max

VO2max vs. Carbohydrates
$R^2 = 0.5005$

VO2max vs Grain
$R^2 = 0.7766$

VO2max vs Calcium
$R^2 = 0.587$

VO2max vs Fruit

$R^2 = 0.65$

VO2max vs total % fat of calorie intake

$R^2 = 0.7487$

VO2max vs Total fiber

$R^2 = 0.6187$
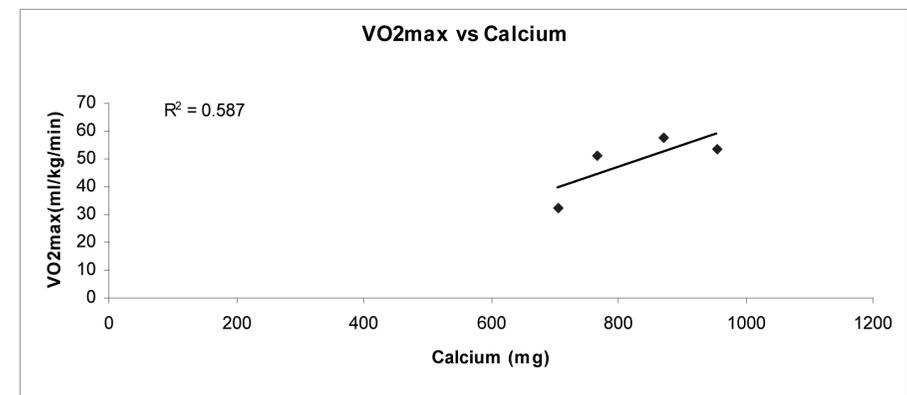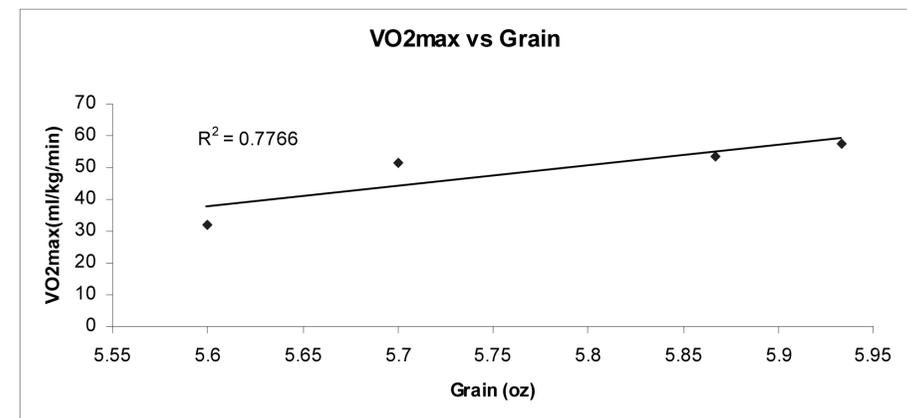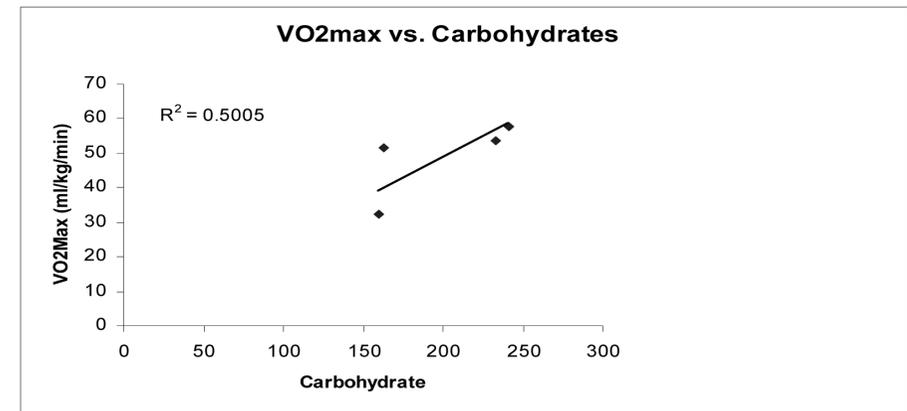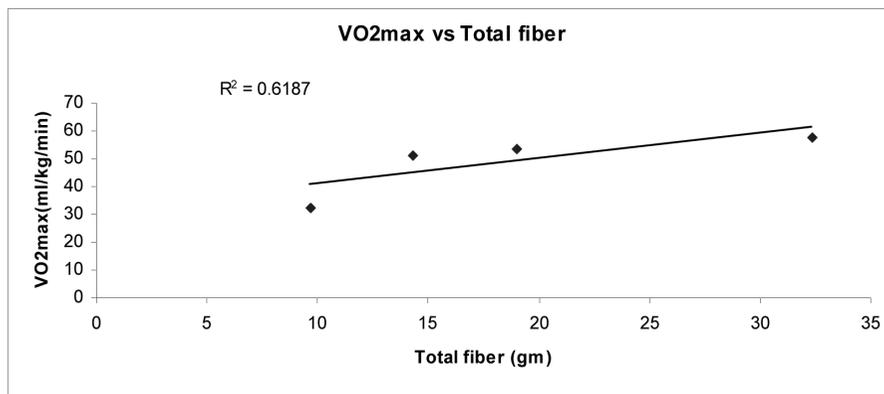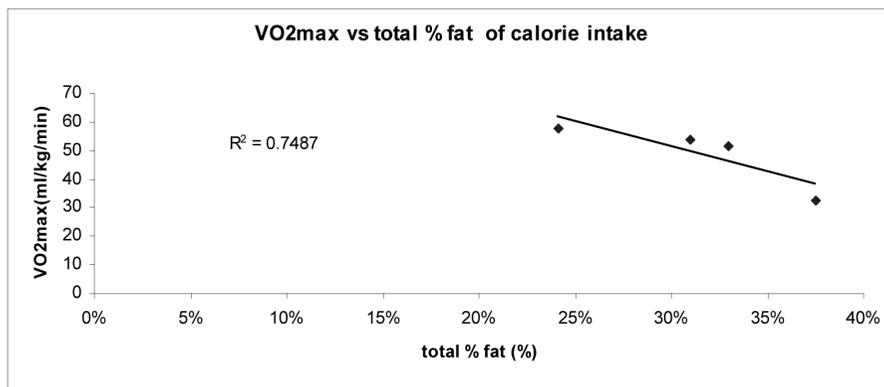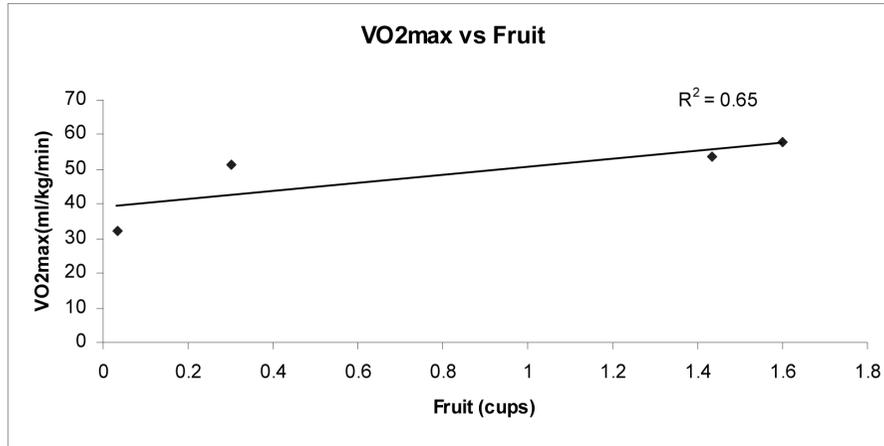
These graphs show the dietary components that had an R square value over 0.5. This was the agreed upon value use to suggest that there maybe a significant relationship between VO$_2$max and dietary intake. The most significant dietary components were carbohydrates (R square value of 0.50), total percent fat from caloric intake (R square value of 0.75), fruit (R square value of 0.65), grain(R square value of 0.78), and total fiber (R square value of 0.62). So as grain, carbohydrate, fiber, and fruit increase the VO$_2$max increases, but as total % fat in calories increase VO$_2$max decrease.

Discussion

Although there is a relationship between VO$_2$ max and dietary habits, the relationship between % body fat and VO$_2$max data had the highest R squared value, which suggests that there is a stronger relationship present. Based on all the dietary components shown in table 2, carbohydrates, grain, calcium, fruit, total fiber, and total % fat of calorie intake had significant relationships with VO$_2$ max as seen in figure 2. Of the significant dietary components grain seemed to be the most relative to VO$_2$max with an R square value of 0.78. % body fat had the strongest relationship to VO$_2$max with an R square value of 0.89. The % body fat tells an individual what percentage of their body consists mainly of fat, so if they weigh 150 lbs with 50% body fat; that would mean that their lean body mass is 75lb and their fat is 75 lbs. % Body fat is very important because the body uses fat for insulation, thermoregulation and, most importantly it is a form of energy storage. All components are essential to VO$_2$max, because you need stored energy to perform the endurance aspect of the test, and insulation and thermoregulation to warm up the muscles so they can be used more efficiently.

Based on our understanding of fiber, it is easy to understand why it may have a relationship with VO$_2$ max. Dietary fiber contains indigestible carbohydrates that are beneficial. VO$_2$ max evaluates an individual's cardiovascular health. The introduction of dietary fiber in an individual's diet has the ability to reduce their risk of coronary heart disease and diabetes; it can also help an individual maintain normal blood glucose (USDA, 2005). The maintenance of normal blood glucose levels is important because glucose is a form of energy storage (USDA, 2005).

Carbohydrates are derived from many sources like sugars, starch, and the fiber from fruits, vegetable, milk, and grains. Carbohydrate could have a close relationship with VO$_2$max because much like fiber, carbohydrates derived the energy source from glucose which comes from the breakdown of sugars and starch. Then, the derived glucose can be used to send energy to the brain, central nervous system, and red blood cells (USDA, 2005).

The relationship between calcium and VO$_2$ max is not as obvious because calcium is a mineral. It is common knowledge that calcium is used to build strong teeth and bone, thereby playing an overall role in strengthening and maintaining bones. In relationship to VO$_2$max, calcium is used to initiate muscular contraction, blood clotting, and cell membrane maintenance (USDA, 2005) which are essential components to any aerobic exercise regime.

The rest of the dietary components that showed significant relationships with VO$_2$ max are sources of the previous breakdowns. Grains are the major sources of energy and fiber. Fruit is a main source of potassium, magnesium, and fiber.

In terms of Vo$_2$ max, the total fat % of an individual's caloric intake is directly related to cardiovascular health. Fats can be as helpful to an individual's diet as they are harmful. A total fat intake that is less than 20% of calories may actually increase individuals to inadequately absorb vitamin E and other essential fatty acids, which can cause a negative change in their high density lipoprotein cholesterol (USDA, 2005). But total fat intakes that exceed 35% of the calorie intake can cause a person to consume more calories than necessary. This type of reaction can increase an individual's risk of coronary heart disease. Thus, an individual's total % fat of their caloric intake can be good reflection cardiovascular health, which is similar to the purpose of VO$_2$ max (USDA, 2005).

Conclusion

In conclusion, the result of the experiment was based on only 4 subjects. The data can, therefore, only be used to suggest a relationship, and not make a definitive conclusion. Overall % body fat had the strongest relationship with VO$_2$max, making % body fat the best predictor of VO$_2$max. Figure 2 shows that as % body fat increases VO2max decreases, which suggests that as individuals increases in % body fat their cardiovascular fitness may be compromised.

Our results suggest a relationship between dietary choices and VO$_2$ max, but the small sample size makes it difficult to assess cause and effect. Thus, future studies should use a minimum of 20 subjects to attain a more accurate correlation because it was definitely a limitation in the current study.

Despite the limitation to this study, the basic information can be used as a foundation to guide future experimental studies. A second study could look at both active and sedentary people. All subjects in this study were categorized as active. To eliminate certain factors, like aerobic fitness, we need to determine how the dietary habits of both active and sedentary subjects vary in relationship to % body fat and VO$_2$ max. For a more in depth understanding of why certain dietary components are significant, we could conduct studies that allow us to experimentally manipulate the amount of caloric intake, fiber, carbohydrate, grain and fruit that is present in an individual's diet. Then we can analyze how variance in these concentrations can affect VO$_2$max.

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Power of United States Political Parties and Street Gangs: An Analysis of the Strategies Used to Secure Power

Kathyleen Guevara

Mentor: Dr. Wallace Southerland III, Associate Director,
McNair Scholars Program, University of Maryland, College Park

Abstract

Many organizations have reputations according to what they can provide others. Street gangs are looked down upon by society because they are violent, are involved with drugs, and commit crimes. Political parties are looked at with respect because they are made up of the potential future leaders of the nation in which voters place their trust upon. This conceptual paper will show that the strategies between both groups are not that different. The strategies used to secure power will be applied to both urban street gangs and political parties to explore the similarities and differences in both organizations.

The inquiry will use a theoretical framework from the literature on power and how it is secured. The frameworks used are based on Stewart Clegg's theory of having power divided upon sub-units, the pluralists' versus the stratificationists' points of views, and an analysis of action-oriented themes. The theories will be used to analyze the individual groups and then used to compare the two organizations.

Future research will also use the same theoretical framework but will be applied differently. The recommended research for the future will be qualitative as well. The research will be a focus group and then have the members of the focus groups set up a one-on-one interview. The interviewees will be individuals that work closely with the Republican and Democratic political parties as well as individuals that work with current and former gang members.

Introduction

Similarities exist between urban street gangs' efforts to secure power and national political parties' efforts to secure power. This conceptual paper focuses on identifying and exploring the similarities. The unit of analysis for this paper is the concept of power and how power is secured by national parties and urban street gangs.

The Democratic and Republican political parties and urban street gangs have similar goals because they want to experience success. A measurement of success can be through achieved goals, purpose, growth in members, and length of existence. To be able to achieve the level of success, the organizations must achieve a sense of power over other organizations. Once power is held over the other organizations,

strategies used to attain power must improve because the power will now need to be secured. The techniques that are used by organizations to attain power are all fairly similar because, overall, these organizations want to succeed.

Problem Statement

The conceptual research addresses three primary problems: the difficulty in defining power, explaining the similarities of urban street gangs and the republican and democratic political parties in the concept of securing power and the differences in treatment of the organizations by society.

The difficulty in explaining power is very similar to the difficulty of defining an organization and having that definition apply to all organizations. "…Attempts have been made to develop more structural concepts of power as something which one can not only exercise, but also possess" (Clegg, 1979, p. 65). Many times to explain how an individual or organization holds power it must be described in a sense of it being a "kind of substance that one can have in one's pocket in the same way as money…" (Clegg, 1979, p. 65). As mentioned before, some of the items used to measure power and success would be money, people, and territory.

The purpose of an organization is normally taken at face value without looking into its goals or mission. Political parties are thought of highly since they lead the nation while street gangs are looked at as bringing neighborhoods down. It takes time to accept the power and resource availability that street gangs may be able to offer their residents (Venkatesh, 1997). In the article *Party Games: The Art of Stealing Elections in the Late-Nineteenth Century United States* (2001), it discussed tricks that were used during elections, such as, the 1976 election that involved fraud, bullying, killing, and rigging of the election laws. In the analysis of both groups, it will become clearer that both organizations use outside funding to support the group and need to recruit members to survive. Organizations that work on the streets cannot be looked upon as being sophisticated in the way they function.

Purpose of Inquiry and Inquiry Question

The purpose of this inquiry is to identify and explore the strategies urban street gangs and national political parties use to secure power for their organizations. To achieve the purpose as stated, the concept of power will be applied to each group. After an analysis is conducted, both organizations will be compared to see the similarities used to secure power.

Significance of Inquiry

The nature of this inquiry is significant for the following reasons. The explanations of power as well as strategies used to secure power are not very clear therefore this inquiry will assist in the development of the understanding. Once a clearer sense of what makes up power is established the analysis between both organizations of the nation's top political parties and urban street gangs can occur.

Republican and Democratic parties are not normally compared to urban street gangs because on the surface they seem very different yet similarities lie beneath the surface. Political parties are generally looked at positively and as helpful organizations, and gangs are looked at as causing harm to the neighborhoods, posing new ideas to the readers will allow for greater knowledge and areas of interest to develop. This inquiry allows for power theories to be expanded upon different groups as well as gaining more knowledge of how organizations function to attain and secure power.

Research Questions

The following research questions will guide an extended critical examination of the literature:

1. How do United States national political parties secure power?
2. How do urban street gangs secure power?
3, What are the common strategies used by political parties and street gangs to secure power?

The concept of power will be applied to both political parties and to urban street gangs. Afterwards, both urban street gangs and the Republican and Democratic political parties will be analyzed with the theoretical framework to show the similar strategies.

Summary of Theoretical Framework

Several theoretical models for examining the concept of power exist in the literature reviewed. For example, managerial revolution, pluralist versus elitist, and action-orientation. The theory of power, specifically managerial revolution by Clegg, focuses on organizational power structure. The theory proposes "division of labour in the organization…to provide the functional inter-relationship of an organization system of interdepartmental sub-units" (Clegg, 1975, p.46). The proposal of 'Managerial Revolution' suggest that departmental managers serve as "go to people" by those working around since they would now hold important information. There is still a chain of commands but the responsibilities are spread out among more leaders.

 A different perspective of looking at power and the organizations that will be addressed is by Clegg

> …*stratification theorists [that argue] political life…is correctly described as being one in which governance proceeds through a relatively coherent 'elite.' On the other hand, there are 'pluralist' theorists who are more likely to say the power resides not in any elite, but is widely dispersed amongst many competing and countervailing groups. (1979, p.46)*

The pluralist perception is very much what many organizations try to project because not many organizations want to claim having ultimate power. Therefore, stating that power is shared with others allows for a sense of a comfortable playing field. On the contrary, there exist organizations that like having the monopoly and can then be looked at as elitist.

Lastly is the action-oriented analysis by Joe Magee (2004). While the action-oriented analysis may not be a definitive theory it can still be applied to the inquiry. The analysis is made up of three elements that will be used to elaborate on the other theories. The elements applied will be behavior, psychology and structural position.

The managerial revolution, pluralist versus stratification theorist and action-oriented analysis are helpful because they allow for an analysis of structure, behavior, and thought to be applied to urban street gangs as well as political parties to explore their similarities The action-oriented analysis can look at individual leaders, similarly, the managerial revolution can do the same but it could also be applied to the structure of the departments and sub-units. The pluralist and stratificationist theory can be applied to the organization as a whole because it can look at its ranking compared to other organizations.

Delimitations of the Inquiry

Deciding to conduct this conceptual research meant having to look at the political parties of interest and narrowing it down to Republican and Democratic. The Republican and Democratic parties are the most commonly known parties therefore even though the United States has other political parties; the inquiry does not refer to those parties.

The focus on gangs is strictly urban street gangs. The reasoning that the types of gangs had to be narrowed was because there are many different types of gangs and some function more so as corporations. While a comparison between a more sophisticated gang to political parties would be more ideal, urban street gangs are more commonly known. Street gangs are also the most common deviant group to be studied.

In the field research, the study will be with the same focus groups. The responses from political parties will be from organizations in Washington, D.C. The street gangs will also come from Prince George's County as well as Montgomery County.

Limitations of the Inquiry

The following limitations constrain the nature of this inquiry; time and human error of interpretation. The conceptual research was under a time constraint of a little under six weeks. The time constraint caused a limitation on the amount of literature that could be reviewed and incorporated in the research. Human error of interpretation could very easily occur in reading, analyzing and interpreting the literature. If human error of interpretation occurs in the first stage of reading then the interpretation and analysis of the literature would be affected as well. If writing the information incorrectly occurs then the incorrect message is once again projected.

Analysis and Discussion of the Literature and Presentation of Framework

Literature on Organizational Power

Once power is achieved, domination follows to keep going with the power. "As in less sophisticated forms of organizations, loyal members are expected to maintain the group's secret" (1980, p.18), Best and Luckenbill are alluding to the dirty work that members have to do for the organizations or certain activities that would not be very appealing to the on-lookers. Clegg (1975) introduced Weber in his book and mentioned that power is made up of both economic power and domination. Further in the paper there will be a clearer example of how strong economic power is in the political parties as well as the street gangs.

Other physical items that people find interest in are physical features of the leaders. "Scholars have found, for example, that the attainment of power is associated with some physical attributes like prominent jaw, psychological bases, and structural positions. …Material possession, sex, race, and education all help us determine who has power over whom" (Magee, 2004, p. 1). This is an interesting observation because while society would like to deny that appearance isn't as important as mentality, studies have proven society thinks otherwise. On the streets, having battle wounds are attractive, such as being shot or stabbed numerous amounts of times and having survived the incident is looked up at as being admirable.

Those in organizations that desire more power and will be more action-oriented will always exist. The interchanging relationship would showcase the action of those with more power as doing more than those with less power, therefore, reinforcing the imagery of power amongst different members of the organization (Magee, 2004). Being action oriented also means being able to make decisions. McKay (1998) believes that "…a decision maker tends to have a high level of self-esteem and confidence" (p. 27). This is very true since to lead and have power over others they must believe that as a leader appropriate decisions will be made in a timely manner to look out for the best interest of everyone in the organization.

A study that was conducted by Donley and Winter (1970) looked at certain characteristics that would show power and action in an individual. Power motive imagery is defined as "having impact, control, or influence on another person, group, or the world at large by strong, forceful actions, controlling or regulating others, trying to influence or persuade, unsolicited helping, or acquiring prestige" (Magee, 2004, p. 2). This study helped explain more the sense of power and how power is exhibited rather than trying to only describe it in words.

To be able to have power and not be overwhelmed with it all, Stewart Clegg introduced the division of power. The new concept of power now lies in managerial revolution as mentioned previously.

The decomposition of capital attainment upon the separation of ownership and control, then power no longer resides in ownership, but in management. This states that the general type of manager has disappeared only to be replaced by different department (sub-units) of specialist, each of which pursues some key managerial function. (1975, p. 47)

This allows for more individuals to have more power, feel useful in the organization, and a better sense of promotion to occur. Best and Luckenbill agree in saying that "deviant formal organizations may contain departments for planning, processing goods, public relations, and rule enforcement with positions for strategists, coordinators, accountants, lawyers, enforcers and dealers in illicit goods" (1980, p.18). In giving people in the organization more responsibility they will more likely feel that they are sharing power and be willing to do a better job.

Literature on Power Associated with Political Parties

Leaders in political parties are respected in society as they are the leaders of the nation and their intentions are to look out for the well being of the nation and its people. In return to the analogy of chess, individuals who are not leaders of political parties, but still highly involved, are also well respected because of the pieces they represent in the game. As those pieces in the game, the plans that are put into play are also very important.

A particularly intricate position would be that of a financial assistant to the political parties because money is always necessary to have action plans implemented. "…Most comparisons between 'power' in political theory and 'money' in economic theory rarely develop much beyond the level of rhetoric and metaphor" (Clegg, 1975, p. 65). The simple breakdown shows that if a candidate for any political party wishes to be in a presidential race, $100 million must be raised by the end of the year. "That breaks down to more than a quarter of a million dollars every single day. … Each [candidate] must collect five $2300 contributions every single hour, every single day, including weekends and holidays, for an entire year" (Carney, 2007).

Some of the greatest donations come from people who work on K Street, the street in Washington, D.C. known for lobbyist and advocate groups. Those contributors are known as "super-donors" because of the huge personal donations they contribute to political parties. An example of such act comes from lobbyist Larry O'Brien and his wife, Helen, who personally donated more than $150,000 to the Democratic Party (Carney, 2007).

While donations made to political parties by individuals represent a sense of persuasion the act can be reversed. An act of showing thanks, or even of persuading more individuals to certain parties, consist of private dinners with important committee chairmen and party leaders, luxurious golf matches, ski trips, or theater junkets. The donors are invited to legislative briefings and conference calls as well as inaugural parties and weekends on Nantucket. The final product that both the donator and the political party can see is the payoff occurs when the writing of legislation occurs, handing out defense contracts, or having to set aside federal money for top-dollar clients (Carney, 2007).

Recruitment of individuals to political parties can occur with the options described above, but such recruitment is normally directed to those individuals that have a significant amount of money. A more basic act was done by Bill Clinton whom spent an hour at SoulCylce in New York with bikers that each donated $2300 to ride with him. Other options may be more appealing to the average person such as Romney and Edwards' approach. Romney had college students fundraise $1000 and allowed them to keep 10% of their collections. Edward's mother gave her pecan pie recipe to anyone who donated $6.10 by her son's birthday on June 10th (Carney, 2007). Funding a political party is very expensive. In a presidential election, "if you are forced to do 40 fundraisers a month, it limits your ability to articulate your vision for your candidacy" (Carney, 2007). Imagine how different the final plan might turn out to be compared to what it started with. "Because organization leaders rarely commit public violations, law enforcement agencies find it difficult to compile evidence against them" (Best & Luckenbill, 1981, p, 26). The opportunities to become corrupt because of brides are endless.

Literature on Power Associated with Street Gangs

Gangs originated with a sense to be a positive group of a neighborhood. Unfortunately, the introduction of drugs and weapons changed the functions of gangs towards the end of the 1980s. "Gangs began to corporatize- that is, when they directed their energies toward systematic involvement in drug distribution- and began using their illicit revenue to fulfill a range of community needs" (Vankatesh, 1997, p. 84). Ironically, while wanting to assist the community, gangs were preying upon the members of the community to gain finances. Committing one act, the selling of drugs, produced two outcomes; it created addicts and revenue. The outcome allowed for gangs to have power because they posed the resources and the funds.

Some of the reasons that people join gangs even though they know that gang membership will bring problems with authority are being "differences in languages in the community and school, difficulties academically, problems in school, race discrimination, and low economic status" (Balistrieri & Wattenburg, 1950, p.744).

Even though gangs preyed upon the community, they also wanted to help out their own neighborhoods. Gangs were able to provide financial support to those in the community that needed it. Gangs tried to provide the community with what they were missing. A sense of business through loans, kinship, and organizing sports and teams, were the main elements of gangs to make sure that while they cannot receive this from the outside world, the gangs would be who would be upon as the providers to the community. "Many leaders also see the process of 'giving back to the community' as part of corporatist ethos and so they approach churches, residents, businesses and social service agencies with proposals for cooperative of philanthropic ventures" (Levitt & Venkatesh, 2000, p.455).

There was even a sense of feeling protected by the gang members. Members of the neighborhood begin to accept the street gangs money and support services, such as nightly escorts to the grocery store (Levitt & Venkatesh, 1997). While members

of the community may be against the criminal activity that the gang members engage in, they also understand that they will need to count on the gang members to protect them from other gang members.

Aside from having power over members of the community, gangs continuously fight to secure power over other gangs. Much of the power over other gangs is attained through gang membership in a gang, finances, and territory, but that is not possible without looking at gang-membership behavior, which is also very much hyper masculine and violence-oriented. Violence is expected in a scenario which can send some sort of threat to the reputation and honor level of a member and gang by other gangs (Vigil, 2003).

To see the power associated with street gangs, focus must be drawn to their behavior. "The subculture of violence construct posits that it is the normative behavioral system of groups that support, encourage, and condone violence" (Vigil, 2003, p. 228). Interpreting the behavior and meaning behind the actions from both the person conducting the action and the observer or recipient of the action is what allows for the discussion of strategies of power to be held. The individuals in the environment sets the standards for what kind of behavior is accepted, especially when disrespected by other gang members.

Methods for Collecting and Analyzing Literature

Research ports from the University of Maryland College Park library system were used to find sources. Specifically, the subject research ports that were used were subjects' of sociology, politics and public policy, and criminology and criminal justice. Under the sociology subject port, the databases used were Academic Search Premier and JSTOR, Journal Storage, Sociology. Under Politics and Public Policy subject, a focus on American Politics database was selected. Once under that focus, the Almanac of American Politics and CQ, Congressional Quarterly, Inc., Researcher were the main databases used. In the Criminology and Criminal Justice subjects, Academic Search Premier, NCJRS, National Criminal Justice Research Service, and SocIndex were the main databases used.

Some of the keywords used in the search were political party, power, leadership, gangs, republican and democrat. Political party, republican, democrat, gangs, and power search words were used to find more information about the research topic, most known political party in the United States are Republican and Democratic parties. In searching power theory, there were some difficulties attaining the correct amount of literature on power theory and therefore leadership and organizational power were other terms that were searched.

Data Collection and Data Sources for Future Research

Future research would be conducted through interviews and focus groups. These interviews would be conducted on individuals who would be closely related to the work field of the political parties, specifically Republican and Democrat parties. The interviews for the gangs would be directed towards intervention groups,

family groups, police officers that work closely with gang violence. Interviewing former and current gang members would be the ultimate interview that would b conducted. For political parties, interviewing campaign managers from the political parties would also be very helpful since they would have experience in running a campaign and all that is necessary o make it as successful as possible.

Data Analysis Strategies for Future Research

The interviews conducted would be 45-60 minutes and the focus group would be 30-45 minutes long. The environment would encourage individuals to feel a little more free to share information in a group and then in the private interviews questions asked would focus on elaboration of what was said in the focus group.

The methods of analysis would consist of taking a closer look at the literature to help find similarities between the actual individuals in the study versus the individual that is in the book. By applying the literature of theory of power to the literature of political power allowed for the analysis to occur. The same happened when the theory of power was applied to the literature of street gangs. Once the strategies of power were obtained from each organization, the two organizations were compared to one another.

Strategies Used to Minimize Bias and Error

Strategies Related to this Inquiry

This inquiry required more of a check on personal biases because it is an in depth analysis of the literature. The most challenging bias to avoid was the human error of interpretation. Interpreting and analyzing the data required double checking the information to make sure that it was valid. While some of the findings in some of the literature was not found in other literature, it came from reliable sources in which the information seemed reasonable.

The research also was focused on the Democratic and Republican political parties and not other parties therefore the interpretations had to reflect those parties doings. The findings for gangs also have to be strictly reflected upon the urban street gangs and not other gangs that may have some similarities but have different structure.

Strategies Related to Future Inquiry

For future related inquiry of strategies used to attain power by political parties and street gangs, avoiding human bias and error of interpretation would be the greatest difficulty. The groups being studied will be specific that generalizations should not occur to all others groups of similar functioning. The findings from the interviews of urban street gangs will not be generalized to other forms of gangs and findings from the interviews of the Democratic and Republican political parties will not be generalized to other political parties in the United States.

In selecting individuals to participate in the focus group and one-on-one interviews, the selection will be done anonymously. The participation by the

individual will be based on volunteer and the selection process will be random and anonymous to avoid any preconceived notions.

Ethical Considerations for Future

In conducting future research, to minimize bias, the individuals volunteering for the focus group and interviews would have their identity for the gang focus group would be done anonymously through a gang focused program that works closely with youth-in-gangs and youth-at-risk of gang involvement. In the attempt to allow for a better sense of generalization to occur, the focus groups would be conducted in Prince George's County and Montgomery County, Maryland. Unfortunately, this still does not allow for a true sense of generalization. In conducting the interviews, the interviewees would be maintained anonymous by allowing them to select another name for themselves to be included in the research. Any information that is disclosed by them will also not be used against them in any way.

As for the focus groups of the political parties, the individuals will be selected to conduct an interview and their identities will be maintained anonymous. The organizations that will be used will be organizations that will be found throughout Washington, D.C.

Findings, Conclusion, and Recommendation for Future Research

In conducting the conceptual research of strategies used to secure power by Democratic and Republican parties as well as urban street gangs there were many findings that applied to the organizations individually. After analyzing the findings it was noticeable that there were some findings that were found in one group were resembled the findings in the other group. While the findings were not identical, in some cases, the similarities were fairly close to want and need to conduct further research.

Findings from the Literature

How do United States Republican and Democrat political parties secure power?

Finances are extremely important in president candidates' race. Stratification theorist would argue that only those with money can run in presidential elections, the candidate must have $100 million raised by the end of the year. Aside from having the candidates need that much money, those of the elite group are the ones that make the biggest impact on the candidates by hosting charity events and making personal donations of $150,000 (Carney, 2007).

Pluralist theorist would say that there are plenty of opportunities for people of all backgrounds to make a difference. The United States has other political parties that can run and people can vote for. There were two events that allowed for most of the population to participate in. The first event was at SoulCycle in New York with Bill Clinton, to participate bikers had to donate $2300, a far lower amount

than the personal donations made by lobbyist O'Brien. Edward's mother hosted a small fundraiser that was even more welcoming to all since the donation was less. Edward's mother gave her pecan pie recipe to anyone who donated $6.10 by her son's birthday on June 10th (Carney, 2007).

The managerial leadership is a little more complicated because the committee members of the presidential candidate at preliminaries are not necessarily the individuals that he will continue working with. The parties do have different individuals that are in charge of different committees that take care of the planning, public relation, and of meeting with the community.

The action-oriented analysis is easily applied to such a setting because it is highly weighted upon the approval of society. The structural position of the analysis is covered by the political parties attending certain events. The psychological aspect is covered by the speech that they make and show a sense of power. The third element is the physical attribution which is the wardrobe and hair style.

How do urban street gangs secure power?

Applying the stratificationist theory to urban street gangs is reversed of political parties and stratificationist. Since the theory is based on an elite group, it is very difficult to apply it to urban street gangs because they come from poorer neighborhoods and the minority culture. The gangs function to attain more funds and provide more for the community. The means of attaining the money is through a way that much of society does not agree with.

People who want to be part of a gang are looking to make themselves equal to those already in the gang. The reason for looking into joining a gang is to create a sense of equality and respect that many times the interested individuals do not feel at home or at school.

Urban street gangs vary in sizes and therefore may need to have sub-units according to what the gang is trying to accomplish. There are people in charge of drug sales, enforcing, and running; all important sub-units to have the gang function accordingly. All the individuals have to answer to one person at the top but most of the time have to interact with the manager of their area.

As for the action-oriented analysis, gang members are restricted by physical appearance. Gang members should wear their organizations colors at all times because it shows off the respect that they want from others toward their organization. If gang members were involved in fights, any scars that were attained from that event would be used to their benefit it would show a level of toughness about them.

What are common strategies used by political parties and street gangs to secure power?

Urban street gang and political parties function on opposite ends of the stratificationist theory when being looked at in a societal stand point. Political parties have members that come from all sorts of backgrounds but those that are highly involved and can make a difference come from elitist backgrounds. Street gangs are not from made up of elite members but when comparing gangs to other gangs

there can be a ranking to show which gangs have more power over other gangs.

Pluralist can say that political parties are made for the people and by the people. As mentioned before there are different ways to contribute to the political parties through time and money.

Applying the analysis of action-oriented power and political parties, the weight lies on the appearance of the individuals in social settings. The level of confidence that the leader's project, as well as their charisma, adds to the way that others view them. Once others view them a certain way, it is up to the leaders and the members to keep functioning in that manner.

Conclusions

Urban street gangs and the United States Democratic and Republican political parties share similar strategies to secure power. Money is an important element needed to have the organizations function accordingly for extended periods of time. Both the political parties and the gangs need man power to keep functioning therefore finding ways to recruit new people can be a challenge for them. Both organizations do have a way to recruit the typical individual that would be a part of their organization but finding new ways to attract new people is always a challenge. Being able to grow in numbers also means growing in territory. People move away and then the new location becomes part of the organizations territory and the challenge becomes getting those of the surrounding area to know of the group and get them involved as well. If the political parties and street gangs can stabilize those elements then the organizations should be able to begin their process of creating an organization that will last a long time.

Recommendations for Future Research

To continue with the research of strategies used by the Democrat and Republican political parties and urban street gangs to secure power, qualitative research of interviews and focus groups would be beneficial to the findings of the literature. Interviews should be conducted in the Washington D.C. metropolitan area. Specifically, individuals involved in the Democrat and Republican political parties should be selected from Washington, D.C. since most of the headquarters of different organizations that the parties interact with are in D.C. The selection for the street gang interviews should be in Prince George's county and Montgomery county. There is an office in Prince George's county that works with current and former gang members in which interviewees could be selected from. Montgomery county might also be a location to consider because that is where the headquarters' of the Prince George's facility.

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The Factors Human Resource Managers Use to Determine Whether They Are Going to Hire a College Graduate and How They Communicate Their Expectations and Qualifications

Tiarra Hailey

Mentors: Dr. Wallace Southerland III, Associate Director,
McNair Scholars Program, University of Maryland, College Park and
Dr. Thomas Sigerstad, Assistant Professor, College of Business
Frostburg State University

Abstract

My research identified the primary factors that human resource managers use when hiring college graduates and explore how the factors are communicated. Through an exhaustive literature review, it has been determined that human resource managers use resume screening, interviews, and written performance tests to determine whether a college graduate is qualified for the job. Several database systems were examined using different search terms to produce research the following results. Resume screenings will determine if the candidate has any experience in the job area. The interview process will determine communications skills as well as job performance abilities. Lastly, written tests are given to also determine job performance skills.

There are three factors that the methods are used to identify. A college graduate's major is identified with the resume screening. The interviewing skills are obviously determined by the interview itself. Finally, the college graduate's job experience is determined through the resume screening, interview, and the written performance test. These methods are supposed to rank the college graduate's overall ability to complete the job successfully by meeting the qualifications. These qualifications are sought out by human resource managers through the job analytical process. Afterwards these qualifications are put into what is called a job description.

This job description is how human resource managers communicate what is expected of job candidates. Job descriptions are supposed to depict the epitome of an employer who would be successful in that specific job area. If job descriptions are done accurately, college graduates should be able to use them to determine if they are qualified for the job and if they would be successful in undergoing the hiring methods of the human resource managers. My research is intended to identify the factors human resource managers use and how they are being communicated. This conceptual paper is significant because college graduates may be prepared to enter the workforce if they are aware of the expectations.

Introduction

Every year, college graduates begin their search for the perfect career. For college graduates to be successful, an understanding of what human resource managers are looking for is important. My research will use the hiring process to determine key qualities that college graduates must have and display when looking for an occupation along with how human resource managers are communicating what they are looking for to college graduates. Important hiring factors and communication methods will be determined through an extended and critical literature review using previous dissertations along with journal articles, books, reference books, and secondary and tertiary sources. Ultimately, this inquiry is intended to determine what human resource managers are looking for in college graduates and how they are communicating what they are looking for.

Problem Statement

An exploration of what human resource managers are looking for when hiring college graduates address the following problem; College graduates may be unprepared for the workforce because an understanding of what is expected of them is miscommunicated. According to the society for Human Resource Management (SHRM), "We will experience a 33 percent shortfall of degreed candidates by 2012- that is 6 million graduates short to fill new jobs and replace retirees" (Benjamin 2003, p.14). This indication is based on the fact that SHRM believes that managers are having problems attracting new candidates. If human resource mangers are communicating what they are looking for effectively, then this problem may not exist and more college graduates may be hired.

Purpose of Inquiry and Inquiry Questions

The purpose of this inquiry is to identify what primary factors human resource managers use when hiring college graduates and to explore how the factors are communicated. Given this purpose statement and given the problem statement, the following questions will be addressed in this conceptual paper:

1. What are the primary factors human resource managers use when hiring college graduates?
2. How do human resource managers communicate their hiring expectations to college graduates?

Significance of Inquiry

An explanation of the hiring and communication factors is significant for two reasons. First, graduates may not get jobs because they do not fully understand what HRM are looking for. Second, findings may begin to close the gap between what HRMs are looking for, how they communicate what they are looking for, and what graduates think HRMs are looking for. Human resource managers need to

communicate what they are looking for effectively to college graduates. This will help both the employer and employee in the long run. According to Rodriguez (2005), "job descriptions reduce the chance for misunderstanding between employer and employee and reveals expectations that are required for the employee," (p.64). Additionally, hired college graduates will be better suited for positions if they understand job descriptions and if human resource managers rank their hiring factors based on the content of job descriptions.

Summary of Theoretical Framework

This conceptual paper is anchored in The Success System Model (Bowin & Harvey, 1996). This model was appropriate for this conceptual paper because it explains how human resource managers construct what they are looking for in a certain job position holder and what they do to attract and hire specific employees to complete the job. The model has seven steps that include anticipating, attracting, developing, motivating, maintaining, changing, and focusing. For the purposes of this paper, steps two and five were looked at in large. This conceptual paper will use steps two (attracting) and five (maintaining) to give an explanation of what human resource managers expect of college graduates and how they communicate this.

Delimitations of the Inquiry

There were delimitations within this inquiry. Because this inquiry did not look at professional students, the primary factors that HRM use to are limited to undergraduate students. Additionally, not looking at all the hiring factors might exclude other important factors that are not primary. Future delimitations may include not surveying professional students and not surveying students from more than one college. The delimitations are rational based on a study conducted by Garcia (2005) where critical factors in hiring, promoting, and designing job descriptions were explored.

Limitations of the Inquiry

The limitations of this study include but are not limited to my experience and time constraints. Additionally, time was limited and the information might not be developed as thoroughly as it should be. These are legitimate limitations according to Essentials of Research Methods: a Guide to Social Science. Future limitations might include my theoretical framework. This might also create a bias in the information that is looked at.

Analysis and Discussion of the Literature

This chapter offers the review of literature as it relates to the topic of this conceptual paper. The first section of this chapter describes how human resource managers communicate their qualifications and expectations to college graduates. The second section discusses the different hiring practices human resource managers

use. Lastly, the third section uses a previous given survey to describe the objectives human resource managers are trying to fulfill with each hiring method.

Literature on Communication Strategies

This section will discuss the demand for college graduates in the job market and how important communication between them and HRM is. Then the purpose of the selection process will be discussed which will lead into how human resource managers communicate with college students when they become job candidates. Lastly, job analysis and descriptions will be described and the purposes for each will be explained.

The Demand for College Graduates as Job Candidates

Human resource managers (HRMs) use several methods when recruiting and hiring job candidates. Among the candidates that are in the employment market exist new college graduates. For example, "early indications suggest the college Class of 2008 will find healthy demand for its services, according to data from the National Association of Colleges and Employers (NACE)" (Eversole, 2008, p.34). Because of this, college grads must be educated on what HRMs are looking for when considering whether or not they will hire a specific candidate. "The job market for new college graduates has been gathering strength over the last several years, and this year we're seeing that trend continue," said Marilyn Mackes, NACE executive director, in a statement (Eversole, 2008, p.34). However, if these grads don't meet the expectations and requirements of HRMs, then the trend will be destroyed. Business professionals expect that there will be a 16% increase of hired college grads in 2008 than in 2007 (Eversole, 2008). Human resource managers need to communicate their expectations so that college graduates know what they need to be prepared for when entering the job market.

The Purpose of Employee Selection

"Employee selection processes should focus on employing the 'right people' to get the job done (Yusko & Goldstein, 2006, p.176). Regardless of the specific selection method chosen, each candidate should have displayed high levels of job performance abilities. When Human Resource Managers hire the "wrong person," they lose large sums of money (Richards, n.d.). Money spent on job advertisement, managerial fees, and training fees all go down the drain. However, if an employee who helps reach the overall goals of the business is hired, the money will be gained. Therefore, when HRMs are hiring future employees, they should, "be clear about the job/person fit" (Richards, n.d., p.1). According to the Society form Human Resource Management, "we will experience a 33 percent shortfall of degreed candidates by 2012-that is 6 million graduates short to fill new jobs and replace retirees,"(Benjamin, 2003, p.1). Managers are not attracting the right candidates for the job. This error stems from bad employee selection practices. If human resource managers were to focus more on creating better ways to communicate the specifics

of the job instead of creating the ideal job and discussing benefits, better employees will be hired(Benjamin, 2003, p.1).

The Role of Job Analysis and Job Descriptions

The primary aspect of developing a good job description lies in an accurate job analysis (Golob, 2002). The job analysis is used to determine what the applicant needs to be successful in the position. The job analysis helps human resource managers create a job description. Human resource managers use job descriptions to communicate with college graduates when they enter the job market.

The blame for poor recruitment lies with those who do the hiring (Davis, 2005, p.3). Sometimes employers don't make it very clear in the job descriptions the specific details, duties, and requirements of the job. "Job descriptions provide an indication of what the job requires," and too many employees quit/get fired because they were unaware of all the requirements to complete the job successfully (Davis, 2005, p.3). Job descriptions should be given to applicants prior to their recruit (Cartwright, 2005). This way, they know exactly what they are getting themselves into.

Another role of the job description is to also make sure that the job candidate knows the overall goals of the company and if he or she can successfully contribute to the accomplishment of these goals (Cartwright, 2005). And so, this will ultimately, "help job candidates choose more effectively among job offers," (Cartwright, 2005, p. 312). Lastly, the job description will act as an evaluation of whether or not the job candidate will be able to do the job. "The job description are tools which can not only aid the employer in finding the appropriate person to fill a job opening, but can also help guide the employee during his or her time with the business," (Hillstrom, & Hillstrom, 1988, p.325). Human resource managers can use this up against resumes and all other method to see if requirements are met.

Literature on Hiring Practices in the United States

This section will discuss the resume screening practice that is done by human resource managers when hiring college graduates. Next, the interview process will be discussed and how important the job candidate's need for succession in this area is. Lastly, the written test method will be discussed and how this method is ranked will be described.

Resume Screening

Resume screening is the first step that isolates the better candidate for the job (Richards, n.d.). Without this step, employers would spend a great deal of time on recruiting individuals who aren't capable of completing the job. This step determines if job candidates meet basic requirements such as specific job experiences or skills. Resume screening is used to open the door as to if the candidate is even qualified for the job. They are ranked, "based on content (i.e. job relevant skills and experiences)" (Hunt, 2007. p.55). However, this step does not guarantee a candidate the job.

Interview Process

"Interviews have been researched perhaps more than any other selection device," (Yusko & Goldstein, 2006, p.201). They are the most common method used by human resource managers when hiring employees because they test performance abilities (Hunt, 2007). "The interview approach has the potential to yield a rich mosaic of information about a candidate's knowledge, skill, and ability level, his/her likelihood of engaging in positive organizational citizenship behavior, and the degree of to which the applicant fits with the organization" (Yusko & Goldstein, 2006, p.201). "Most managers will not hire candidates without first interviewing them in person," (Hunt, 2007, p. 52). Structured interviews (interviews with clear questions that every candidate answers and the answers are ranked with levels of job performance) are the more appropriate type (Hunt, 2007). These interviews ask motivational (determines plans), situational (determines what he or she would due in certain job related situations), and behavioral (determines what he or she have done in past job related situations) questions (Hunt, 2007).

"Many interviews involve rating a set of competencies such as analysis, leadership, planning, and organizing," (Yusko & Goldstein, 2006, p.206) Job candidates are rated in these categories, which give the human resource managers an idea on whether or not they are eligible for the job. Human resource managers also use these interviews to pay close attention to how well the employee listens and responds to the questions (The Interview Process: Selecting the "Right" Person, n.d.) Lastly, interviews help the employer get a better idea of who the candidate is. This meaning that key personality traits can be determined here (Richards, n.d.). Personality traits can also determine if a candidate is right for the job or not.

Written Test Performance

Written tests focus on job performance abilities (Hunt, 2007). This method is the most commonly used method of the HRM hiring process. 'These test scores provide information on how well an individual is capable of performing the job," (Yusko & Goldstein, 2006, p.182). To make sure this is done, the validity process makes sure that the test is measuring what is supposed to as opposed to other unnecessary things (Yusko & Goldstein, 2006). This is why an organization should always seek the advice of an employee testing service or a state employment agency before administering tests (Hillstrom & Hillstrom, 1988). The test should not lead to any type of discrimination problems. It should just be used as a determinant as to what the candidate knows about the job itself (Hillstrom & Hillstrom, 1988).

Literature on HRM Objectives

What Top Entry Employers Want

In an effort to understand what objectives HRM are looking to meet under their hiring methods, in 2008, a Survey was done at the State College in PA to determine what top entry employers want the most from potential employees. The following was found:

#1 – The student's major (44%)
#2 – The student's interviewing skills (18%)
#3 – The student's internship/experience (17%)
#4 – The college the student graduated from (10%)
#5 – Other miscellaneous qualifications (5%)
#6 – The student's GPA (4%)
#7 – The student's personal appearance (1%)
#8 – The student's computer skills (1%)

As determined from the information above, the three dominant factors that human resource managers look   for are an applicant's major, interviewing skills, and previous internships/experiences. However, these three factors were very brief and general. The factors are sub-categories of the Hiring methods. For example, HRMs do look at a college grad's major; however, this would be incorporated in the resume screening of the hiring process. In addition, the college grad's interviewing skills would be determined in the interviewing portion of the hiring process. Lastly, the college graduate's internships/experiences would be determined in the resume screening, interview, and the written portions of the hiring process. This information demonstrates the sub-categories that human resource managers look for under their specific hiring methods. Together, these methods and sub-categories help determine whether or not a job candidate is qualified for the job.

Methods for Collecting and Analyzing the Literature

This conceptual paper is based solely on a review and analysis of research and data from the literature. Several methods were used to collect and analyze the literature. Because several database hits and books were available, a reading of abstracts and tables of contents were done so that all sources used would be relevant to this study. Additionally, references were looked at for extra sources.

First research was conducted using Frostburg State University's Library Research port. No specific database was used. Terms such as "human resource management," "qualifications," "hiring," and "recruitment" were used. These terms were too broad and a limited amount of sources were available to me. However, there were many pieces of literature that dealt with hiring practices that human resource managers use found. Of these included a survey that was submitted to collegegrad.com that listed the results of what top level employers were looking for when hiring a college graduate. At the time, this was the most important source because it was straight forward.

Next, the University of Maryland at College Park's research port was investigated. Several databases were researched including ABI, Business Search Premiere, Lexis Nexis, and specifically the Human Resource Management database. Here different dissertations were found and so were excerpts from scholarly journals. Specifically,

articles dealing with hiring methods and practices were found using terms such as "human resource management hiring college graduates" and "communication and hiring." It was found that using quotations around whole phrases and titles along with asterisks in front of word bases made it easier to find information pertaining to my specific topic. These search methods made narrowed my sources. The most important source found here was a dissertation done by Andy Rodriguez entitled "Critical Factors in Hiring, Promoting, and Designing Job Descriptions for Strategic Project Managers." This dissertation helped me with some of my definitions as well as information regarding this conceptual paper.

Lastly, journals and books were looked at in the University of Maryland at College Park's Mckledin Library. These sources were found in the stacks area on the fifth and sixth floor. Information that was provided on Research Port was used to locate the books. Books were just skimmed through also to find information that was relevant. Many sources were not found using this method but those that were found were very useful. For example, "Human Resource Management: An Exponential Approach" was found. The theoretical framework for this conceptual paper was located in this book.

Data Collection and Data Sources for Future Research

This is a conceptual paper that is based solely on a review of literature on the topic of the factors that human resource managers use when hiring college graduates and how they communicate this information. Little empirical evidence to determine what college graduates think human resource managers are looking for exists and this is why my paper is significant. For future research, a quantitative study will be conducted to compare what was found in my literature review with what college students think. According to Ruane (2005), surveys are appropriate for social research. Human resource management is a social science.

A survey will be distributed to college students ages 18 to 22 asking them to rank different factors that they see as important when going for a job. This specific age group is selected because these are the most common ages of college students. The information will determine if a correlation between what human resource managers want and what college students think they want exists. This will determine if human resource managers need to be educated on how to communicate with job candidates and if college students are being prepared for the workforce as college graduates. The survey will be constructed based off of the State College of PA's survey that was distributed to human resource managers who measured what they thought was more important when hiring college graduates.

For ethical reasons, Collegegrad.com will be contacted and asked if I could use a sample of their survey for my study. According to Ruane (2005), each participant should be asked to sign a consent form stating that they agree to take the survey and be apart of the study. Signing a consent form will give participants the opportunity to decide if they would like to participate without being forced.

Data Analysis Strategies for Future Research

Since future research will rely on a survey, demographic questions will be answered so that results can be separated based on male and female. In addition to this averages will be calculated to determine frequencies of what factors were chosen as more important than others. This information will be compared with what is known from the literature review about what factors human resource managers think are most important. This comparison will determine if HRM and college students are on the same thought path or if discrepancies occur. According to Ruane (2005), this research method is called a correlation design.

Strategies for Minimizing Bias and Error

Strategies Related to this Inquiry

To minimize bias and error related to this inquiry, different database systems were reviewed. Business and Human Resource Management database systems were both looked at using several search terms. Research was done at two different libraries so information would be different. The use of different search terms helped produce a Literature Review that would come from different stand points of literature. Additionally, the information that was developed through the literature review was sorted through and organized to represent a pattern of importance based on redundancy. According to Ruane (2005), the process is called replication.

Strategy Related to Future Inquiry

Future Inquiry will be completed through a survey given to college students from ages 18-22. In an effort to minimize bias an error, a small blurb will be at the top of the survey asking all participants to rate the factors as honestly as possible. The age range that the survey will be distributed to will also minimize bias and error because the information will come from participants who vary in age. The survey will also be distributed to both male and female and people with different other demographic information. The procedures will add to the variances of the answers to the survey which will ultimately minimize bias and error.

Findings, Conclusions and Recommendations for Future Research

Findings from the Literature

An analytical literature review helped develop a thorough understanding in this conceptual paper. The literature answered the following questions:

What are the primary factors human resource managers use when hiring college graduates?

FINDING 1:
Human resource managers use resume screens, interviews, and written performance test to determine if they will hire a college graduate.

The three methods help rank the candidates' ability to complete the job. 'Organizations that intend to compete through people must invest in a selection process geared specifically towards bringing members into the organization." Basically, human resource managers must use hiring methods that will attract job candidates that can contribute to the overall goals of the organization successfully. This is an example of the "attracting" step of The Success System Model (Bowin & Harvey, 1996, p.7-9).

FINDING 2:

When college graduates enter the job market as candidates, specific factors such as their college major, interview skills, and job experience are determined through the above mentioned hiring methods.

Human resource managers use resume screenings to determine the job candidate's college major and job experiences. Interviews can determine job experiences along with interviewing skills such as how well the candidate listens and answers the questions. Lastly, written performance tests can also determine job experiences and job performance capabilities.

How do human resource managers communicate their hiring expectations to college graduates?

FINDING:

Human resource managers communicate what they are looking for to college graduates using job descriptions.

"Job descriptions reduces the chance for misunderstanding between employer and employee and reveals expectations that are required from the employee," (Rodriguez, 2005, p.64). The job description gives the qualifications and expectations of the job. They give employers a criterion to go by using hiring methods and help employees decide if the job at hand is for them. However, successful job descriptions can only be developed through a thorough job analysis which is also completed by human resource managers. This line of communication is an example of The Success System Model (Bowin & Harvey, 1996, p.7-9), where human resource managers and employees communicate to minimize error.

Conclusions

This conceptual paper has reviewed the three most commonly used employee selection methods used by human resource managers (resume screening, interviewing, written tests). The resume screening gives the HRM the opportunity to isolate the good job candidates from the bad. A good resume is also the first step for a candidate to show that he or she is qualified for the job. HRM use structured interviews to get a better understanding of the candidate's background as well as future and present job relating skills. Lastly, written tests are used to determine the candidate's understanding of the job and ability to do the job. With these three methods, HRMs are capable of hiring the appropriate candidate for the job who will help achieve the overall goals of the organization. "Many organizations still

make selection decisions primarily based on resume screens and interviews," (Yusko & Goldstein, 2006, p.200).

Because the college graduates of today will soon contribute to the job market of tomorrow, they need to be fully aware of what their future employers are looking for. In addition to this, future employers will have a better time hiring the right employees if they meet the job requirements and expectations of the human resource managers. With this being said, job descriptions are necessary to communicate qualifications and expectations of human resource managers to college graduates. This way, college graduates will know that they need to have certain majors, interviewing skills, and experiences to be successful in the job market.

Recommendations for Future Research

For future research a study on if hiring methods are successful should be done. Focus groups of organizations with high turnover rates and low turnover rates should be looked at to determine what specific hiring methods work and do not work. This study is very essential to my research because it digs deeper into the hiring practice that human resource managers use. The purpose of this conceptual paper aimed to define the hiring methods and factors that these methods sought after. Determining whether these practices are successful would ultimately determine if human resource managers need to change their recruitment strategies.

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African American Vernacular English

LaWanda Lewis
Mentor: Dr. Roberta Lavine, Associate Professor
Languages, Literatures, and Cultures
University of Maryland, College Park

Abstract

African American Vernacular English (AAVE) causes reading problems for majority of the African American students who speak it. There is a strong concern of whether African Americans will perform adequately on the job front, due to low reading levels (Rickford, 1999). Although AAVE is a dialect shared by many African Americans, they need to be able to have proficient Standard English in order to move forward and become successful in America (Rickford, 1999). African Americans have been, and still are performing poorly in reading and have very low academic achievement throughout the nation (Rickford, 1999). Bronfenbrenner's (1979) Ecological Systems theory was use to determine possible factors contributing to the reading problems that AAVE speaking children face when trying to learn Standard English. For the purposes of this inquiry, of the four systems in the theory only the microsystems and mesosystems were analyzed. In order to gain a healthy understanding of African American Vernacular English and majority of its topics, an extensive amount of literature review and scholarly articles read and analyzed. The results discovered from the literature were that there are three main reasons why AAVE speaking students have reading problems.

Problem Statement

While these issues are important, this paper will focus on AAVE and education. Although AAVE is a dialect shared by many African Americans, they need to be able to have proficient Standard English in order to move forward in America (Rickford, 1999). African Americans have been, and still are performing poorly in reading and have very low academic achievement throughout the nation. Speaking AAVE is a contributing factor to the lack of advancement in academics in African American students (Rickford, 1999). Several experts such as Rickford (1999), Baratz (1969), Granger (1976), and Stewart (1969) have declared that the best thing to do to help solve this problem is to reach African American students where they are, meaning, teach them Standard English using their own dialect as a foundation. However, this suggestion has not been highly regarded by many people as the best method.

Purpose of Inquiry

The purpose of this paper is to explain some of the reasons AAVE speaking students are hindered when learning Standard English. This paper also supports

the recommendations of previous researchers in teaching Standard English using the African American Vernacular English dialect as a foundation. This inquiry will address the following questions:

1. What are the reason speakers of AAVE are hindered when trying to learn Standard English?
2. Why do people disagree with using the foundation of dialects to teach standard languages?
3. Why should instructors use the foundation of dialects to teach standard?

Summary of Theoretical Framework

Several theories could be used as framework to observe the reading and poor academic achievement problems in the African American communities to gain different perspectives. However, for this inquiry, Bronfenbrenner's Ecological Systems theory will be applied to examine the African American students' educational problems.

Bronfenbrenner believed in order to understand how humans develop the entire ecological system in which the person grows must be considered (Bronfenbrenner, 1979). The Ecological Systems Theory implies that a system of relationships form a child's environment and influences the child's development (Bronfenbrenner, 1979). The theory explains four complex systems that effect the child's development. The four systems are the microsystem, mesosystem, exosystem, and the macrosystem. The microsystem refers to families, classrooms, neighborhoods and other primary environments that a child operates in (Brofenbrenner, 1979). The mesosystem refers to the processes taking place between two or more microsystems. The exosystem is the environment that the child is not directly involved in but has an affect on the child anyway, such as the child's parent's workplace (Brofenbrenner, 1979). The macrosystem identifies the larger cultural context that the child lives in. This layer contains laws, cultural customs, and values (Brofenbrenner, 1979). Figure 1 in the appendix will assist with better understanding of the four systems in the Ecological Systems theory.

Although the Ecological theory consists of four systems, for the purposes of this inquiry, the focus will be on the microsystem and mesosystem. As mentioned before, the mesosytem pertains to the interactions between two or more microsytems in the child's environment (Bronfenbrenner, 1979). For example, the linkage between school and the community. This theory explains when the microsystems in the child's environment have compatible expectations; the child's development is rather easygoing and balanced (Cole & Gauvin, 2001). In the same view however, when the microsystems' expectations conflict, the child's development becomes difficult and unbalanced (Cole & Gauvin, 2001).

Literature Review

Much research has been conducted on African American Vernacular English, most notably on the areas mentioned below. This portion of this paper will present what the literature of several earlier researchers on AAVE have to say about the different topics and issues concerning the dialect. These topics discussed in the literature review are important because they give a better understanding about African American Vernacular English. The ideas and statements used in the literature review deal with AAVE and the people who use it, the people who educate its users, and the experiences and findings of people who have studied it.

Standard English and Dialect

The language that is used most by educated speakers of a given region to carry out their important academic, economic, and political business is considered the standard for that region (Dandy, 1991). In the United States of America, English is considered to be the standard language. Standardized English has formal and informal language. Although informal standardized English is usually spoken, both the formal and informal are considered to be "standard language," or "standard English" (SE) or "educated English." On the other hand dialects are considered to be nonstandard. A dialect is a variation of a particular language (Dandy, 1991). Dialects are usually regionally or socially set apart from other dialects of the same language by differences in lexical, phonological, and grammatical rules. Everyone has been conditioned to have some kind of a dialect either through social groups, community or a specific region where they live (Daniels, 1998).

The most known descriptor of dialects in America is geographical location. This means that people can recognize what part of the country other people are from because of their dialect. For example, a characteristic of citizens in New England region of the United States is that they usually drop the letter "r" in words (*pahk the cah in Hahvahd yahd*) meaning (park the car in Harvard yard). Speakers of the New England dialect also use the word *bubbler* for *drinking fountain* (Daniels, 1998). Unluckily, dialects have been labeled as a poor style of language (Dandy, 1991). This is unfortunate because a dialect is no more than a peculiar way of vocalizing an already agreed upon language. People with dialects usually have their own idiolect as well (Dandy, 1991). Idiolects are individual personal dialects (Dandy, 1991). Figure 2 in the appendix is Dandy's illustration of how language can vary on a regional, social, and personal level.

African American Vernacular English (AAVE) is the dialect spoken by the majority of African Americans in America. Dandy (1991) stated "The language is alive and well and is spoken everywhere African Americans reside in America" (p.12). Although AAVE is spoken everywhere African Americans live, a couple of exceptions apply to this situation. One is that not all African Americans speak the dialect all of the time. These individuals most likely inherently understand the idea of sociolinguistics (Dandy, 1991). Simply speaking, they understand that certain types of language have a specific impact in different places in society. Therefore, they

know when where and how to use their dialect, so they may be bidialectal (Dandy, 1991). For example, Dandy uses the story of her daughter Roslyn to explain this circumstance. Roslyn learned to talk when she lived in Philadelphia and acquired her mother's dialect, who also grew up in Philadelphia. Then when Roslyn was almost five, she moved to Savannah, Georgia and developed the dialect of her peers and teachers. In an effort to fit in with different people, she learned to shift her speech depending upon whom her audience was (Dandy, 1991). Dandy (1991) also stresses, "Now, as an adult, she switches her pronunciation, grammar, and vocabulary to the most acceptable form depending upon the situational requirement" p.v-vii).

Another exception prevalent in speakers of AAVE is that everyone does not use every feature of the dialect (Dandy, 1991). This means that although you may have the opportunity to listen to some African Americans use AAVE, do not expect that they will use every rule or feature that applies to the dialect; they may only use a select few. The features of the dialect are more common among working class than middle class speakers and more frequent among adolescents than the middle aged; more in informal contexts rather than formal ones (Rickford, 1999). Both of the exceptions about AAVE speakers are important to understand, but one thing is for certain, although all African Americans do not use the dialect, the majority comprehend its features (Dandy, 1991).

Origins of AAVE

have been preserved in the language of African Americans (Dandy, 1991). The debate on the origin of African American Vernacular English is revolves around comparative data from the English adaptation in the Diaspora, Caribbean Creoles, and other varieties of English (Green, 2002). Because information is limited, different proposals on how the dialect actually began and evolved are regarded. As additional research becomes available, other ideas about the origin of AAVE have been developed (Green, 2002).

People who share the same culture generally decode or understand the messages of symbols, behaviors and other objects the same or in like ways (Dandy, 1991). Our worlds are interpreted through our cultures. The ways in which people think, learn, and even the way in which they talk, all revolve around their culture. It is a way in which people identify and interact with one another (Dandy, 1991). According to Dandy (1991), African Americans participate in many community activities and cultural traditions that are similar throughout America and the Diaspora. Dr. Hilliard, an expert of kemetology, stated in 1985, "Africans in the African Diaspora, including the Americans and the Caribbean retained and still retain varying degrees of African culture. The culture is reflected in family patterns, language, religious belief systems, artistic creativities, etc." (p.155). With respect to Hilliard's statement, the main reason that many African Americans have many similar community activities and traditions is because they share an identical culture that has descended and resonated in them from the first African slaves who were brought to America and the rest of the "New World." Since, these slaves were forced to comprehend and assimilate the

English language, it has been suggested that AAVE has limited features that are similar to general English (Green, 2002). This view of the origin of AAVE suggests that the vernacular is configured and directly related to West African languages such as Kikongo, Mande, and Kwa. This perspective is known as the "substratist hypothesis" because it implies that the West African languages are the supporting basis for AAVE's sentence and sound structure (Green, 2002).

In contrast Harrison, an early American dialect scholar, views the speech of African Americans as a low quality and childish form of English (1884). In his essay "Negro English" he says, "Much of his talk [the Negro's] talk is baby talk … the slang which is an ingrained part of his being as deep dyed as his skin … the African, from the absence of books and teaching, had no principle of *analepsy* in his intellectual furnishing by which a word, once become obscure from a real or supposed loss of parts or meaning, can be repaired, amended, or restored to its original form" (Harrison, 1884, p.233). That is, until in 1949, L.D Turner challenged Harrison's statement after mastering several African languages and dialects (Turner, 1949). He stressed:

> *When the African came to the United States and encountered in English certain sounds not present in his native language, he did what any other person to whom English was a foreign language would have done under similar circumstances- he substituted sounds from his own language which appeared to him to resemble most closely those English sounds which were unfamiliar to him… The English inter-dental fricative th does not exist in the Gullah and nor in the West African languages included in this study. When pronouncing English words containing this sound, both the Gullah speaker and the West African substitute [d] and [t], respectively, for the voiced and voiceless varieties of it. (Turner, 1949, p.245)*

A clear example to support Turner's statement is how many African Americans even today still say words such as "dem," "den," "dis," and "doz" instead of "them," "then," "this," and "those" (Dandy, 1991). Africans were restricted from learning how to read and write, therefore, many of the cultural African contributions, especially in the verbal and nonverbal traditions of communication

Another view on the origin of AAVE is the idea that the dialect began as a Creole such as Jamaican Creole and Gullah, which are spoken off of the coast of South Carolina and Georgia (Green, 2002). A Creole is a language that develops from a pidgin; it is the mother tongue that originates from contact between two languages. The "Creole hypothesis" was introduced to provide another perspective on the development of AAVE because the vernacular shares patterns with Creole varieties of English such as Jamaican Creole and Gullah (Green, 2002). For instance, the Creole hypothesis focuses on the similarities between the copula absence in AAVE and numerous Caribbean Creoles (Rickford, 1999). Copula is an equating verb that links the subject with the complement of a sentence, such as the verb "be." American linguist, William Labov (1972), says that one of the most challenging and complex problems with Black English is the appearance and disappearance of the copula. Labov (1972) also states, "It is well known that BEV [Black English

Vernacular] frequently shows the absence of be in a variety of syntactic environments … The French Creole of the Caribbean (Soloman, 1966) shows the same pattern (13-14), and so does the English Creole of Trinidad (15-16) ” (p.67-68). The more research we see on the absence of the copula in AAVE the more evidence we have for the argument of its Creole origins (Green, 2002).

Many Labels for One Dialect

Although the term African American Vernacular English was chosen to refer to the dialect of African Americans in this research paper, there are many expressions utilized to refer to the dialect. In fact, several words and phrases that are commonly known. These terms are Negro dialect, Nonstandard English, Nonstandard Negro English, Negro English, American Negro speech, Black communications, Black dialect, Black folk speech, Black street speech, Black language, Black English, Ebonics (derived from the words ebony and phonetics), Vernacular, Black Vernacular English, Inner-city English, Afro American English, African American English, African American Language and African American Vernacular English (Dandy, 1991; Green 2002). Many of the labels given to the dialect contain the word English to acknowledge that some of the characteristics in the dialect are similar and common to those of different varieties of English (Green, 2002).

In some instances, the word English has been eliminated to emphasize African and Creole relations (Green, 2002). The phrase Black Communications was coined by Hoover (1985). Hoover suggested Black Communications (BC) because she stresses that the dialect is more than just speech, but a whole system of communication (Dandy, 1991). The system of Black Communications includes speech codes, speech acts, style, nonverbal behaviors, special speaking behaviors, sociolinguistic rules for speaking, and moral teachings (Dandy, 1991). Baugh, used the phrase “black street speech” in his 1983 book, where he analyzed “one slice of black American culture, namely, the common dialect of the black street culture” (Baugh, 1983).

African American psychologist, Robert Williams, coined the term “Ebonics” in 1973. He intended that the words be used to describe the collection of languages spoken by black people in the United States and the Caribbean (Green, 2002). Many of the names given to the dialect have changed over the course of years since the 1960s, but they all refer to the same dialect (Green, 2002).

AAVE’s Sociolinguistic Issue

The usage of African American Vernacular English in professional settings tends to bring about negative attitudes. When speaking AAVE or any other form of non Standard English in professional arenas, the speaker, many times is perceived or evaluated as being incapable of communicating effectively (Green, 2002). Baugh explains that hirers pursue articulate blacks (and other minorities) for their management trainee positions, which ultimately means that they have a negative judgment about AAVE and other nonstandard English. AAVE, especially is considered to be unintelligible, incoherent, non-fluent and illogical speech (1983). If

an AAVE speaker is confronted in a situation where the employer thinks negatively about their vernacular, the important thing that the AAVE speaker should remember is that they are expected to shift their dialect to the standard because the norm for that professional setting is the standard. Green (2002) goes on to say:

> *Nonstandard English speakers should adjust their speech to the standards of their employers because, after all, they are offering services as representatives of the company, and, as a result, they should strive to be a representative voice of the company. Along these lines, employees have the obligation to speak what the employer deems appropriate for the company, and the employer has the power to demand a particular variety of language. The message is that AAE [African American English] is not appropriate language for use in a professional setting. (p.223)*

AAVE and Education

In late 1996, the Oakland School District in California directed the nations’ attention to the disappointing truth about the massive educational failure within African American communities across America (Rickford, 1999). In Oakland at that time, 53 % of its school district population was African American and they represented 80 % of all suspended students and had the lowest grade point average, which was approximately a C-. The irony of this situation is, since 1981, Oakland’s original aim was to use the Standard English Program (SEP) to help students learn to the standard using their vernacular (Rickford, 1999). Whatever was going on in the classroom, it was not working. Rickford (1999) states, “the fact of the matter is that the status quo with respect to the teaching of African American children in American elementary, middle, and high schools is far from satisfactory” (p. 331). When students of any ethnicity do well in English, they usually do well in other subjects, but when they do not do well in English, their performance in other subjects are usually not well either (Rickford, 1999). African Americans have been performing poorly in reading for years. Oakland is not the only city where African American children face problems in reading. City after city in the United States have reported in substantial numbers that the reading achievement for black children is unacceptably below the norms (Shuy & Baratz, 1969). Green (2002) also states, “the reading scores for African Americans in inner cities are well below the mean, below the basic level or reading level for a particular grade” (p. 228). The National Assessment of Educational Progress reports that in the years 1992, 1994, 1998 and 2000, African American students’ grades were consistently dropping as they advanced to the next grade level and persistently trailed behind the grades of white students (Green, 2002). This can be seen in Table 1 in the Appendix.

A teacher’s reaction or response to the vernacular has a monumental impact on the reading success of African American students (Rickford, 1999). Teachers usually have inexcusably negative attitudes towards AAVE and students who speak it. When teachers present negative attitudes, sometimes it can lead them to hold low expectations already in mind for these students (Rickford, 1999). As result, they may have the students put in learning disability and special education classes

and this restrains the students' academic performance (Rickford, 1999). When the teacher gives off a negative attitude toward an AAVE speaking student, the student often becomes offended and refuses to cooperate and continue in the participation of their own education. Therefore, many times, reading failure in African American students is a mere product of miscommunication between the teacher and student (Labov, 1970).

The miscommunication starts with the teachers. When they demean and discourage the use of the students dialect, completely ignoring and failing to understand that it is a part of the students culture, they can easily classify the students as deprived, disadvantaged, and nonverbal (Dandy, 1991). Baratz (1969) found out after reviewing literature, that educators of African American students were the first people to announce that the students were destitute, i.e. they couldn't talk, or their speech was filled with errors. Then following the educators, psychologists reconfirmed the same idea. However, when linguists like her examined the children, they had come to the conclusion that the students spoke a highly structured, highly developed language system that was in many ways different from Standard English (Baratz, 1969).

Additionally, the differences between African American Vernacular English and Standard English also contribute to the difficulty in learning to read (Dandy, 1991). Although the dialect is indeed a variation of English it has different rules in its structure (Dandy, 1991). As explain in a previous section of the paper, many of the phonological features in AAVE are distinct from Standard English. AAVE's plurality is expressed once in a sentence, whereas in SE, plurality can be expresses up to three times. For example, plurality in AAVE could be shown as "Now I got five cent" (Dandy, 1991, p. 49). The five in the sentence indicates that there is more than one cent. Possession in AAVE is also different. It can be shown by proximity where the owner's name comes before the object owned. For instance, "She over Mary house" (Dandy, 1991, p.49). In this sentence you know that the house belongs to Mary because her name precedes the object owned. However, in SE, the only way to show possession is to add 's after the owner's name. Two more very clear differences are in third person present tense, AAVE speakers usually retain the same form in person and number and in SE "s" is used in third person present tense.

Lastly, when "ed" is used to indicate past tense in SE, words stay in the same form in all tenses in AAVE (Dandy, 1991). Because of these significant differences in AAVE and SE, learning the Standard from persistent use of the dialect is not as easy as it may seem. Goodman (1969) states, "it is harder for a child to learn to read a dialect that is not his own than to learn to read his own" (p.14). What Goodman means is that since a child is accustom in using his dialect, learning to read what they already speak is much easier. Therefore, because African American students are not accustom to speaking the SE, it is much harder for them to learn to read SE.

Furthermore, African American students fear being rejected from their own speech community (Morgan, 2002). When students chose to use Standard English and tend to the demands of the non African American society, they risk losing community membership (Morgan, 2002). Many African American students think

that speaking Standard English is a white person characteristic. So, when an AAVE speaking child chooses to use Standard English over the vernacular in their community they are often accused of trying to act "white" (Jones, 1998). Therefore, African American students sometimes encourage each other to speak incorrectly by teasing each other when they do speak Standard English (Jones, 1998).

Findings from a Review of the Literature

RESEARCH QUESTION 1:

What are the reason speakers of AAVE are hindered when trying to learn Standard English?

- A teacher's negative reaction and attitude toward the students' vernacular
- Differences between African American Vernacular English and Standard English
- The fear of rejection from their own communities if they choose to speak Standard English instead of the vernacular that the majority of community speaks.

RESEARCH QUESTION 2:

Why do people disagree with using the foundation of dialects to teach standard languages?

Most people disagree with this method because of the misconception that AAVE will be taught in the classroom. Another reason for disapproval of the method is because some people believe it supports the idea that African Americans are inferior, inadequate and it deepens the perception of disadvantaged Black youths.

RESEARCH QUESTION 3:

Why should instructors use the foundation of dialects to teach standard?

Instructors should use the foundation of dialects to teach the standard because the methods that are being used in the classroom today are not working and African American students are still declining in academics. Also, the method is effective and has different strategies for teaching. Last but not least, this method improves communication, unity, and encouragement between the teachers and students.

Conclusions

First, negative attitudes from teachers towards the usage of AAVE cripple the reading development in African American students who speak the vernacular. When teachers approach AAVE speaking children with negative attitudes often times they start a process of miscommunication between the student and themselves (Dandy, 1991). Also, when teachers have negative attitudes about the dialect speaking children they usually have low expectations for them, which then becomes a self fulfilling prophecy (Dandy, 1991). If AAVE were used in the classroom to teach the Standard English in the classroom, the children reading process should smoothen because the expectations from the mesosystem become more compatible.

Second, teachers should not attempt to abolish the child's usage of the dialect because it is important for the communication in their community microsystem and it discourages the AAVE speaking child to participate in education. One way teachers tend to deal with the use of AAVE in the classroom is the strategy of eradication (Smitherman, 2000). The goal of eradication, is to erase the dialects traces by constantly correcting the AAVE speaking child when they use the dialect (Green, 2002). Smitherman (2000) says this correctionist approach is not a good method because often correcting grammar supercedes focus on attention to meaning and sense. Smitherman and Dandy go on to say that reading and speaking instruction for these students often includes correction that discourages the student and inhibits them in the classroom (2000; 1991).

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Posttraumatic Growth and Religiosity in Latino College Students Who Have Experienced Psychological Trauma

Franklin Mesa

Mentor: Dr. Courtland Lee, Department of Counseling and Personnel Services, University of Maryland, College Park

Abstract

In the field of psychology, research on the aftermath of trauma has historically focused on the negative consequences. More recently, empirical evidence suggests that individuals often derive benefits or personal growth as a result of these extraordinary events, thus the term posttraumatic growth. The purpose of this future study is to assess the relationship between religiosity and posttraumatic growth in Latino/a college students at a large, predominately White institution using previously validated constructs. Traumatic events are universally experienced, therefore, growth is expected in all populations. Furthermore, research suggests that minorities may face additional stressors, called minority status stressors, which include discrimination and alienation. In addition, college Latino populations remain relatively understudied with respect to posttraumatic growth. Empirical data on posttraumatic growth and deriving benefits from difficult circumstances propose there are several factors that may enhance this experience. Among these factors are optimism, event–related rumination, gender of the individual, time elapsed since the traumatic experience, and religiosity (Calhoun, Cann, Tedeschi, & McMillan, 2000; Park, Cohen, & Murch, 1996; Updegraff & Marshall, 2005; Weiss, 2004). The instruments used for data collection will consist of the Posttraumatic Growth Inventory, Daily Spiritual Experience Scale, Impact of Event Scale-Revised, and a demographic questionnaire (Tedeschi & Calhoun, 1995; Underwood & Teresi; 2002; Weiss & Marmar, 1997). The measures, hosted on the Internet by Survey Monkey[©], will be distributed via e-mail to Latino/a students currently enrolled at the University of Maryland, College Park. Data analysis will consist of correlational analysis via multiple regressions, and ANOVA's to analyze the relationship between all variables. The computer program SPSS will be used to perform data analysis. The results expected based on previous findings in the literature include: (a) elevated levels of posttraumatic growth, (b) a relationship between the severity of the event and religiosity, (c) gender differences in posttraumatic growth, (d) greater religiosity and growth among recent migrant students, and (e) a positive correlation between religiosity and posttraumatic growth.

Introduction

Suffering resulting from traumatic events is a universal occurrence, and the ability of individuals as well as groups to emerge positively transformed from such events has been noted (Davis & Nolen-Hoeksema, 2001; Powell, Rosner, Butollo, Tedeschi, & Calhoun, 2004; Tedeschi, Park, & Calhoun, 1998). Though the phenomena of personal benefits or growth resulting from traumatic events have always been present, they had remained relatively overlooked in the field of psychology. Traditionally, negative responses to severe stressors have served as the focus of the literature on stress and its repercussions (Tedeschi & Calhoun, 2004). Indeed, Rubonis and Bickman (1991) showed in their study that a relationship exists between traumatic events and the incidence of psychopathology. Tedeschi and Calhoun (1995) cite empirical evidence demonstrating other negative effects of such events, including negative affect, negative rumination, and negative behavioral changes. However, as more investigations have been conducted addressing the aftereffects of trauma, higher rates of personal growth than psychiatric disorder have been found (Tedeschi & Calhoun, 1995; Tedeschi & Calhoun, 2004). Although numerous terms have been used to label this concept, one of the widely accepted and recently coined terms to describe the process of personal growth following a traumatic event is posttraumatic growth (Tedeschi & Calhoun, 1995). Other terms used in the literature include stress–related growth (Park, Cohen, & Murch, 1996) and perceived benefits (Affleck, Tennen, Croog, & Levine, 1987; McMillen, Smith, and Fisher, 1997).

Posttraumatic growth (PTG) is the concept that an individual may experience cognitive growth following a traumatic event, and enhance their psychological functioning as a result (Tedeschi et al., 1998). Though PTG itself may be considered an outcome, it also incorporates the process of cognitive reconstruction following trauma that has challenged an individual's assumptions of the world (Park & Helgeson, 2006; Tedeschi et al., 1998). Davis and Noel-Hoeksama (2001) describe it as the effort put forth to reestablish one's cognitive understanding of life. In most instances however, the experience of growth does not imply the relief of psychological distress. Many investigations of perceptions of benefits show that although PTG is present, the trauma victims continue to experience a degree of psychological distress throughout (Cordova, Cunningham, Carlson, & Andrykowski, 2001; Frazier, Conlon, & Glaser, 2001; Salter & Stallard, 2004; Wortman, 2004).

Problem Statement

Posttraumatic growth (PTG) has been measured and analyzed for various populations that have been affected by different traumatic events, including cancer patients (Cordova et al., 2001), traffic accident survivors (Salter & Stallard, 2004), community violence victims (Updegraff & Marshall, 2005), adolescents (Milam, Ritt-Olson, & Unger, 2004) and Latina immigrants (Berger & Weiss, 2006). Research has also identified numerous factors, both related to the incident and related to the individual, that influence perceived benefits. These include dispositional and

context-specific optimism (Updegraff & Marshall, 2005), religiosity (Helgeson, Reynolds, & Tomich, 2006; Park et al., 1996), and time since diagnosis of cancer (which represents the traumatic event) (Cordova et al., 2001). Given both the universal occurrence of traumatic events and empirical studies demonstrating that college students must often find ways to manage following traumatic loss, the present study is warranted (Balk, 1997). In addition, despite the wealth of empirical data on PTG, few studies have looked at the construct specifically in Latino/a populations, and more empirical data is needed addressing the relationship between religiosity and PTG (Calhoun, Cann, Tedeschi, & McMillan, 2000; Calhoun & Tedeschi, 1998). Smedley, Myers, and Harrell (1993) suggested that minority college students may experience minority status stresses. These additional stress factors, which include greater feelings of alienation, may add additional stress to preexisting stressors faced by all students (Smedley et al., 1993). In addition, Latino students must often cope with the profound stresses that accompany immigration status and the acculturation process, which include the separation from familiar environments and resettlement (Berger et al., 2006; Cervantes, Padilla, & Snyder, 1991).

Purpose of Study

The purpose of the present study is to examine important factors related to posttraumatic growth (PTG) among Latino college students. In particular, the relationship between PTG and religiosity among Latino students will be investigated.

Significance of Study

Many current researchers express that there is still much to uncover regarding posttraumatic growth, and positive responses to traumatic events in general (Helgeson et al., 2006; Park & Helgeson, 2006). Specifically, several studies have stated that the relationship between the religiosity of an individual and the experience posttraumatic growth (PTG) require further investigation (Calhoun et al., 2000; Calhoun & Tedeschi, 1998). Furthermore, Wortman (2004) stated that few studies have compared PTG experienced by individuals that have endured different traumatic events. The present study will complement current data on the experience of posttraumatic growth, and extend the understanding of PTG and its relationship with other factors related to the individual and the traumatic event.

Theoretical Framework

The concept of posttraumatic growth (PTG) is one that suggests that there are more than simply negative consequences for individual's that have suffered traumatic experiences. Frazier et al. (2001) acknowledged in their study of sexual assault victims that it is not unusual for people to experience coexisting positive and negative aftereffects following trauma. PTG is the phenomenon of deriving benefit from trauma, including a new outlook on life, improved interpersonal relationships,

a renewed appreciation for life, and spiritual change (Tedeschi & Calhoun, 1995). Calhoun and Tedeschi (1998) provided a model explaining the process of growth (Fig. 1). The general process begins with a traumatic event. For the purposes of this study, a traumatic event constitutes a highly stressful event in an individual's life that is sudden and/or unexpected, causes significant psychological distress, and presents challenges to the individual's beliefs about his/her world (Tedeschi & Calhoun, 1995; Calhoun & Tedeschi, 1998). Following the traumatic event, the individual works to cope with the trauma, incorporating social support into their attempts to deal with the event. The amount of growth experienced is a product a variety of factors, including individual traits (i.e. optimism, religiosity), though psychological distress is still present (Tedeschi & Calhoun, 1995). Tedeschi & Calhoun (2004) posited that growth occurs in predominately five domains: (a) an increased appreciation for life, (b) development of more profound relationships with others, (c) increased inner strength, (d) discovery of new possibilities in life, and (e) spiritual or existential growth.

The concept of religiosity, an individual's perspective on religion and spirituality, can be classified in numerous ways, ranging from involvement in religious activities (i.e., masses or religious conferences) to the importance of religion for an individual (Walker, Ainette, Willis, & Mendoza, 2007). Empirical studies demonstrate the ability of religious interactions to serve as effective coping strategies and foster social interactions that aid survivors of trauma in their recovery (Calhoun et al., 2000; McIntosh, Silver, & Wortman, 1993). Furthermore, religion may serve as a framework through which an individual is able to extract beneficial significance from a traumatic event (McIntosh et al., 1993; Park et al., 1996). However, many individuals that do not practice a particular religion do experience spirituality, and therefore spirituality is often independent of a specific denomination. For these individuals, religiosity (or spirituality) may represent appreciation for one's possessions, inner peace, and a general attitude of amnesty towards others (Underwood & Teresi, 2002). In this study, religiosity and spirituality will be used interchangeably.

Delimitations

Additional concepts exist that describe similar processes or outcomes experienced by individuals responding to difficult life circumstances. These include resilience, optimism and coping. However, there are essential distinctions between posttraumatic growth (PTG) and these concepts. Resilience may be defined in several ways within the literature. For example, Yi, Smith, and Vitaliano (2005) define resilience as "an individual's capacity to maintain psychological and physical well-being in the face of adversity" (p. 257), where as Orozco (2008) refers to resilience as the ability of an individual to overcome adversity by reducing the negative aspects of stressors via "protective factors" (p. 53). Optimism refers to the anticipation of positive events in the future, though it may also be further delineated to context-specific optimism, which is the belief a person holds that good experiences will arise from trauma (Calhoun & Tedeschi, 1998; Updegraff & Marshall, 2005). Coping

relates to behaviors that individuals use to shield themselves from psychological harm caused by stressful social events (Pearlin & Schooler, 1978). The primary difference between PTG and these concepts lies in the notion that PTG refers to experienced positive outcomes (specifically, improved psychological functioning) resulting from a struggle to deal with the trauma (Tedeschi & Calhoun, 2004).

Limitations of the Study

A basic limitation of the present research proposal lies in the dependence on previous findings to address the intended research questions. Though the conclusions of these studies may provide a solid base for hypotheses, conducting the proposed study will likely provide more reliable data. An additional limitation is that due to several actual constraints (i.e. time, resources available), the proposed study is cross-sectional in design, and therefore cannot make any claims of causality. Several researchers express that longitudinal studies, in which growth may be assessed before and after a potentially traumatic experience, are ideal for investigating the development of growth and its correlates; cross-sectional studies are not able to accurately comment on the directionality of correlations between growth and other variables (Cordova, Cunningham, Carlson, & Andrykowski, 2001; Helgeson, Reynolds, & Tomich, 2006; Milam, Ritt-Olson, & Unger, 2004; Weinrib, Rothrock, Johnsen & Lutgendorf, 2006). A final limitation lies in the use of a single instrument to assess both religiosity and spirituality. Though the terms are used interchangeably in the present study, the two concepts are not precisely synonymous, and each may have a distinct relationship with posttraumatic growth (Underwood & Teresi, 2001).

Literature Review

The following section reviews empirical studies that address posttraumatic growth (PTG) and religiosity. The discussion begins with general research focused on and related to trauma and posttraumatic growth, then continues on to studies identifying factors related to PTG, particularly the relationship between benefits derived from trauma and its relationship with religious involvement.

Posttraumatic Growth

Posttraumatic growth (PTG) is the process of deriving beneficial outcomes from highly stressful experiences. Tedeschi & Calhoun (2004) stated that such events can often be regarded as traumatic, and traumatic events challenge an individual's perspectives and beliefs about the world. The unique aspect of posttraumatic growth is the transformative quality that it produces in those that experience it, such that they are able to come away from trauma with improved psychological functioning (Tedeschi & Calhoun, 1995). Tedeschi and Calhoun (2004) posited, "what makes these experience transformative are that they have an affective component" (p. 5). Indeed, many empirical studies have demonstrated the various positive and negative

affective consequences of trauma (Frazier, Conlon, & Glaser, 2001; Ickovics et al., 2006; Weinrib, Rothrock, Johnsen, & Lutgendorf, 2006).

After experiencing trauma, Tedeschi and Calhoun's (1998) model of growth suggests that an individual attempts to cognitively manage the distress, and struggles to overcome it. Tedeschi and Calhoun (1998) stressed that this process, referred to as rumination, is necessary for the individual to make sense of the ordeal. PTG develops as the person's ruminative and coping efforts bring about personal changes, specifically spiritual change, an increased appreciation of life, increased personal strength, recognition of new possibilities in life, and improved interpersonal relationships (Tedeschi & Calhoun, 2004). However, researchers emphasize that psychological distress is not completely eliminated once PTG is reported, and suggest that continued distress is necessary for the maintenance of posttraumatic growth (Helgeson, Reynolds, & Tomich, 2006; Tedeschi & Calhoun, 2004). There exists a variety of terminology used to label the phenomenon of personal gain following trauma (posttraumatic growth, stress-related growth, perceived benefits, perceived growth, benefit finding), though the underlying concept throughout is that individuals struggle to overcome difficult life situations, and through the struggle to overcome the trauma, experience various noticeable improvements (Affleck, Tennen, Croog, & Levine, 1987; Park, Cohen, & Murch, 1996; Tedeschi & Calhoun, 1995; Tedeschi & Calhoun, 1998; Updegraff & Marshall, 2005; Urcuyo, Boyers, Carver, & Antoni, 2005).

General Research

Some researchers express concern that posttraumatic growth or perceived benefits may not be as common as suggested, and question the accuracy and authenticity of self-report measures that are often used (Wortman, 2004). On the other hand, Park & Helgeson (2006) have stated:

> However, people's perceptions of growth may be more important in understanding their psychological experience and quality of life than measures of actual growth. In fact, it may be more important to know whether people believe that they have grown regardless of whether there is any objective measure of change. (p. 794)

Furthermore, the literature on the effects following trauma has documented many different benefits resulting from attempts to cope with a spectrum of traumatic experiences across diverse populations.

Frazier et al. (2001), who explored the course and development of both positive and negative consequences experienced by sexual assault victims over one year using 5-point Likert scale responses to items addressing positive and negative changes, found that positive changes were acknowledged by participants just two weeks following the assault. These changes included improved relationships with family members, reported by 46% of the participants, and an increased appreciation for life, also reported by 46% of the participants. Negative changes reported by participants were decreased beliefs about the safety of the world (83% of the participants) and decreased beliefs about the fairness of the world (81% of the participants).

Furthermore, Frazier et al. (2001) noted that over time, positive changes increased and negative changes decreased.

A study conducted by Weiss (2002) measured PTG in women that had been diagnosed with breast cancer, and their husbands. Both wives and husbands reported similar levels of stressfulness and perceived fear or threat as a result of the diagnosis. Weiss used the Posttraumatic Growth Inventory (PTGI), developed by Tedeschi and Calhoun (1996; in Weiss, 2002), to measure different aspects of growth, and found that both groups experienced significant PTG. Weiss also had each individual of each couple complete a PTGI that they believed represented the growth experienced by their spouse, performing an intersubjective validation. After statistical analysis, it was noted that the correlation between spousal estimates of the each other's total PTGI score and self-reported total PTGI scores were positive and relatively strong (r = .50).

Another investigation, conducted by Park et al. (1996), also compared self-reported growth to estimates produced by related others. As part of three analyses used to test and validate their instrument that also measures growth following stressful events (called the Stress-Related Growth Scale or SRGS), Park et al. had college students and their close friends or relatives reports SRGS scores for an event identified by the college students as the most stressful they had experienced within the previous 12 months. In this study, the correlation between self-reported and scores estimated by relatives and friends to be lower, but still significant (.21). In addition, the correlation increased to .31 when only "extremely close" informants were considered (Park et al., 1996). Weiss (2002) suggests that higher correlations were found in her sample because the greater intimacy between husbands and wives relative to college students and their friends allows outward changes in behaviors to be more readily noticed. Weiss (2002) supports this proposition with data collected in her study that demonstrates that the Personal Strength subscale of the PTGI, which constitutes less observable changes, had the lowest intersubjective validation correlation of all subscales.

Affleck et al.'s (1987) participants consisted of men that had suffered heart attacks. The study focused on the correlations between morbidity, causal attributions, and perceived benefits of men 7 weeks after the attack and again 8 years after the attack. When asked to report benefits resulting from their medical incident, 58% of the participants reported gaining benefits during the interview after 7 weeks, and 59% of the participants reported benefits 8 years after. One of the most common benefits cited (11% of those reporting benefits after 7 weeks, and 25% of those reporting benefits after 8 years) was change or renewal in philosophy of life and religious views. Interestingly, Affleck et al. also found that men that had found benefits following their first heart attack were less likely to have subsequent heart attacks.

Populations that have remained relatively understudied with respect to posttraumatic growth are adolescents, though it is recognized that adolescents also experience extraordinary circumstances (Ickovics et al., 2006; Milam, Ritt-Olsen, & Unger, 2004). Indeed, Calhoun and Tedeschi (1998) assert that PTG or "an equivalent process may also occur at earlier stages of development" (p. 215). Salter and Stallard

(2004) conducted a study with children that had survived road traffic accidents to investigate the prevalence and magnitude of PTG and posttraumatic stress disorder (PTSD). The participants, who averaged 15 years of age and were evenly split between sexes, were given a PTSD symptom scale to assess the indications of PTSD and interviewed. In the interviews conducted, 42% of participants reported some extent of PTG, including improved appreciation for life and improved interpersonal relationships. It was also noted that PTSD co-occurred with PTG in 37% of the children. Milam et al. (2004) also performed a cross-sectional study focusing on PTG in adolescents, additionally surveying its relation to substance abuse within this population.

Milam et al.'s (2004) subject pool consisted of mostly Latino adolescents with a mean age of approximately 16. These researchers employed social readjustment scales to measure the negative life experiences of the adolescents within the past 3 years, and the PTGI to measure growth from those experiences. The PTGI was modified so that responses to the items ranged from "highly negative change" to "highly positive change". Milam et al. found that 30% of the subjects experienced positive changes following their traumatic events, and PTG was negatively correlated with substance abuse, though "directionality is unclear" (p. 200).

Correlates and Predictors of PTG

In the studies from which the PTGI (Tedeschi & Calhoun, 1996; in Weiss, 2002) and SRGS (Park et al, 1996) were tested and derived, several factors were found to be related to the growth measured in the participants. As budding research interest has produced more data on the phenomenon of deriving benefits from trauma, additional individual and situational variables related to participants have been identified and empirically examined, though the fact that many studies are cross-sectional rather than longitudinal restrict their ability to identify directionality of correlates (Helgeson et al., 2006; Tedeschi & Calhoun, 2004).

Optimism. A common correlate of growth following trauma that has emerged from the literature is optimism. Updegraff and Marshall (2005) identify two forms of optimism: generalized or dispositional optimism, and situation-specific optimism. Generalized optimism is defined as an individual's inherent belief that the future holds positive outcomes, and situation-specific optimism refers to beliefs that positive outcomes will result from a particular event (Updegraff & Marshall, 2005; Urcuyo et al., 2005). In their longitudinal study, Updegraff and Marshall (2005) assessed dispositional optimism, event-specific optimism, and posttraumatic growth (PTG) in a sample consisting of 255 survivors of community violence. The participants were 94% male, and 79% Latino, with small representations of African Americans (13%) and Caucasians (3.3%). Using the PTGI, Updegraff and Marshall noted that moderate levels of growth were reported. Additionally, over the length of 3 months, increased PTG was predicted by both increased situation-specific optimism (at $p < .05$) and generalized optimism ($p < 0.001$). One limitation relevant to this finding stated by Updegraff and Marshall (2005) is the "reliance on a single-item measure of context-specific optimism" (p. 556).

Urcuyo et al. (2005) conducted a study of 230 early-stage breast cancer patients in order to assess variables related to benefit finding. Their subject pool consisted of predominantly White women (63%), and some Hispanic (27%) and Black women (10%). Optimism, perceived benefits of trauma, time interval between trauma and assessment, distress experienced, and perceived quality of life were among the factors measured in this study. Urcuyo et al. found that the amount of benefit finding reported by participants was significantly correlated with the extent of optimism recorded ($p < 0.001$).

Hart, Vella, and Mohr (2008) also investigated the relationship between optimism, positive affect, depression, and finding benefits. Hart et al. measured these factors in a sample of patients diagnosed with multiple sclerosis (average time since diagnosis was 7 years). The sample in this study was almost entirely Caucasian (89%) and consisted of a large portion of women (77%). The SRGS was used to evaluate benefit-finding and optimism was assessed using Life Orientation Test—Revised (Scheier, Carver, & Bridges, 1994; in Hart et al., 2008). Hart et al. discovered that reducing the symptoms of depression was significantly predictive of finding benefits over the course of a year. Furthermore, Hart et al. found that the relationship between reduced depression and improved benefit finding was completely accounted for by improved optimism and positive affect.

Rumination. Within the context of posttraumatic growth (PTG), rumination is defined as a process of repeatedly cognitively processing thoughts (often intrusive) related to the traumatic experience (Calhoun & Tedeschi, 1998). Though there exist different forms of rumination, some of which may be more psychologically harmful then others, Calhoun and Tedeschi's model of growth suggests that rumination is necessary for growth to occur (Calhoun et al., 2000; Calhoun & Tedeschi, 1998).

Calhoun, Cann, Tedeschi, and McMillan (2000) conducted a study that investigated the relationship between rumination and PTG. In this study, 54 college students were given 14 total items to assess posttraumatic rumination (both intrusive and deliberate), 7 of which addressed rumination soon after of the event and 7 of which addressed rumination related to the event within the past 2 weeks (subsequently named the Rumination Inventory). They were also given PTGI to measure PTG resulting from a traumatic experience, which was required to have occurred within the past 3 years. Calhoun et al. found a significant positive correlation between event-related rumination soon after the event and PTG, such that individuals that had reported more early rumination experienced more PTG.

Benetato (2008) replicated Calhoun et al.'s (2000) findings in an empirical investigation of the relationship between social support, length of time since trauma, rumination, and PTG. Benetato also used the PTGI to measure PTG, and the same 14-item Rumination Inventory to determine posttraumatic rumination. However, the participants of this study consisted of US armed forces veterans that had experienced an amputation. Rumination was significantly correlated with PTG (r [37] = .48), and accounted for 23% of the variance in the PTG reported.

Time since trauma. Many researchers theorize that time is an important component of posttraumatic growth, given the excessive amount of psychological

distress caused by traumatic events, and the degree of effort often needed to manage and derive benefit (O'Leary, Alday, & Ickovics, 1995). However, a literature search revealed that the empirical data on the effect of time since trauma on growth reported is mixed.

Cordova, Cunningham, Carlson, and Andrykowski (2001) compared measures of PTG, well-being, and depression in women who had been diagnosed with breast cancer within the previous 5 years to a group of women that had no history of serious illness, and were comparable in age and education. The average age of participants in this study was 54 years old, 90% were Caucasian, and most had completed at some least college. All participants were administered the PTGI and Ryff's Well-Being Scales (Ryff, 1989; 1995; in Cordova et al., 2001), among other scales. Breast cancer participants reported significantly higher scores on the Spiritual Change, Relating to Others, and Appreciation of Life subscales of the PTGI. Time since diagnosis, which represented the traumatic event in this study, was significantly correlated with larger total PTGI scores (r = .24).

Weiss (2004) investigated the relation of PTG to quality of marital relationship, exposure to others that have experienced growth, and ability to derive comfort from social context in women who had survived breast cancer. Weiss's sample consisted of mostly Caucasian women, whose income was greater than $60,000, averaged 38.7 months since diagnosis, and averaged 54 years of age. Women that reported contact with another individual that had experienced PTG had significantly higher total PTGI mean scores (64.9 vs. 46.8). Furthermore, Weiss's findings contrasted Cordova et al.'s (2001) with respect to time since diagnosis; this factor was negatively correlated with PTG, such that women who had been more recently diagnosed with breast cancer expressed higher levels of PTG. Demographic factors may account for the divergent findings, as Weiss's (2004) sample consisted only of married individuals, was predominantly of a higher socioeconomic status, and excluded women that were in their first year since diagnosis.

In a community-based sample of 163 predominantly White women, Weinrib et al. (2006) investigated the validity of the PTGI for an event experienced within the previous 3 years (sample average of within 13 months) by collecting and analyzing writing samples addressing the questions: "Since the time of that challenge, how has the experience of that event affected your thinking about your life and your relationships? What has been most important to you in your experience? What has been the most difficult for you?" (p. 853). The essays were evaluated for the experience of growth by four independent raters. PTGI total scores and overall growth reported in the essays were significantly ($p < .01$) and positively (r = .39) correlated. The PTGI subscales of Relating to Others and Spiritual change also correlated with relationship growth and spiritual growth (respectively) expressed in the essays. Weinrib et al. did not find a correlation between time elapsed since the event and PTGI growth score, though they express that the average time since the event of 21 months may have diminished this effect by allowing growth to stabilize. Benetato (M = 37.5 months since event; 2008), Ickovics (55% of events reported within 1 year length of study; 2006), and Milam et al. (M = 2.47 years since event;

2004) also did not find time since the trauma to correlate with growth reported. Helgeson et al.'s (2006) meta-analysis of 87 studies that had investigated benefit finding also did not reveal an effect for this factor (reported a median of 30 months since trauma). However, the meta-analysis did find time elapsed to be predictive of depression, global distress, and positive well-being.

Gender. One of the factors commonly tested for relation to growth in the literature is the gender of participants. In Park et al.'s (1996) initial study testing their stress-related growth construct (SRGS), they found that women reported higher levels of growth than men on average (51.50 and 45.73, respectively), contrary to their expectations. Because this finding was replicated in their third study testing the SRGS, Park et al. hypothesize that gender differences in stress-related growth may be due to divergent coping styles.

Bellizzi (2004) also identified gender differences in the magnitude of posttraumatic growth (PTG) reported. Bellizzi explored generativity and PTG in a sample of mostly White participants, 45% of which were female. Participants consisted of adults (mean age of 53 years) who had been diagnosed and treated for different types of cancer. Females scored higher than males on three subscales of the PTGI: New Possibilities, Spiritual Change, and Appreciation of Life. Bellizzi expressed that these findings "reflect considerable agreement with previous findings by Tedeschi and Calhoun (1996)" (p. 284), whose sample consisted of college students. Weiss (2002) also found females to score higher on total PTGI score, as well as all PTGI subscales save Relating to Others.

Powell, Rosner, Kreussmann, and Butollo (2003) conducted a study to assess the occurrence of PTG in refugees and internally displaced adults of former Yugoslavia during the early 1990's now living in Sarajevo. PTG was measured with a PTGI that was slightly altered to increase comprehension within the sample, and the Checklist for War Related Experiences (CWE; Powell, Rosner, Kreussmann, & Butollo, 1998) was used to quantify the amount of traumatic experiences individuals in the sample were exposed to. Items on the CWE have participants respond to questions asking to specify the type and number of potentially traumatic experiences they have been witnessed related to war. The sample consisted of equal amounts of men and women, and data was split into three evenly numbered cohorts based on age (16-30; 31-45; 46-65). Though women reported significantly less exposure to trauma, number of traumatic events experienced did not correlate with PTGI scores. Furthermore, no sex differences were found in the amount of PTG reported. Milam et al. (2004) and Benetato (2008) also found no correlation between sex and PTG in their investigations, though 92% of Benetato's sample consisted of males.

Among the majority of the additional literature reviewed, sex differences in the amount of growth reported either was not addressed, or could not be addressed due to sample characteristics (was entirely one sex or both sexes were not well represented) (Calhoun et al., 2000; Cordova et al., 2001; Hart et al., 2008; McMillen, Smith, & Fisher, 1997).

Religiosity. The literature on the role of religion in managing difficult circumstances suggests that it is often relied upon as a coping mechanism as well as a

means for self-regulation (Cook, 2000; Lechner, Carver, Antoni, Weaver, & Phillips, 2006; Marsiglia, Kulis, Nieri, & Parsai, 2005; Urcuyo et al., 2005). Furthermore, Park et al. (1996) propose that "intrinsic religiousness reflects the degree to which religion serves as an individual's framework of meaning" (p. 96).

McIntosh, Silver, and Wortman (1993) investigated the role of religion in the process of coping with the loss of a child 3 months and again 18 months postloss. Their sample consisted of 124 parents (98 women, 26 men), 50% of which were Black, and 45% of which were White. Participants were asked to respond to "How important is religion in your life?" on a 5-point scale (1 = not important) to assess the importance of religion, and "How often do you attend religious services?" on a 5-point scale (1 = never) to measure religious participation. Social support, cognitive processing related to the event, derived meaning, and well-being were also measured. Both religious participation and importance of religious were significantly correlated to finding meaning in the loss (r = .38 and r = .36 respectively, both p < .001), and indirectly related to well-being through significant positive correlations to social support, which was positively correlated to well-being. Limitations of this study lay in the use of a single item measure to assess importance of religion, and a lack of data for the variables prior to the losses experienced by the participants. McIntosh et al. could not assess the extent to which the factors of religion changed as a result of the loss. In relation to research to posttraumatic growth, McIntosh et al. found that religious importance was significantly correlated to cognitive processing related to the event. As stated earlier in this review of the literature, Calhoun et al. (2000) and Benetato (2008) found cognitive processing (i.e. rumination) to be related to growth following trauma.

Other studies that have found similar relationships are Helgeson et al.'s (2006) meta-analysis, which identified a positive correlation between religiosity growth, and Lechner et al.'s (2006) investigation of breast cancer survivors. Survivors that reported higher levels of benefits finding in Lechner et al.'s study also reported higher levels religious coping. In addition, some studies that have produced empirical evidence supporting a link between growth, religiosity, and ethnicity, such that Stanton, Bower, and Low (2005; in Berger & Weiss, 2006) posit religiosity may mediate and contribute significantly the correlation between minority status and growth or benefit finding reported. For example, Urcuyo et al. (2005) found both minority status and religious coping to be positively correlated to benefit finding. In addition, a regression model confirmed that minority status was predictive of benefit finding, even with all controls accounted for; however, when religious coping was introduced to the regression, minority status was no longer significantly predictive.

Berger and Weiss (2006) investigated posttraumatic growth in Latina immigrants of the United States. The Latinas in this sample had a mean age of 37 years old, averaged of 5.07 years since immigration, and were mostly less educated than some of samples in other studies, with 47% having completed high school or attained education following high school. Despite this, 79% of the participants had full- or part-time jobs. Berger and Weiss (2006) used a translated and shortened (13

items vs. 21 items) version of the PTGI, called the Spanish PTGI (S-PTGI; Weiss & Berger, 2005), that measures growth on three factors as opposed to the original five: Philosophy of Life, Self/Positive Life Attitude, and Relating to Others. Weiss and Berger (2005) reported a strong Spearman's rho correlation of .98 between S-PTGI and PTGI scores. Other variables measured included importance of religion (measured on a 7-point scale), stressfulness of immigration , stressors concurrent with immigration, and cognitive processing. The Latinas in this study reported relatively high levels of growth, averaging a S-PTGI score of 44.21, which would be 71.42 on the original PTGI. Though importance of religion rated high in this sample (M = 6.18), it was not significantly correlated to S-PTGI scores. However, it was positively correlated with scores on the Philosophy of Life subscale. These results are limited by the use a single-item measure for the significance of religion in the lives of participants.

Coon et al. (2004) explored coping and well-being in Latina and Caucasian female community caregivers of a family member with dementia. Several scales were used to assess stressors associated with caregiving, reliance on religious coping and religious behaviors, caregiver physical and mental health, and acculturation experiences of the Latinas. The Acculturation Rating Scale for Mexican-Americans-II (Cueller, Arnold, & Maldonado, 1995) and Szapocznik, Scopetta, Kurtines, and Arandale's (1978) acculturation scale for Cubans were used, as Coon et al. sampled from two distinct populations of Latinas. The Latina participants reported greater use of prayer (t = 5.48), high attendance at religious services (t = 5.12), and assigned religion more importance (t = 6.39) than Caucasian participants (all significant at p < .001). Furthermore, Latina caregivers also derived benefits from caregiving more often. Coon et al. posited that this may be due to the traditional Latino family structure, in which there is a tendency for individuals to demonstrate greater concern for their elder family members. Less acculturated Latinas reported even more derived benefits than more acculturated Latinas. The interpretation of this finding is limited by the use of two distinct Latino populations, and in turn, two different constructs to collect acculturation data. There were no ethnic differences found in reported depressive symptoms, anxiety, or physical health.

Methodology

The following sections will reintroduce the purpose and research questions for the proposed study. Afterwards, the participants are described, and methods for data collection and analysis are discussed.

Participants

The participants of this study will consist of Latino students currently enrolled at the University of Maryland, College Park. A list of these students will be obtained from the campus registrar, which may provide the information of students who consider themselves of Latino or Hispanic origin. All academic classes (freshmen through seniors) will be included in the initial study group.

Instrumentation

A total of four measures will be used to accumulate data for the present data. The measures consist of a demographic questionnaire, the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1995), Daily Spiritual Experience Scale (DSES; Underwood & Teresi, 2002), and the Impact of Event Scale-Revised (IES-R; Weiss & Marmar, 1997). All participants will be rated on all measures. Appendices A through D contain the instruments in full.

Demographic questionnaire. The demographic questionnaire will consist of 6 items asking participants to report their gender, socioeconomic status, academic class, immigration status, ethnicity/country of origin, and describe an event they experienced within the previous 5 years that may have caused them significant distress. The demographic questionnaire items are contained within appendix A.

Posttraumatic Growth Inventory. The PTGI was introduced by Tedeschi and Calhoun's studies investigating factors that contribute the experience of growth following trauma (1995; 1996, in Tedeschi & Calhoun, 2004). A factor analysis was used to reduce the original 34 items to 21, with these items strongly correlating to the original 34 (Tedeschi & Calhoun, 1995). The entire measure is made up of five subscales: New Possibilities (5 items), Relating to Others (7 items), Personal Strength (4 items), Appreciation of Life (3 items), and Spiritual Change (2 items). Each subscale may be comparatively assessed on its own with other variables for data analysis. The items on the construct are rated on a 6-point Likert-type scale, 1 representing "I did not experience this change as a result of my crisis" and 6 representing "I experienced this change to a very great degree as a result of my crisis". Examples of items on the inventory include "Appreciating each day", "I developed new interests", and "A sense of closeness with others". The inventory was selected to measure growth in the present study for its reliability and widespread use in previous research. Tedeschi and Calhoun (1995) reported that the internal consistency of the PTGI is α = .90, with a test-retest reliability of r = .71 over 2 months, and several other studies reported strong Cronbach's alphas on the entire inventory as well as the subscales (Benetato, 2008; Milam, Ritt-Olsen, & Unger, 2004; Weinrib, Rothrock, Johnsen, & Lutgendorf, 2006; Cordova, Cunningham, Carlson, & Andrykowski, 2001). The PTGI has also been validated with written essays and other personality measures, such as optimism and extroversion (Tedeschi & Calhoun, 1995; Tedeschi & Calhoun, 2004; Weinrib et al., 2006). Appendix B contains the complete Posttraumatic Growth Inventory.

Daily Spiritual Experience Scale. The DSES consists of 16 items that are used to quantify the daily spiritual experiences of individuals (Underwood & Teresi, 2002). The scale measures both religious and spirituality experiences, and therefore incorporates related factors from a variety of faiths. Though religiosity and spirituality are not necessarily synonymous, characteristics of each concept often overlap with one another, such as exploring the meaning of life and a connection to the transcendent (i.e. God or a divine figure) (McIntosh, Silver, & Wortman, 1993; Underwood & Teresi, 2002). Sample items include "I feel thankful for my blessings"

and "I feel a selfless caring for others." Responses to the first 15 items on the DSES are recorded on a 6-point Likert-type scale, ranging from 1 (Many times a day) to 6 (Never or almost never), and the final item is rated on a 4-point Likert-type scale (1 = Not at all, 4 = As close as possible). In Underwood and Teresi's initial testing of the scale, Cronbach's alphas were .94 and .95. Walker et al. used a shortened version of the scale in their study of middle- and high school students, and reported a Cronbach's alphas of .92 and .93. See Appendix C for the complete DSES.

Impact of Event Scale-Revised. The IES-R contains 22 items that assess the instances of intrusion (7 items), avoidant behaviors (8 items), and hyperarousal (7 items) experienced within the past 7 days attributed to a previous difficult life event. The original IES contained 15 items, however, the hyperarousal items were added in a revision to further address responses to traumatic life events (Horowitz, Wilner, & Alvarez, 1979; Weiss & Marmar, 1997). Intrusion items are analogous to "Any reminder brought back feelings about it [the event]"; avoidant behavior items are analogous to "I felt as if it hadn't happened or it wasn't real", and hyperarousal items address a range of behaviors and responses (i.e. "I was jumpy and easily startled"). Responses to the items are scored on a 5-point Likert-type scale, ranging from "Not at all" (0) to "Extremely" (4). Weiss and Marmar's initial study employing the IES-R produced internal consistencies ranging from .79 to .92 for each subscale. In addition, test-retest reliability was calculated for two samples, producing subscale correlation coefficients ranging from .51 to .92. The scale is contained in Appendix D.

Procedure

An e-mail will be sent to all Latino students enrolled at the University of Maryland once a directory of addresses is obtained from the University Office of Admissions, inviting students to participate in this study and ensuring confidentiality. The PTGI, DSES, IES-R, and demographic questionnaire will be posted on Survey Monkey©, a website that hosts surveys free of charge. Students that have accepted the invitation to participate will then be sent the link for the packet of measures, and asked to complete them. Data will then be collected from Survey Monkey©, and the program SPSS will be used to conduct data analysis.

Data Analysis

Data analysis for this study will be completed using SPSS, a statistical analysis computer program. Means and standard deviations will be reported for each of the scales. The analysis will consist of a correlation analysis via multiple regressions to determine relationships between different variables. Additionally, ANOVA's will be used to analyze the relationships between all variables measured.

Findings Expected, Conclusions, and Recommendations

Findings Expected

This section discusses some of the results expected pertaining to the research questions that would be addressed should this study be conducted. These results are reported in terms of findings in the literature that apply to the purpose of the present study. Recommendations for further study are also discussed, given the predicted findings and limitations.

Response to & Analysis of Research Question 1

The first research question explored the relationship between posttraumatic growth and religiosity for Latino/a college students. The literature suggests that religiosity is often positively correlated with growth reported, though different studies have used different measures of religiosity (Berger & Weiss, 2006; Calhoun, Cann, Tedeschi, & McMillan, 2000; Coon et al., 2004; Park, Cohen, & Murch, 1996; Urcuyo, Boyers, Carver, & Antoni, 2005). Of the literature reviewed, only one study found no relationship between religiosity and growth (Milam, Ritt-Olsen, & Unger, 2004), therefore the expected result for the present study is that religiosity is positively correlated to posttraumatic growth.

Response to & Analysis of Research Question 2

The second research question addressed gender differences in the relationship between growth and religiosity. The literature on posttraumatic growth often demonstrates a gender difference in growth reported, with females often reporting higher levels of growth (Bellizzi, 2004; Park et al., 1996; Weiss, 2002). Thus, it is expected that females in the present study will report higher levels of growth. The literature reviewed that investigated religiosity did not address gender differences. However, the elevated levels of growth in females would likely affect the relationship between growth and religiosity.

Response to & Analysis of Research Question 3

The third research question examined the relationship between immigration status, posttraumatic growth, and religiosity. Berger and Weiss's (2006) found relatively high levels of growth in their sample of Latina immigrants who averaged 5 years post-immigration. In addition, Coon et al. (2004) found that less acculturated Latina caregivers derived greater benefits from caregiving than both more acculturated Latina caregivers, and Caucasian caregivers. However, less acculturated Latinas and more acculturated Latinas did not differ significantly in frequency of prayer, attendance at religious services, or importance of religion. Based on these findings, it is anticipated that the Latinos/as in the proposed sample that have migrated more recently will report higher levels of growth, though time since migration may not be a strong indication of magnitude of acculturation.

Response to & Analysis of Research Question 4

The fourth research question investigated how differences in event impact may affect posttraumatic growth and religiosity. It is hypothesized that event impact will be positively correlated with growth reported, though the literature has produced mixed findings. While some studies have found that growth is inversely related to emotional or event-related distress, others have concluded that growth is positively related to more intrusive or avoidant behaviors and greater event severity, and still another proposed a curvilinear relationship (Helgeson, Reynolds, & Tomich, 2006; Ickovics et al., 2006; Lechner, Carver, Antoni, Weaver, & Phillips, 2006; Urcuyo et al., 2005; Weinrib, Rothrock, Johnsen, & Lutgendorf, 2006). Additionally, numerous studies that have sampled various populations with diverse traumatic life events have demonstrated that religious involvement or religious coping is positively correlated with experiences of growth (Berger & Weiss, 2006; Calhoun et al., 2000; Coon et al., 2004; Park et al., 1996; Urcuyo et al., 2005). Therefore, a positive correlation between event severity and growth is anticipated. Likewise, it is predicted that greater event severity will be positively correlated to the degree of religiosity reported by participants in the proposed study. Traumatic experiences may challenge an individual's perceptions of the world; therefore, dealing with a traumatic experience often involves the process of restructuring and making sense of the world (Davis & Noel-Hoeksama, 2001; Park & Helgeson, 2006; Tedeschi, Park, & Calhoun, 1998). Consequently, religion may provide a framework for coping and making sense of an individual's world following a traumatic experience (McIntosh, Silver, & Wortman, 1993). Thus, individuals that report greater event impact may report greater religious/spiritual sentiments.

Conclusions

The present study investigated factors that may influence the degree of posttraumatic growth experienced by Latino college students. Because Latinos are a heterogeneous group, the results derived from previous studies, or this study (should it be conducted), may not be representative of all individual Latino groups (Orozco, 2007). Nevertheless, there are sufficient previous findings in the literature to provide preliminary hypotheses for the proposed research questions. From the reviewed literature, expected results include: (a) a significant, positive correlation between religiosity and posttraumatic growth, (b) a significant, positive correlation between growth reported and gender, (c) no gender differences in religiosity reported, (d) a significant, inverse relationship between immigration status and posttraumatic growth, such that more recent migrants express more growth, (e) no differences in religiosity based on immigration status, (f) a significant, positive correlation between growth and event impact, and (g) a significant, positive correlation between religiosity and event impact. The data from this study may provide more insights into some of correlates of growth in Latino populations.

Recommendations for Future Research

The results of this study may provide more empirical knowledge about the incidence of growth in Latino/a college students. However, future studies may address some of the present limitations, and further examine the concepts of growth and religiosity in this population. First, longitudinal studies may examine the directionality of the correlation between growth and religiosity. Knowing the direction of the correlation (i.e., whether the primary relationship is religiosity influencing the development of growth, or vice-versa) will further understanding of growth in Latinos. Second, future studies may investigate possible differences in the relationship between growth and religiosity across different Latino subgroups, such as Central American, South American, and Caribbean Latinos. Finally, it is important for future studies to analyze the current model of growth following trauma, and investigate its application to Latino populations. A more accurate model may expose further areas of research on growth in Latinos.

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Attention Deficit Hyperactivity Disorder and Risky Sexual Behavior in Adolescence

Kristian Owens

Mentor: Dr. Stacey B. Daughters, Psychology Department
University of Maryland, College Park

Abstract

According to the literature, many adolescents diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) have been shown to engage in risky sexual behavior (Flory, Molina, Pelman, Gnagy, Smith, 2006). However, it still remains unknown which particular social and environmental factors influence this positive correlation. Thus, this research examines the social and environmental risk factors that influence risky sexual behavior in adolescence. The results from this research has identified that adolescents reporting having sexual intercourse in their lifetime scored significantly higher on parent reports of externalizing problems, attention problems, rule breaking behavior, and aggressive behavior. Additionally, adolescents that scored high on externalizing symptoms were more likely to report a greater number of sexual partners, and adolescents scoring higher. There also seemed to be a significant gender difference, such that females scored significantly higher on parent reports of total ADHD problems. Considering the potential health problems associated with risky sexual behavior, it is important to identify the specific factors that increase this likelihood among diagnosed adolescents, and to formulate ways to address this issue and thereby reduce its occurrence.

Introduction

Attention deficit hyperactivity disorder (ADHD) is one of the most common psychiatric disorders among children and adolescents (Flory et al., 2006). Symptoms of this disorder can impact academic performance, as well as social behavior. In particular, many adolescents with ADHD have been shown to engage in risky sexual behavior. This correlation has been well documented for the last several years; however, there has been very little research regarding the influential factors that contribute to it. Considering the potential health problems associated with risky sexual behavior, it is important to identify the specific factors that increase this likelihood among diagnosed adolescents, and to formulate ways to address this issue and thereby reduce its occurrence.

Purpose of Study

The purpose of this study is to identify the specific environmental and social factors that cause ADHD diagnosed adolescents' involvement in risky sexual behavior

at a higher rate than typical adolescents without the disorder. The environmental and social factors to be examined in this study include ethnicity, family structure, socioeconomic status, neighborhood environment, and parents' level of education. With the continual rise in ADHD diagnoses and the likely possibility that ADHD is a developmental precursor of risky behavior, this study will be of much significance to the field of psychology.

Theoretical Framework and Hypothesis

The theoretical framework that will be used to conduct this study is the cumulative risky model, which emphasizes observation of both environmental and social factors as a cumulative index. This approach allows one to understand that there may be a cluster of risk factors to which a child is exposed, rather than one specific factor alone that predicts the outcome of a particular behavior. Therefore the hypothesis of this research is that the symptoms characterized as ADHD, along with a variety of other factors, increase the likelihood of risky sexual behavior.

According to Wozniak (2003), ADHD adolescents typically experience continued academic difficulties, higher dropout rates, problems with authority, higher rates of risky behavior, and overall feelings of worthlessness. The symptoms of ADHD can cause an individual to be more impulsive in his or her thinking and decision making when regulating behavior. Therefore, having an impulsive personality can promote an individual to act without considering the situation and its consequences.

In addition, the lack of attention and critical thinking associated with ADHD can further increase participation in risky sexual behavior. The notion that individuals lack the social skills to formulate close peer relationships may explain why peer relationship problems are common among children and adolescents with ADHD (Flory et al., 2006). These adolescents may be more likely to associate with individuals who engage in risky behaviors of all types, such as reckless driving, substance abuse, and smoking. In regards to family factors, poor parenting and parents' lack of knowledge regarding effective sexual health practices may also be a social factor. Parent involvement and communication is important component in the reduction of risky behavior. Parent relationships are what influence the ways in which a child is effectively socialized into the environment. Therefore healthy parent interaction is necessary during development.

An additional influential factor of this correlation may be ethnicity. According to most research, minority children diagnosed with ADHD tend not to receive adequate treatment for the disorder (Bussing, Zima, Gary, Garvan, 2003). Because of this trend, many minority children may be more likely to engage in risky behavior. Without treatment, minority adolescents are left with their needs unmet during a time in their lives when sexual education and treatment for ADHD are imperative.

All of these specific environmental and social factors, along with the symptoms of ADHD, play an integral part in the positive correlation between ADHD and

risky sexual behavior. This study will attempt to identify these factors with careful observation and statistical analysis.

Limitations

There were a number of limitations in this research. The first included the limited amount of time allotted to complete this study in its entirety. Few subjects were included in this study in order to generate precise results and conclusions due to this time constraint, limiting the amount of results provided. Additionally, there was a limited amount of information available for the literature review. Research on this topic is scarce. Although there is some research identifying the correlation between ADHD and risky sexual behavior, there is still little information regarding the factors that influence this phenomenon.

Literature Review

Attention Deficit Hyperactivity Disorder (ADHD)

The "Summary Health Statistics for US Children", found that more than 4.7 million children between the ages of 3 and 17 have been diagnosed with ADHD as of 2007 (Bloom & Cohen, 2007). The core symptoms of this behavioral disorder have been clustered into three categories: hyperactivity, impulsivity, and inattention. Based on the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders IV* (4th edition), these symptoms must be present in several settings, occur for more than six months, and be present more severely than in a typical child or adolescent in the same age cohort (2000). As a result of these symptoms, diagnosed individuals are typically linked to academic, behavioral, and social problems (Flory et al., 2006). Many researchers have begun to link the prevalence of ADHD to risky sexual behavior in adolescence, as supported by observation and empirical findings (Flory et al., 2006). ADHD can be a developmental precursor of risky behaviors, which may also lead to criminal delinquency in adulthood. The following is a list of symptoms that characterize the fundamental characteristics of the ADHD diagnosis (APA, 2000):

Diagnostic Criteria for ADHD

INATTENTION
• Difficult time paying close attention
• Difficulty remaining attentive during tasks and activities
• Does not seem to listen
• Does not follow instructions and fail to complete tasks
• Disorganized
• Forgetful of important activities
• Loses important things needed for tasks and activities
• Inability to participate in tasks that require constant mental effort

HYPERACTIVITY
• Fidgets or squirms
• Inability to stay seated
• Runs, jumps, and climbs when it is not appropriate
• Excessive talking
• Is in constant motion

IMPULSIVITY
• Acts and speaks without thinking
• Difficult taking turns
• Interrupts or intrudes on others
• Inability to wait for things

The cause of ADHD is still unknown; however, there has been much research examining various theories. Many researchers have classified ADHD as a biological disorder originating in the brain due to low levels of activity in the regions where attention and activity levels are regulated (AAP, 2001). Other biological theories suggest that there may be problems with certain chemicals that send messages throughout the brain (AAP, 2001). Heredity has also been proposed as a cause of ADHD indicating that individuals are more likely to develop ADHD if a parent is diagnosed with the disorder as well (AAP, 2001). Other theories with empirical support blame environmental and medical factors, such as toxins and extremely severe injuries to the head (AAP, 2001). However, according to the American Academy of Pediatrics, "there has been no evidence that ADHD is caused by eating too much sugar, food additives, allergies, or immunizations" (AAP, 2001, p. 9).

Although there is no cure for ADHD, many treatments may be effective in controlling and diminishing symptoms, based on a child's diagnosis and individual needs. Treatments consist of medical, behavioral, educational, and psychological interventions, with a combination of treatments used as a comprehensive approach to enhance the effectiveness of treatment. Specifically, common treatments may consist of parent training, behavioral interventions, educational programs, individual/family counseling, and sometimes medication. Most medications given are psychostimulants, which help to relieve ADHD symptoms. Studies illustrate that over 80% of children who are treated with psychostimulants improve greatly (AAP, 2001). Psychostimulants used to treat ADHD include methylphenidate, also known as Ritalin and Concerta, and amphetamine, most commonly known as Dexedrine, Dextrostat, and Adderall (AAP, 2001).

Risky Sexual Behavior and Its Effects

In general, risk taking is a something that most individuals take part in during adolescence. The main question is what influences some adolescents to participate in risky behaviors, while others never engage in them? Adolescence is the emergence of the sexual drive and the onset of exploring one's ability to attract the opposite sex (Zwane, Mngadi, Nxumalo, 2004). According to empirical research, many

contributing factors play a part in the onset of risky sexual behavior in adolescence. With today's increased rate of adolescents engaging in risky sexual behavior at younger ages than previous years, there is an increased risk of unintended pregnancies and sexually transmitted infections, such as HIV and AIDS (Zwane et al., 2004). In addition, many adolescents are engaging in sexual activity more frequently, which influences the future direction of these sexually infections (Zwane et al., 2004). This means that as more engage in risky sexual activity, the more prevalent sexually transmitted diseases will continue to be present in our society. For the most part, adolescents tend to be uninformed or misinformed regarding sexuality and sexual education, which may be the reason why they are reluctant to protect themselves (Zwane et al., 2004). Many adolescents also believe that they are not at risk for infections or other health dangers. Some are also unable to discuss their concerns about reproductive health with others, or may not have access to affordable health services (Zwane et al., 2004).

Risky Sexual Behavior and Environmental Predictors

Researchers have identified four factors that they consider "multi-factorial" in influencing risky sexual behavior in adolescents (Zwane et al., 2004). The first influence is social pressure. Many adolescents are encouraged by society to experiment with sex and to enhance their physical attractiveness. Other contributing factors include easy access to family cars and unsupervised time at home. Adolescents have more opportunity to get away with and engage in risky behaviors with the frequent absence of parents. This idea leads to the final factor that researchers Zwane, Mngadi , and Nxumalo found. The composition of the family structure has changed in recent years, which contributes to sexual experimentation among the adolescent population. Most research has focused on two key areas; the effect of family configuration and the effect of family involvement (Davis & Friel, 2001). Family structure typically measures whether an adolescent lives in a home with one or two parents present, whether the parents are married, and whether they are the biological parents of the adolescent (Davis & Friel, 2001). Results in the Davis and Friel study illustrate that adolescents from intact, two-parent homes are more likely to begin having intercourse later in life than adolescents who come from a one-parent home. However, it is believed that girls in single-parent families are likely to engage in risky sexual behavior earlier than single-parent boys do (Miller & Moore, 1990). Davis and Friel also discussed the context of family in their research. It seems that the mother–child relationship is important when predicting an adolescent's onset of sexual activity (2004). A mother's interaction, along with her attitude toward discussion of sex, can affect an adolescent's understanding of sex. The more positive a mother's attitude is toward discussion, the less likely the adolescent is to engage in early sexual activity. The family is a dynamic element in the life of an adolescent. It provides structure and guidance that helps socialize the child by providing values and norms. Therefore, the interference of the family unit can have adverse effects on adolescent behavior if he or she is not properly

socialized (Davis & Friel, 2004). However, it is important to recognize the cultural differences in families, which can also explain why some adolescents engage in risky sexual behavior and others do not. The family cultural norms inform an adolescent as to what behavior is acceptable and appropriate (Pick & Palos, 1995).

Risky Sexual Behaviors and Gender Roles

Other research has observed risky sexual behavior in adolescents from the view of their traditional gender role attitudes. Social norms about gender and a woman's understanding of her power in a relationship can be very important in understanding and explaining risky sexual behavior (Amaro, 1995). There is a definite difference in the way each gender behaves sexually, which may be due to many explanations. The evolutionary theory proposes that men and women behave differently because they are enacting evolved mating strategies (Shearer, Hostermann, Gillen, & Lefkowitz, 2005). Another explanation denotes that men and women maintain different sexual scripts because they are socialized into society differently based on their gender (Shearer et al., 2005). This socialization impacts an individual's cognitive schema regarding sexual aspects about themselves (Shearer et al., 2005). As stated earlier, cultural values about gender roles can influence a man or woman to engage in particular sexual activities. This might include the general interactive behavior between a man and a woman in a relationship, who initiates sex in a relationship, and how sex is enacted (Shearer et al., 2005). However, it has been identified that adolescent boys who internalize social norms regarding their masculine sexual role were more likely to engage in risky sexual behavior (Shearer et al., 2005).

Risky Sexual Behaviors and Self-Regulation/Risk Proneness

The concept of self-regulation and risk proneness has been identified in its relation to risky sexual behavior (Crockett, Raffaelli, & Shen, 2006). Self-regulation has been defined as the ability for one to regulate their behavior, attention, and activity according to internal and external demands (Crockett et al., 2006). Self-regulation contributes to a number of adaptive responses to life's challenges and can be linked to a child's competence. As illustrated by Wong (1999), egocentrism can increase the likelihood of risk-taking and experimentation. Children low in ego control typically report more substance use in adolescence, which is believed to increase risky sexual behavior (Crockett et al., 2006). The concept of self-regulation is believed to develop in childhood. During preschool years, parents begin mediating behavior, and a child develops symbolic representations, which lead to an emergence of internalized executive functions during the preschool years (Crockett et al., 2006). Stable individual differences in self-regulation tend to emerge in early childhood, as well (Crockett et al., 2006). According to Feldman and Weinberger, children who are able to develop strong regulatory skills are more likely to avoid risky behaviors in adolescence, including risky sexual behavior (1994).

Risky proneness, also known as risk tolerance, has been identified as an attraction to the excitement of risky situations and poor decision-making (Crockett

et al., 2006). Risk-prone individuals usually seek out dangerous or risky situations to fulfill their inner urges for excitement. Sensation-seeking adolescents have been linked to risky sexual behavior in a number of empirical studies. Individuals who seek excitement in risky activities will most likely engage in risky behavior because they will focus on the positive emotional outcomes that they believe will come from the experience, while ignoring the potential negative consequences that may result from participation in such activities (Crockett et al., 2006). The results of the study conducted by Crockett, Raffaelli, and Sheen revealed a number of relevant findings. They first identified that self-regulation during middle childhood influences adolescent risky behaviors, directly and indirectly through early adolescence substance abuse. This finding illustrated the indirect relationship between substance abuse and risky sexual behavior, because it shows that low self-regulation in children promoted sexual risk-taking in adolescence with the increase of early substance use (Crockett et al., 2006). The direct relationship of self-regulation and risky sexual behavior was also identified, with research suggesting that self-regulation demonstrated stable individual differences (Crockett et al., 2006). Another additional finding was the effect of negative peer pressure on an individual's proneness to engage in risky behaviors (Crockett et al., 2006). These researchers concluded that poor self-regulation in childhood and early adolescent risk proneness influence risky sexual behavior in part by increasing early substance use.

Risky Sexual Behavior and Aggression

There are a number of studies that suggest the correlation between childhood externalizing behaviors and risky sexual behavior in adolescence. Externalizing factors include a variety of behaviors that have been clustered into four groups (Frick, Lahey, Loeber, Tannenbaum, Vanhorn, Christ, M.A.G., 1993): opposition, physical aggression, status violations, and property violations. Physical aggression appeared to be a major predictor of health risky behaviors, including risky sexual behavior (Timmermans, Lier, Koot, 2007). Therefore significant measures, such as preventive interventions aimed at physical aggression in childhood, should be considered in an effort to reduce risky sexual behavior and it consequences (Timmermans et al., 2007).

Risky Sexual Behavior and Other Alternative Influences

Research has also identified other alternative influences that are not mentioned in a majority of the work regarding adolescence and risky sexual behavior. Many researchers and public health experts have recognized race, ethnicity, socioeconomic status, and family structure as key features in risky behaviors. However, according to Carpenter (2001), these factors only contribute to a small fraction of individual difference in adolescent risky behaviors. Based on the largest survey given to adolescents in the U.S., these contributing factors consist of an adolescent's school performance, how an adolescent spends their free time, friends' behavior, and relationships with one's family (Carpenter, 2001). Only a small percentage

demonstrates the influence of demographic and family structure as influential factors in risky sexual behavior in adolescence. Only 26 percent of seventh- and eighth-graders whose annual family income was less than $20,000 reported having had sexual intercourse, compared to 8 percent of adolescents whose families earned at least $41,000 each year (Carpenter, 2001).

Other researchers believe that risky teen behavior is simply a result of an immature brain that is unable to avoid risky behavior (Jayson, 2007). Laurence Steinberg, a psychologist from Temple University, expressed that adolescents are at a stage in their lives where there is an overload in their brains, which makes it difficult to control themselves (Jayson, 2007). Neurological researchers have found that the brain is not fully developed until after the age of 18; the portion of the brain that controls logic and reasoning developing before the region that controls impulse and emotions. The researcher's strategy to control this situation would be to create stricter laws and policies limit risk taking (Jayson, 2007). Such examples might include increasing the driving age or the price of cigarettes. "Education does not work alone in reducing risky behavior" (Jayson, 2007). Instead, this newspaper article suggests both education and stricter laws in combating this issue in society.

ADHD and Risky Sexual Behaviors

Although adolescence has been related to risky behavior, an adolescent diagnosed with ADHD has illustrated an increase in the possibility that risk taking will occur. Due to the symptoms, children with ADHD typically have poor social skills that make it very difficult for them to socialize and establish meaningful relationships. ADHD also frequently occurs with disorders such as learning disabilities, anxiety disorders, and other behavioral disorders (Flory et al., 2006). Unfortunately, many of these problems continue into adolescence and adulthood, when concerns about the safety and health of ADHD individuals arise (Flory et al, 2006). According to Flory and colleagues (2006), ADHD and risk behavior seem to be related due to many complex interpersonal factors and core characteristics of the disorder (2006). Peer relationships, especially with peers whose attitudes favor involvement in unconventional activities, promote risky sexual behavior. In addition, with peer relationship problems being an issue with which many individuals with ADHD struggle, it is common that many will affiliate with and be vulnerable to peers outside the "mainstream social networks" (Flory et al., 2006). A second finding in research emphasizes the importance of family factors. As stated previously, the lack of parental monitoring and trust, high levels of family conflict, and poor quality of parent-teen communication regarding sexual health all contribute to the involvement of risky sexual behaviors (Flory et al., 2006).

These findings all illustrate the need for increased effective treatment and attention to risky sexual behavior by professionals who work with adolescents diagnosed with ADHD. Typically, an individual with ADHD is treated throughout childhood for their disorder. However, once they enter adolescence, many stop receiving treatment (Barkley, Fisher, Smallish, & Fletcher, 2003). However, even if

adolescents continue to seek treatment as adolescents, very little direction is available regarding psychosocial interventions for ADHD at these ages (Smith, Waschbuch, Willoughby, & Evans, 2000). Another treatment for decreasing risky sexual behavior is the prescription of stimulant medication. Although it has been highly documented as an effective treatment for those diagnosed with ADHD, it is very ineffective in promoting behaviors related to safe sex (Smith et al., 2000). Nonetheless, Flory and her colleagues assert that the ideal treatment to reduce risky sexual behavior in adolescents with ADHD would be to provide a number of different comprehensive approaches that encompass family involvement (2006). This type of prevention strategy can promote parent–child interaction and communication. Research has shown that sex education that contains family components has shown greater success in eliminating risky sexual behavior within populations where risk-taking is most common (Flory, 2006).

Although it is difficult to find a definite understanding regarding the dynamics of risky sexual behaviors, there are to be similar findings throughout the research. Many studies have identified how family structure, relationships, socioeconomic status, pubertal maturity, and various personalities and characteristics contribute to the timing and frequent occurrence of adolescent sexual activity and other risky behaviors (Wong, 1999). Thus, it can be understood that risky sexual behavior is something that many adolescents experience, but those with ADHD have an even greater incidence that can possibly lead to other deviant behaviors.

Research Methodology

Participants

Participants of this study included a cohort of high school students that were 15-18 years of age. This sample targeted the University of Maryland community and inner-city adolescents in the metropolitan Washington, D.C. area. Subjects were recruited using local advertisements and various contacts, including local schools, after-school programs, and adolescent-outreach programs. Eligibility for this study required parent/guardian consent, due to their child's participation in the study as a minor, as well as the adolescent's assent. Additionally, both the parent/guardian and adolescent must be able to speak English and the child had to live with the participating parent/guardian participating in the study. This study also consisted of an exclusion criterion, which means that certain subjects were excluded to participate if they met a certain criterion set up by the experimenter. Therefore, the exclusion criterion of this study consisted of tenth-grade adolescents who were either younger or older than 15-18 years of age.

Adolescent participants completed surveys consisting of questions about their neighborhood environment, family structure, and the prevalence of health–risk behaviors. In addition, parents of the adolescents completed a number of surveys consisting of questions regarding the child's behavior and the family's demographics. This study took place at the Center of Addictions, Personality and Emotions Research (CAPER) lab on the University of Maryland campus and was carried out

in conjunction with another study, which looked at distress tolerance and adolescent substance use (ADT study).

Procedures

The ADT study, of which this study is a part, was approved by the University of Maryland Institutional Review Board. Prior to coming into the lab for assessment, parents were interviewed and screened in order to ensure that they met the requirements to participate in the study. If eligible to participate in the assessment, parents and adolescents were scheduled to come to the lab, where both parent and child signed consent to participate.

Measures

Measures of this study assessed the following domains: (a) demographics, (b) neighborhood environment, (c) risky sexual behavior, and (d) child behavior (ADHD). All measures of this study were completed by the adolescent with the exception of the parent/guardian version of the demographics form and the measures of ADHD symptoms, which have been hypothesized to impact the participation in adolescent risky sexual behavior. The parent/guardian completed his/her forms in a separate room from the adolescent and had no access to the child's responses.

Demographics

In this study, the parent/guardian completed two forms that included personal information and information about the adolescent. These forms measured age, gender, education level, academic achievement, occupation, home occupants, and socioeconomic status. The socioeconomic status pinpointed the annual family income, father's education, and mother's education.

Neighborhood Environment

The neighborhood environment was assessed using the Neighborhood Environment Scale (NES). Adolescents completed this survey, which measures neighborhood disorganization, including questions about violent crime and drug use and sales. This measure examined three factors: perceived violence, perceived safety, and perceived drug use and availability. Questions related to these factors in this survey will be used to create a subscale score that will indicate the underlying construct.

Risky Sexual Behavior

Risky sexual behavior of adolescents will be assessed using the Youth Risk Behavior Survey (YRBS) completed by the adolescent. This survey focuses on risk behaviors that affect the health and safety of an adolescent, while identifying the prevalence of these health risk behaviors in a particular environment. The questions found in this survey consist of questions regarding drug and alcohol use, dietary habits, sexual behavior that leads to pregnancy or sexually transmitted diseases, and other activities that result in intentional or unintentional injury. However, for this

particular study, the section regarding sexual behavior was the only portion of the survey that was collected for analysis.

Child Behavior

This factor of the study was assessed using the Child Behavior Checklist (CBCL) developed by Thomas Achenbach. This measure identifies and assesses a child's competencies and behavioral/emotional problems. The CBCL for ages 6-18 were used for this study, which provides raw scores, T-scores, and percentiles for three competence scales including activities, social life, and school. This measure involves parents or individuals who know the child well to rate their child's behaviors and competencies. Parents rate their child for how true each item has been within the last 6 months using the scale: 0 = not true (as far as I know); 1 = somewhat or sometimes true; 2 = very true or often true. Many different behaviors and DSM-classified disorders are scaled in this measure based on the parents' ratings. In other words, the presence of a disorder can be partly identified using this measure. The behavior problems that can be identified using this measure include the following: Aggressive Behavior; Anxious/Depressed; Attention Problems; Rule-Breaking Behavior; Social Problems; Somatic Complaints; Thought Problems; Withdrawn/Depressed; and Internalizing/Externalizing Problems. The DSM-oriented scales include: Affective Problems; Anxiety Problems; Somatic Problems; Attention Deficit/Hyperactivity Problems; Oppositional Defiant Problems; and Conduct Problems. These scales are based on a normative population (N = 1,753) of children between the ages of 6 and 18, where children were excluded from the normative sample if they were ever referred for mental health or special education services within the last year. Adolescents were rated on a scale range of normal, borderline clinical, and clinical.

Results and Discussion

Sample Characteristics

The current sample consisted of 61 adolescents with a mean age of 16 (SD=.949), where 49.2% (n=30) were male. Ethnicity of the sample included 42.6% (n=26) Caucasian, 42.6% (n=26) African American/Black, 4.9% (n=3) Hispanic/Latino, 3.3% (n=2) Native American/ American, and 11.5% (n=7) Asian/ Southeast Asian. The mean family income for this sample consisted of $81,631 (SD= $41,696). Additionally, 32.8% (n=20) of families reported the biological father living outside of the home. According to the education level for biological mothers surveyed, 18.0% (n=11) had only a high school degree/GED, 4.9% (n=3) maintained a technology/ trade school certification, 21.3% (n=13) had some college level education, 14.8% (n=9) maintained an associated degree, 26.2% (n=16) maintained a 4-year degree, and 14.8% (n=9) maintained an advanced degree. According to the education level for biological fathers surveyed, 1.6% (n=1) had some high school education, 13.1% (n=8) had only a high school degree/GED, 8.2% (n=5) a technology/trade school certification, 16.4% (n=10) had some college education, 4.9% (n=3) maintained an associates degree, 34.4% (n=21) maintained a 4-year degree, 16.4% (n=10)

maintained an advanced degree, and 4.9% (n=3) maintained some other form of education not specified.

Response to and Analysis of Research Questions

Relationship Between Sexual Behavior and ADHD Symptoms

Adolescents who reported ever having sexual intercourse in their lifetime scored significantly higher on parent reports of externalizing problems [$F(1, 53) = 7.62$, $p < .01$], attention problems [$F(1, 53) = 5.34$, $p < .05$], rule breaking behavior [$F(1, 53) = 13.3$, $p < .001$], and aggressive behavior [$F(1, 53) = 7.33$, $p < .01$]. Of note, higher total ADHD problems were approaching significance [$F(1,53) = 3.74$, $p = .06$]. In addition, adolescents scoring higher on externalizing symptoms were more likely to report a greater number of sexual partners ($r = .794$, $p < .001$), and adolescents scoring higher on rule breaking behavior reported a significantly younger age of first sexual intercourse ($r = -.603$, $p < .01$). But, there were no significant relationships between condom use during sex or use of drugs and alcohol during sex intercourse, with ADHD symptoms.

Relationship Between Neighborhood Environment and ADHD Symptoms

There were no significant relationships between ADHD symptoms and neighborhood disadvantage.

Demographic Variables and ADHD Symptoms

There was a significant gender difference, such that females were significantly higher on parent reports of total ADHD problems [$F(1,53) = 4.29$, $p < .05$]. There were no gender differences in any other ADHD categorized symptom, however. Additionally, there was no relationship between ethnicity, whether the biological father lives with the family, parent education level, or income with any of the ADHD symptoms. Of note, however, a lower family income approached significance with higher levels of attention problems ($r = -.286$, $p = .08$), aggressive behavior ($r = -.295$, $p = .07$), and externalizing symptoms ($r = -.308$, $p = .06$).

Discussion

This research found that adolescents that reported having sexual intercourse in their lifetime scored significantly higher on parent reports of externalizing problems, attention problems, rule breaking behavior, and also an approaching significance of higher ADHD problems. These behaviors have been identified to impair social skills, critical thinking skills, and self-regulation skills. With that being said, adolescents with these problem behaviors are more likely to engage in activity that they believe will instantly gratify their feelings and emotions without critically thinking about the consequences or establishing meaningful relationships. This same thought can explain why adolescents that scored high on externalized symptoms were more likely to report a greater number of sexual partners, and adolescents that

scored high on rule breaking behavior reported a significantly younger age of first sexual intercourse.

One of the most interesting findings of this study is the significant gender difference where females scored significantly higher on parent reports of ADHD problems. According to most research, ADHD is more common in boys (Woodward, 2006). The finding from this study may be due to the fact that the behaviors associated with ADHD are considered more of a norm for male adolescents as compared to female adolescents. Girls displaying ADHD behaviors are more likely to be labeled as disorderly because stereotypically boys are believed to behave this way naturally. Additionally, based on the data, lower family income may be related to attention problems, aggressive behavior, and externalizing symptoms because of the stresses associated with being from a low income family in society. An individual may have to work harder to obtain resources or treatment for problematic behavior. As a result, these individuals display more of these externalizing behaviors than individuals from higher socioeconomic statuses. This research has also illustrated a few relationships that were insignificant. These findings maybe valid, but it would be good to see if these findings remain stable with more subjects added to the sample. Much research in previous years has identified correlations between ADHD symptoms and neighborhood disadvantage, along with other social factors such as the family structure and parent education level.

Recommendations for Future Research

Future recommendations for this research include the additional recruitment of adolescent participants. With such a small sample, it was difficult to produce many findings in this research. Furthermore, it would be essential to recruit adolescents from a variety of environments besides schools or after school programs from the areas where standardized test scores are typically the highest. This might impact the number of adolescent participants we see actually engaging in risky behavior. Thus, it would be interesting to see how the results would vary if adolescents were recruited from inner city environments, such as Washington, DC or Baltimore city schools. Furthermore, future research should examine adolescents that have been diagnosed with ADHD, rather than observe adolescents with ADHD symptoms only.

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Traditional Medicine in the Gambia

Ana Peterson
Mentor: Dr. William Roberts, Professor, Department of Anthropology
St. Mary's College of Maryland

Introduction

The practice of traditional medicine is an important aspect of Gambian life and culture. It has existed in the country since before the arrival of western medicine and even the Islamic religion. Although there have been some additions to the methods of traditional healers of The Gambia since the coming of Islam, many of the values and concepts remain as they were when traditional medicine began. Modern medicine, that is the diagnosis and treatment of patients using scientific study and clinical trials, is the predominant form of healthcare for citizens of the United States while in The Gambia, seeking medical attention from traditional healers still remains to be a popular means of treatment. The popularity of traditional medicine continues to climb in the country, which in some ways can be attributed to the president, Alhagi Dr. Yahya A.J.J. Jammeh, who claims to be working to acquire cures of devastating diseases using traditional medicine.

Initially, I was interested in following the topic of traditional medicine mostly because I found the idea of using plants as medicine intriguing. The use of medicinal plants is also an attractive subject with the current increasing appeal of herbal remedies and medicines in the United States. Keeping this fact in mind, I wanted to investigate the role herbal remedies played in a culture much different from that of the United States. Being a chemistry student without much prior knowledge about traditional medicine in The Gambia, I was under the impression that I might find many herbalists eager to reveal all of the herbs they used, what sicknesses the herbs treated, and what chemical compounds made these herbs. Upon learning more, I recognized that this was not always going to be the case. My purposes for research evolved into much more modest goals: to establish an understanding of the traditional form of healthcare in The Gambia, the measures being taken to integrate traditional medicine into the modern healthcare system, and the reasons for the effectiveness of herbal medicines.

As well as being a way in which people attempt to remain healthy, traditional medicine is also a large piece of the culture that represents The Gambia. Traditional medicine remains within the culture by way of the practitioners from one generation passing the knowledge to members of the next generation. In this way, the title of traditional healer can remain within a family for many generations. The continuation of the knowledge of a traditional healer being put into practice is dependent upon the traditional healer himself. By taking a close look at the work of traditional healers in many areas of The Gambia, I was able to come into contact with a part of the country's culture.

As much as being sick in a foreign country can be an inconvenience as well as depressing, my experience with food poisoning turned out to give me a good idea of the other spectrum of medicine in The Gambia. For me, laying on a bed hooked up to an intravenous drip was comforting because I knew that I would soon be hydrated and on my way to recovery. However, a patient who I had viewed in the Cherno Baba Association of Traditional Healers Clinic in Berending would most likely disagree. Part of how I view the effectiveness of medicine is due to the society in which I grew up. The same can be said of a Gambian who seeks treatment from traditional healers instead of traveling to the hospital. Modern medicine often treats the symptoms of an illness while traditional medicine treats illness through an understanding of what is believed to be the cause of it.

As mentioned before, the arrival Islam has brought a spiritual aspect to the practice of traditional medicine in The Gambia. Even outside of my field work, I viewed the work of traditional healers or marabouts in the *jujus* tied around the necks, ankles, wrists, and waists of people of all ages. In many of the marabous' "offices" that I entered, I observed prayer mats, one or more copies of the Holy Koran, prayer beads, and wall hangings adorning verses from the Holy Koran. It soon became clear to me that traditional medicine was not merely someone gathering a variety of herbs and brewing medicines for ailing patients.

Traditional healers with many years of experience generally receive a great deal of respect and legitimacy from the inhabitants of the villages in which they practice. However, the work of healers that is praised by many Gambian citizens is not given the same recognition by the institutions of modern medicine in The Gambia. Over the years, some conflict has arisen between the country's healthcare system and traditional healers. I came to comprehend this conflict further once I began to visit traditional healers while simultaneously receiving information from my peers about their research into modern healthcare in The Gambia. It is of great importance that these two ends of the spectrum find a way to be integrated so that modern and traditional medicine can coexist within the country. Despite the differences that exist between a healer who has attended medical school and one who has learned from an elder, both share the same goal to bring good health to the country.

Methods

I used three main methods to conduct my research on traditional medicine in the Gambia. Through participant observation at the workplace, interviews and consultation of written sources, I was able to collect information on various aspects of my topic. The participants for my studies included seven traditional healers from five different villages as well as the manager for the National Traditional Medicine Program. I met six out of seven of the traditional healers within their workplace. For most of my research, my materials consisted of a small notebook for writing detailed notes and a camera to document those that I interviewed and the medicinal herbs presented to me, but I also took advantage of the availability of a tape recorder for one of my more extensive interviews. All of the interviews I had with traditional

healers (except my session with Alhassan Abubakar who spoke English) were conducted in a language other than English, making it very important that I always had someone to translate my questions and the healer's answers

My preliminary research consisted of speaking with a few Gambians with whom I was well-acquainted about my desire to study traditional medicine. From their responses I gathered that traditional medicine is a very well-known practice in the country, and that it would be a feasible project because healers are accessible to non-Gambians. These conversations helped me gather some relevant background information and brought me to the understanding that traditional medicine is a combination of cultural knowledge and practices that have medical value. In this sense, it became clear to me that in order to begin my interviews with traditional healers it would be necessary for me to first and foremost extend my greetings with both words and even kola nuts as is customary for anyone seeking assistance from someone else. For me, this meant that in order to establish a relationship with traditional healers so that I could learn about their work I had to be aware of cultural etiquette and make an attempt to build some trust first.

I conducted my first interviews with two marabouts in Medina village, Niumi district, in the North Bank Region of The Gambia. Prior to these visits, I had read over some of the interviews another St. Mary's student working with the same topic had written so that I could generate a list of appropriate questions to ask. In my meeting with Mular Bari, a marabout as well as the *alkalo* of Medina, I gathered a lot of information without even asking many questions. The interview was in the Mandinka language and translated by Awa Ceesay, who knew this marabout very well already. In addition to translating Bari's answers to my questions, she added her own personal knowledge and interpretations based upon her experiences with this domain of Gambian culture. The second marabout of the village (who also spoke Mandinka) was somewhat secretive about her methods of diagnosis, making this interview a little more difficult for me to get the information I wanted. This encouraged me to formulate questions that would present to me the information she was willing to give.

From these two interviews, I developed a general structure for my future interviews and questions. I gathered that each meeting would start off with a greeting between the healer, my interpreter, and me so that the healer might understand my motives for research. I first inquired about how he or she learned to become a healer, his methods of treatment and diagnosis, the illnesses he treats, common illnesses he sees among his patients, his opinion or beliefs on why someone becomes sick, and the reasons his treatment is effective. Once I had acquired answers to these questions, I usually proceeded to ask about his relationship with the modern healthcare system and whether he was involved with any Association of Traditional Healers. I frequently concluded my interview by asking about the specific names and uses of some medicinal herbs. More often than not, this last matter did not render a straightforward answer because many marabouts did not know the names of the plants they used. My response was to instead ask where the healer finds these

medicinal herbs. Every interview varied but this general structure remained about the same throughout.

I conducted two interviews with Bubakar Sillah, the manager of the National Traditional Medicine Program, during which I was able to collect information on both The Traditional Healer's Association and the current issues related to traditional medicine in The Gambia. He also gave me some written materials to use including a book on traditional medicines in The Gambia that had been written in the 1970s by a Peace Corps volunteer. Our first meeting occurred early in my research and before I had spoken with any traditional healers. The result of this interview consisted mostly of answers to my questions on the background of Gambian traditional medicine and the Traditional Healer's Association. When we met for a second interview, I had already met with a handful of traditional healers, and so used the questions that had surfaced during these past interviews.

Although interviewing was my primary method of research, participant observation was an integral part of gaining an understanding of the work of traditional healers. With some healers, our meetings took place while they worked on treatments using excerpts from the Holy Koran for their patients. This is something I may not have learned about if I had not observed it. Witnessing two healers with actual patients allowed me to grasp how each different healer diagnosed the illness of the person and decided on the right form of treatment. Not only was I able to view traditional healing in action, I also experienced it firsthand. From both Amadou Njie, president of the Cherno Baba Association of Traditional Healers Clinic in Berending, and Ida Njie, a marabout from Medina, I received traditional treatment for my own minor physical ailments. My visits to the clinic in Berending were probably the most beneficial for gaining knowledge about traditional healers and medicine through participant observation. I viewed the Amadou Njie treating patients and was shown and educated about the uses of many of the medicinal plants the association kept stocked within the clinic. My observation of medicinal plants with the traditional healers Amadou Njie, Alhassan Abubakar and Karamo Sanyang taught me a lot about the variation among healers in how they identify and store the herbs they cultivate and use for treatments. These sessions also presented the types and sources of medicinal plants that I could investigate further in my research.

The last method I used to gather information was consulting written sources. I received two sources from the very generous Bubakar Sillah, one concerning medicinal plants and their uses in The Gambia and the other laying out future plans for integrating traditional medicine into the modern healthcare system. In addition to these local sources, I also documented materials from the archives of The Gambia and the library of the Medical Research Council. Upon returning home, I continued some of my research on traditional medicine using journal articles retrieved on the internet.

Conclusion and Discussion of Prospects

Traditional medicine is a valuable part of Gambian culture that I feel needs more attention in order to achieve preservation. It has also changed a great deal with time and probably has more in common with the modern healthcare system than people believe. There is a great possibility for traditional and modern medicine to move in the same direction as it has in countries like China and India. The government and State for Department of Health have given some initial support to the creation of associations of traditional healers, but have somewhat failed in continuing to provide money and education for traditional healers. If they are not educated on serious diseases such as AIDS and tuberculosis or given more medical supplies, doctors will continue to encounter conflicts with patients being treated with traditional methods for too serious of an illness. In other words, both realms of medicine must have a hand in this integration project in order for it to be successful.

In my experiences with traditional healers, whether they were using strictly herbs or involving excerpts from the Holy Koran to treat their patients, I have learned that Gambians seeking medical attention from traditional medicine really do find relief from their illnesses. As long as traditional healers continue to exist in the country, I believe people will continue to seek their assistance. The amount of spirituality involved in the practices of some healers first came as a shock to me because I had no previous knowledge of that aspect of traditional medicine. Further investigation has allowed me to understand a cultural custom outside of this previous knowledge. I've also been able to comprehend the strength of some aspects of traditional medicine that modern medicine cannot even compete with. For this reason alone, I believe modern and traditional medicine together could ensure better health to many Gambians.

In the future, I would like to conduct further research for this project by looking at a few of the plants that were specified to me as having medicinal uses (such as the neem tree) in order to determine why, scientifically, these plants serve as effective treatments. Professor Bill Roberts was able to purchase an herbal medicine that Momodou Conateh claims can cure up to seventy seven diseases. There are possibilities for studying this medicine in the laboratory at St. Mary's College of Maryland to find out what exactly composes it. In knowing the chemical makeup of the herbal medicine, I might be able to link some of its components to biological activities.

The issue of the possible extinction of medicinal plant species is one that also exists outside of The Gambia. In conducting further research on medicinal plants on my own, I would like to investigate how these extinctions are being perpetuated as well as prevented in The Gambia and other countries. This topic is an important universal issue, especially because the practice of traditional medicine cannot continue without the availability of medicinal herbs. Though my focus is on traditional medicine within The Gambia for this paper, understanding this topic on

a global scale is something I believe to be imperative, particularly if I find myself studying traditional medicine for my senior thesis (St. Mary's Project).

It is hard to say at the moment when I will be able to go back to The Gambia (or anywhere in Africa), but the experiences that I had through my project and outside of it have convinced me that traveling there again is on my list of things to do. Living in The Gambia for a short period of time allowed me to become familiar with a culture much different from my own. My expectations for my project were completely shattered, but I could not be happier with the knowledge that I have gained through studying traditional medicine. Although traditional healers are often secretive about their methods, those that I met were more than enthusiastic about sharing with me as much information as they could. In doing this research I came to many conclusions, the most important one being that the country in which I live could take a hint or two from the friendly demeanor of Gambians.

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Family Environmental Characteristics Associated with Obesity in African American High School Girls

Nicole Stevenson

Mentor: Dr. Brit Irene Saksvig, Research Assistant Professor
Department of Epidemiology and Biostatistics
University of Maryland, College Park

Abstract

Adolescent obesity is prevalent in America. African American girls are at a disproportion risk for developing obesity. Family environment has been shown to be associated with obesity in African American adolescent girls. Examining the family environmental factors further reveals there association with obesity. This study is examining key environmental factors associated with obesity in that population.

This study uses secondary analysis of the baseline data from Project Heart (PH), a physical activity intervention trial at a high school with the goal of increasing physical activity levels. Two hundred twenty- one (221) girls participated. Most of them were African American (83%) and age 13-15 years. They completed questionnaires covering aspects of their family environment, and the data analysis showed the factors association with girl's obese status. Chi squared test and T-test were used to show significant differences between the two groups of obese and non obese girls in relation to their parents obesity status.

Twenty-nine percent of the girls were obese, BMI's at or over the 95 percentile specific for age and sex. 71% of the girls were not obese. 35% of those obese girls had ≥ 1 parent who is obese compared to 15% of non obese girls having ≥ 1 parent obese. The rest of the data analysis is in progress (chart and graphs in development).

The data represented girl's perception in terms of reporting parent obese status, making them inaccurate. The measures used within the data set analysis are family intimacy, family support and family physical activity. The family intimacy scale is very important environmental characteristic when predicting levels of physical activity/ non activity in the high school girls and should be continue to be used in other research. There have not been many studies with predominately African American girls. In the future, more in-depth research on the different type of environments needs to be conducted.

Problem Statement

Boyington, Carter-Edwards, Piehl, Hutson, Langdon, and McManus (2006) support the position that obesity is prevalent among adolescent high school girls. African American adolescents specifically, are at a bigger risk for developing obesity than some of their counterparts. Statistics show that African American females are more likely to be obese than White or Hispanics adolescents. This data recorded in 2001-2004 supports that fact; African American women were 70% more likely to be obese than Non-Hispanic White women (CDC, 2007). Furthermore, research notes that obesity in adolescence continues into adulthood (Freedman et al, 2005). This shows the importance of examining obesity in adolescence as a way to prevent tracking into adulthood. Many studies conducted to a degree consider the environmental aspects that contribute to obesity in that population (Boyington et al., 2008; Kimm et al., 2002; Kibbe and Offner, 2003).

Purpose of Study and Research Questions

Many factors contribute to obesity. This study however, examines the aspects of the family environment that may contribute to obesity in African American adolescents. The three variables are: (a) family environment, (b) family intimacy and (c) support for physical. The research will also further explore those aspects in relation to obesity. Given this purpose, the following main research question will guide the investigation:

1. What are the family environmental characteristics related to adolescent obesity?
2. How do family support, intimacy and support for physical activity contribute to adolescent girl obesity and non obesity?

Significance of Study

Further investigation of environmental influence may help explain why African American girls are at a disproportionate risk for obesity and the related health consequences (Boyington et al., 2008). The Project Heart study's primary focus is to evaluate the effectiveness of a life skills centered physical activity intervention for increasing over all physical activity in African American girls. The Project heart study was one of few studies that contain a mainly female minority population.

Data reflecting family characteristics that played a role in overall physical activity among African American girls such as family intimacy, support, and physical activity were collected. These factors are associated with obesity among this age group, but were not analyzed as such in the PH study. This is study will include those factors.

Theoretical Framework

Researchers Davison and Birch (2001) analyzed Urie Bronfenbrenner's Ecological Systems Theory (1979) in relation to factors associated with obesity. The theory defines how complex "layers" of the environment effect child development (Bronfenbrenner, 1979). Their analysis shows the environmental factors associated with childhood/ adolescence obesity (Davison and Birch, 2001). The four systems described are the Microsystem, Mesosystem, Exosystem, and Macrosystem as Figure 1displays. The microsystem is the most influential system because the child experience's their first contact with the environment, including interactions with parents (family), school, neighborhoods, and childcare environments. The child and those surroundings both influence each other. For example, a child's parents may affect his or her beliefs and behavior, and vice versa. This is known as the *bi-directional influence* (Davison and Birch (2001). Secondly, the microsystem and mesosystem are interrelated. In the mesosystem, family experiences are directly related to experiences outside the initial environment (microsystem). Each aspect of the system shows the connection surrounding the child's teachers, parents, neighborhood, and overall environment. Thirdly, the exosystem describes larger social systems that are not directly in contact with the child. Lastly, the macrosystem consists of cultural values, customs and laws. This system has a distance influence on development of obesity since it is the last level (Davison and Birch 2001).

In addition, the theory has been renamed "*bioecological* systems theory" to emphasize a child's own biology as a primary environment factor influencing development. Their biology in combination with the complex levels plays a role in development. The interaction between factors in the child's biology, immediate surroundings, and the broader societal landscape all influence development (Davison and Birch 2001). The framework effectively explains factors influencing child development that related to obesity. Davison and Birch conclude that the family environment is the strongest factor in the early development of obesity.

Figure 1
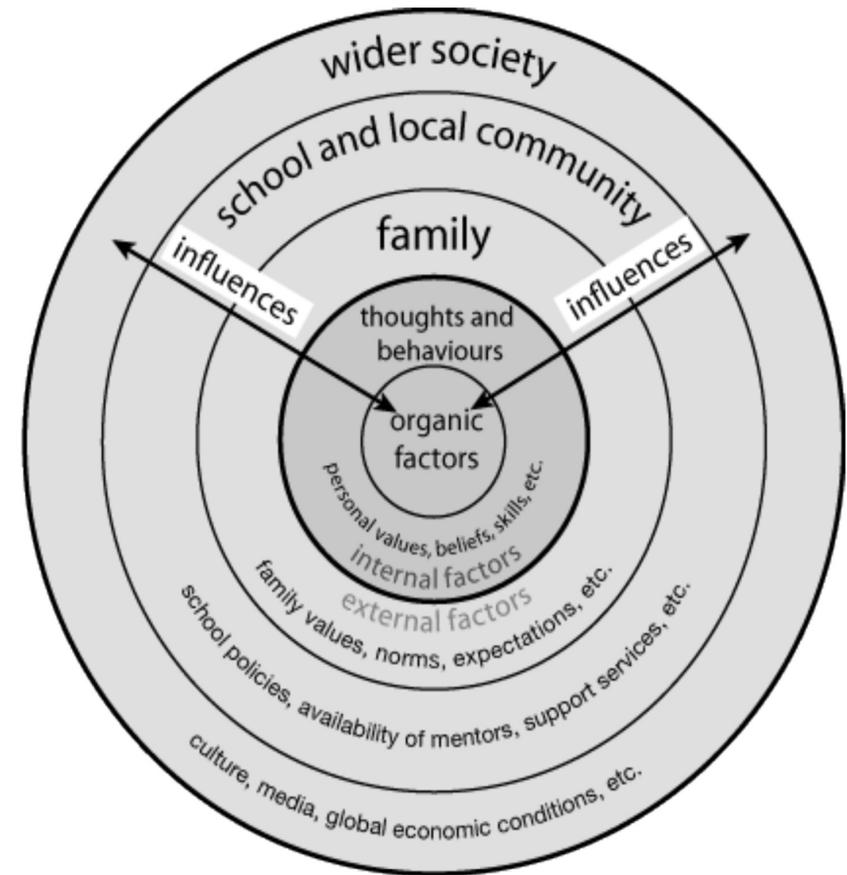
Figure 1 Displays the different environmental levels and influences on the child. First two inner rings display the microsystem- child's first environemental contact, mesosystem-immediate environment like family, exosystem-large social systems like school and community, and macrosytem- the wider society.

Limitations

My study had several limitations. The first limitation was that the data collection consisting of self report measures. These results were based the girl's perception of reporting parent's medical history, so they were not completely accurate. Some data responses are not fully completed they were excluded from the final analysis. The measures used within the data set analysis are family intimacy, family environment and family physical activity. The family intimacy scale is very important environmental characteristic when predicting levels of physical activity/non activity in the high school girls but it is not commonly well defined. In contrast, strength is there have not been many studies with predominately African American girls. This study will add to the current established literature.

Literature Review

This section will cover obesity, adolescent obesity, and adolescent obesity in girls, factors associated with obesity in adolescent girls, health consequences, parental obesity status, cultural attitudes, and the family environmental factors associated with obesity in adolescent girls.

Obesity in America

Prevalence of overweight and obesity has increased sharply for both adults and children, since the mid- seventies (CDC, 2008). The National Health and Nutrition Examination Surveys (NHANES) shows that "among adults aged 20–74 years the prevalence of obesity increased from 15.0% (in the 1976–1980 survey) to 32.9% (in the 2003–2004 survey)" (CDC, 2008). For many, adult obesity is a continuation of a condition that developed as an adolescent (Freedman et al, 2005). Since the condition continues from adolescence then the associated health risk will not only continue, but develop into more serious ones. Many overweight people develop asthma, high blood pressure, high cholesterol and the development of cardiovascular disease (CDC 2007). Not all obese adolescents develop into obese adults, but obese adolescents have a higher risk of becoming obese adults. The health consequences will be discussed more specifically later on in the review.

Health Consequences of Obesity

Some health concerns surrounding adolescent obesity are asthma, diabetes, and pre-hypertension and colon cancer. Some of these consequences occur naturally out of the environment. As mentioned before, some health risk are diabetes, cardiovascular disease, high blood pressure, and breathing difficulties or asthma (Dalton, 2004). African Americans in particular suffer an increased risk for developing the disease.

In addition, various studies have shown a relation between adolescent obesity and hypertension. This problem needs to be curbed at a young age before it progresses into a mountainous issue (Freedman et al., 2005, and Dietz, 1998). The issue is the development of high blood, pressure and diabetes as an adult (CDC, 2007). It is

imperative that the health risks are taking seriously because they have the potential for lasting a lifetime. On the contrary, it has been reported that among the studies revealing childhood obesity tracking in to adulthood, only 15% to 30% results from obesity beginning in adolescence.

Adolescent Obesity

"One out of three children in the United States is either over weight or at a serious risk of becoming so" (Dalton, 2004, p.35). The data represents a large number that will continue to increase if something does not change. The following statistics from the Center for Disease Control and Prevention support the notion that obesity starting in adolescence is likely to persist in adulthood, "Obesity is of particular concern for our children, since overweight adolescents have a 70% chance of becoming overweight or obese adults" (CDC, 2008). With that alarming fact, the health risks associated are devastating. The following are some health risks associated with obesity in adolescents: (a) Type 2 diabetes, (b) cardiovascular disease, (c) advance maturation, (d) asthma, (d) gastrointestinal and (e) psychological problems (Vargus, 2006). Vargus' discussion on the psychological health risk is important. Other researchers agree that adolescent weight gain can lead to other feelings of low self worth, and difficult peer relations (Boyington et al., 2008, Dalton, 2004, Kimm et al., 2002). Alleyne and Lapoint support that obese adolescents that are teased by their peers suffer from low self esteem and self worth (Alleyne and Lapoint, 2008). It is important to understand the social consequences associated with weight gain since it is on going concern. Additionally, adolescents classified as obese have a difficult time socializing with their peers. Some fear that their peers are laughing or mocking their size (Boyington et al., 2008, and Kimm et al, 2002). This is why it is important to understand the impact of the environmental factors having on an adolescent obesity.

Obesity in Adolescent Girls

Adolescent years create an environment favorable to weight gain. Some girls experience more weight gain than their male counterparts. A study conducted by Dietz (2004), supports that adolescence is a critical period where weight constantly fluctuates:

Adolescence represents a third critical period when overweight may occur and may increase the risks of obesity in adulthood. The risk of becoming overweight during adolescence appears to be higher among girls than among boys, perhaps because adolescence in girls is characterized by a relative increase in fatness (p. 855).

This quote refers to the how girls develop compared to boys. Findings show that girls experience weight gain at a higher rate due to puberty related weight gain compared to their male counterparts. It also shows the long term consequence of adolescence obesity, which is the possible growth into adulthood obesity. Adolescent is a critical period for girls in particular because weight gain is common during puberty (Dalton, 2004). Research conducted in Kimm's study supports that a

decline in physical activity is common during adolescent years due to the expected weight gain resulting from puberty for girls (Kimm et al., 2002).

Furthermore, findings of the National Heart, Lung and Blood Institute(NHLBI) reported that in addition to African American children/adolescents being at disproportionate risk , the prevalence of obesity in black girls specifically, is one third higher(31%) in comparison to white girls (Kibbe & Offner, 2003). Clearly, African American adolescent girls are at a high risk for developing obesity. Boyington et al. (2008) and Kimm et al (2002) provide some explanation to why African American girls are at a high risk. Young African American females are less likely to eat the recommended daily amount of fruits, vegetables, and whole grains, and are more likely to consume high amounts of fat and sodium (Boyington et al., 2008, Krebs, 2008 and Kimm et al.2002). The study further reveals, in contrast, white adolescent girls are shown to eat more of the daily recommended amount of nutrition like the fruit, vegetables, and whole grains. One conclusion of the study is that consumption of these types of food will evidently lead to weight gain (Boyington et al., 2008, and Krebs 2008).

Factors Associated with Obesity in Adolescent Girls

There are many factors associated with obesity in adolescent girls**.** Some are (a) diet, (b) physical activity or inactivity, (c) genetics, (d) and Family Environmental characteristics.

Diet

Scientists have reached a consensus that obesity results from an imbalance of an individual's energy intake and energy output (Krebs et al., 2008). High energy intake coupled with low output creates an imbalance which can lead to weight gain. Having a high calorie diet and low physical activity levels is a leading cause of obesity (Krebs et al., 2008). Krebs study explained obesity in it's the simplest form. The amount of calories consumed by boys and girls differ. Studies show that boys eat more than girls. Various studies reveal that when compared to young white females, young African American females are less likely to eat the recommended daily amount of fruits, vegetables, and whole grains, and are more likely to consume high amounts of fat and sodium (Boyington et al, 2008 & Krebs et al., 2008).

Physical Activity

There are clear racial and ethnic differences in physical activity levels. African American adolescents have lower levels of physical activity than white and Hispanic adolescents. Statistics from the YRBS, point out that 29.5% of African American adolescents met recommended physical activity levels compared to 38.7% of whites, and 32.9% of Hispanic adolescents (CDC, 2005). The recommended level is at least thirty minutes of sweat producing physical activity. There is a clear difference across ethnicities with activity levels. African American adolescents still lag behind.

Reis (2008) study supported that all racial and ethnic groups had low physical activities however; African American females had the lowest physical activities (Reis, 2008). To maintain a healthy weight it is recommended that adolescents engage in a minimum of thirty minute of moderate to vigorous daily physical activity. Boyington supports that African American adolescent females lag behind in physical activity. This is due to a couple of reasons. Boyington study explains that a large amount of African American girls do not exercise because they do not want to sweat their hair out (Boyington et al., 2008). In the African American community it is common to value your appearance more than physical health. Many of the girls in that study honestly said, "My hair style is an equal exchanged for me not exercising" (Boyington et al., 2008, p.2**)** Cultural environments play a huge role in whether or not, and how often this population exercises.

Genetics

Genes determine if a person is likely to store excess energy from fat as lean muscle. A common saying is that we are fat because it "runs in our genes" (Dalton, 2004, p.46). This common thought may lead to the belief that weight gain is totally genetic. Genetics alone cannot explain obesity. Dalton suggests that environmental factors are largely associated with the development of an obesity status (Dalton, 2004, p.46). One could also say that obesity runs in the environment, like the above statement of it running in our genes.

Some scientist says that certain types of people have a genetic predisposition to become obese aside from those genetic factors. Dalton asserts children are more vulnerable than others in the obesity epidemic. A geneticist J.V. Neel identified the environment changes everyday, faster than our bodies can keep up. The body will have a hard time adapting to the changes leading to excess gain (Dalton, 2004). This environmental as a prime driver of the obesity epidemic is   termed the obesogenic environment (Elinder and Jansson, 2008). Obesity had has been link to an environment that cluttered with large portions sizes. There has been a rise in unhealthy food accessibility along with long physical activity levels which are factors related to the genetic aspect of obesity (Elinder and Jansson, 2008). If the environment stays constant then so will a person weight gain or weight lost.

 Even though genetics has a role in obesity it only plays a part. The environment has always had a role as this reveals, "Certain genes increase childs potential for becoming fat, and then other factors fall under the nature (environment) category trigger that genetic predisposition until he or she actually becomes overweight" (Dalton, 2004,p.47). Individuals are constantly influenced by the environment in which they live. Simply put it helps shape you and that could not be truer in the obesity epidemic.

Family Environmental Characteristics

Family environment is one of the many determining factors for the rise of obesity among African American girls. Family environments are the key factors in developing food preferences and patterns that shape children's eating habits and physical activity desires. These factors can lead to African Americans girls having healthy or unhealthy weight status (Dalton, 2004 and Kimm et al, 2002). If a family supports sedentary behavior, i.e. watching television compared to going for a walk for instance, there is no push to incorporate physical activity into there daily routine. A study (Granich, Rosenberg, Knuiman, and Timperio 2008), revealed that less supportive families can show little concern for the level of sedentary activities their children participate in. "Excessive screen based activity" or watching television, as the study reveal, has excessive consequences; one being weight gain and asthma (Granich et al, 2008, abstract). On the other hand, a family supportive of active lifestyle will help lead to an adolescent with a healthy weight.

Especially during early and middle childhood, family environments are the key influencers for the development of food preferences, patterns of food intake, eating styles, and the development of activity preferences and patterns that shape children's developing weight status.

Low Socioeconomic Status

Poverty and low education are some other risk factor associated with obesity. Individuals with a low socioeconomic status have a greater likelihood of becoming obese. Federal statistics show that, "23% of white and 34% of black earning 15,000 dollars or less is at risk for obesity" (Dalton, 2004, p.55). She further states that a low income decreases the options for consuming healthy low processed foods. The main concern of these families is to eat. The types of food eaten are of little concern. She also found that since African American families are more prone to eating low quality high fat foods, they eat the foods they want their children to eat, and less of what they should eat. Fresh fruits and vegetables snacks are snacks they want them to eat (Dalton, 2004).

The families know the foods that are better for there children to consume. Access to these foods is is another issue alone. Today's society provides increase access to fast on the go food. There are literally fast food restaurants and quickie shops on every corner in urban low socioeconomic areas (Boyington et al., 2008). It is easier to access foods that are not a hassle to prepare. Certain areas don't have access to supermarkets providing fresh produce, in comparison to more wealthy areas. It is important to understand how the environment as revealed is negatively associated with obesity in African American adolescent.

Parental Obesity

A study supports that parents categorized as obese have relationships with their adolescents which lead to their development of obesity. Kosti et al., (2007) revealed that between school age children and parents there is an association between BMI's

of the parent and child (Kosti et al, 2007). This shows that if a parent is obese, [BMI ≥ 30] that the adolescent is likely to follow in their footsteps. This study suggests that parents are a strong influential factor when it comes to creating an environment that supports a certain level of health.

Boyington et al., (2008) further revealed that parents initiate the type of eating habits for their children which become the basis for life long eating patterns.

This quote explains how the parents shape the food environment early on in their child's life,

> ….relatively little research has assessed the extent to which parents (particularly parents who are overweight) select environments that promote overweight among their children. Parents provide food environments for their children's early experiences with food and eating. These family eating environments include parents' own eating behaviors and child-feeding practices (Birch, 2001, p 894).

The results suggest that parents are critical in shaping there child's early food experiences which can be positive or negative. Parents create the foundation for their children to follow.

Dalton explains that parents eating choices will be reflected in the child's eating habits. There are a few that Dalton discusses like permissive, authoritative, and authoritarian styles about food choices. Parents adapting an authoritarian eating style use commands or coercion to get their children to eat. On the other hand food is commonly used as a reward and punishment (Dalton, 2004). A child's favorite food is used as a reward system; restricting that same food is used as a type of punishment. The notion of "cleaning your plate" commonly aids in overeating, and eventually an overweight status (Dalton, 2004, 79). The child will eat to clean the plate disregarding any recognition of fullness they may have. This behavior is followed because this is what the parents enforced. Another example of a command is "You can not go play if you don't eat all your dinner," showing the negative view of eating created from them that parent environment (Dalton, 2004, p.79). This environments is one where overeating is subconsciously encouraged through those types of commands.

Cultural Attitudes toward Obesity

Davis, Williams, Adbelrahman, Futch, Okeke, and Young's study reveals African American parent view on obesity. The parents of obese children explain their child's condition with the term big boned, explaining that his or her takes after them, or it was caused by DNA (Davis, et al., 2008). Culturally, African Americans use the term "big bone" as an acceptable explanation to their child weight status. Some parents may not know all the consequences associated, but when provided with that information the parents quickly began to change the family environment. In addition, many African American families view obesity as not a huge concern. Moreover, any families view slight weight gain as healthy (Davis et al., 2008). The

parent's perceptions need to be altered. If the parent continues to think that same ways the consequences related to obesity will never change.

Family Support for Physical Activity

Families that openly support physical activity play a huge role in whether or not; the individual develops obesity (Ries, 2008, Kuo, 2007and Kimm et al., 2002). If there are few opportunities for physical activity combined with unhealthy eating habits like over eating, obesity is likely to occur. Research indicates that recent increases in obesity are likely to result from the interaction of biological and social factors within a physical environment. This coupled with few opportunities for physical activity along with and eating excessive amounts of high calorie foods is associated with weight (Jebb, 1999 p.341).

There has been a great deal of focus on childhood obesity. According to Dietz (2004), during this time one would think that parents would naturally be more supportive of adolescent physical activities (Deitz, 2004). If the parents and family show interest in activities their adolescents are involved in, they would have more motivation to be active. Kuo et al (2007) further revealed the level at which the family environment can act as a determinate or motivation factor in contributing to physical activity (Kuo et al., 2007). A family that is supportive of active lifestyles will create an atmosphere where an individual is more prone and eager to participant in physical activity.

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The Effects of Reality vs. Fantasy Based First-Person Shooting Video Games on Adolescent Behavior

Christopher Travers

Mentor: Dr. Wallace Southerland III, Associate Director,
McNair Scholars Program, University of Maryland, College Park

Abstract

This conceptual paper reviewed the literature on violent video games and aggression. Using the General Aggression Model as a framework, this study provides evidence to support the relationship between video game violence and aggressiveness. To address the lack of research on first-person shooter (FPS) video games found in the literature, a future study will be proposed observing different types of first-person shooter video games (reality and fantasy) and the effects they may have on adolescent behavior. Consistent with the General Aggression Model, findings showed increases in aggression for adolescents exposed to violent video games. While research shows first-person shooter video games increase adolescent aggressiveness, evidence on different types of first-person shooter games and their effects on adolescent behavior were inconclusive. However, research reported by Potter (1988) showed that viewers tend to experience more emotional and behavioral issues when viewing reality based media. In addition, Anderson and Bushman (2002) reported that empirical evidence shows that violent video games and aggressiveness have a positive and significant relationship. The grouping of Anderson and Bushman (2002) and Potter (1988), provide evidence that adolescent aggressiveness will be higher when playing reality based first-person shooter games in comparison to fantasy based first-person shooter video games.

Introduction

The effects of violent video games have become an extremely controversial topic in the world of media. Research by Children Now (2001) found that 89% of video games contain some violent content and that about half include violence toward other characters that would result in serious injury or death. In addition, research has shown that adolescents prefer playing video games that have violent content (Buchman & Funk, 1996). Empirical evidence has been found that violent video game exposure increases aggressive thoughts, cognitions, and behaviors (Anderson, Berkowitz, Donnerstein, Huesmann, Johnson, Linz, Malamuth, & Wartella, 2003). Although there is empirical evidence that supports this relationship, research on specific genres of video games like first-person shooter and the effects they have on adolescent behavior has not been found.

Problem Statement

Aggression is a major problem in adolescents today. Evidence has shown that violent video games increase adolescent aggression (Anderson & Bushman, 2001). The increased popularity of first-person shooter violent video games creates a need to explore the effects different types of FPS video games have on adolescent behavior. In comparing reality based first-person shooter (RPS) violent video games with fantasy based first-person shooter (FFS) video games and the effects they have on adolescent behavior in a future study, research will address the aforementioned problem.

Purpose of Inquiry and Inquiry Questions

The purpose of this conceptual paper is to review the current literature on violent video games and adolescent behavior in order to explore adolescent exposure to the different types of first-person shooter games. Given the aforementioned problem, research will address the following questions:

1. How does exposure to violent video games affect adolescent behavior?
2. What are the different types of first-person shooter video games?
3. Is there a change in adolescent behavior when exposed to different first-person shooter video games?

The population of the U.S. spends a lot of time watching media violence (Anderson & Bushman, 2001). Of the population, our youth are the most exposed to media violence. According to Anderson and Bushman (2001), "Youths between the ages of 8 and 18 spend more than 40 hr per week using some type of media, not counting school or homework assignments" (p.354). In the past, television was the major source for access to media violence, but video games have become increasingly popular. Playing violent video games is becoming more of a greater concern because empirical evidence suggests violent video games increase adolescent aggression (Anderson et al, 2003). The three school shootings that took place in Kentucky, Arkansas, and Colorado have only expanded the need to research the effects of first-person shooter video games on adolescent behavior. Anderson and Dill (2000) reported the two shooters responsible in the Columbine Massacre created a customized version of the game Doom (a FPS video game) and investigators found that the actual shootings were similar to the customized version. The connection between FPS games and recent school shootings further supports the need for research on the effect FPS games has on adolescent behavior.

Significance of Inquiry

Research related to adolescent aggressiveness is instrumental in the struggle of creating safer and more scholastic environments in educational institutions. Research has shown that violent video games increase aggressive behavior and thoughts in adolescents (Anderson et al., 2003). Research has also shown youth heavily exposed

to violent video games see the world as more hostile, are more hostile to others, get into more arguments with teachers, get into more fights and perform more poorly in school Lynch, Gentile, Olson, and Brederode, (2001). In addition, evidence has shown a relationship between FPS video game exposure and adolescent aggression exists (Anderson & Bushman, 2001). However, research on the effects that different types of FPS video games have on adolescent aggressiveness is still inconclusive. The lack of conclusive evidence on adolescent behavior when exposed to different FPS video games creates significance for this conceptual paper and future research. This is significant because future research on FPS video games can bring attention to educators and policy makers. Policymakers can then try to better regulate violent video games, which may reduce adolescent exposure to violent video games, consequentially reducing adolescent aggression.

Summary of Theoretical Framework

Reasons exist that justify why violent video game exposure can increase aggressive thoughts and behaviors in both the long and short run. In addition, reasons exist to support why higher levels of aggressive behavior will come from playing reality based FPS games. In this analysis, the theoretical approach stems from *The General Aggression Model*. A theory used throughout video game literature that explains why adolescents exposed to violent video games show increased aggressiveness, coined by Anderson (2003). In similar studies, research has been guided through the use of Anderson's General Aggression Model (Anderson & Bushman, 2001; Lynch et al, 2001; Chory & Cicchirillo, 2007; & Anderson & Dill, 2000) to explain why adolescent's exhibit increases in aggressive behavior. Aggression-Related Priming is a significant procedure assumed by the GAM to further justify the relationship between video game violence and adolescent aggressiveness (Barlett, Harris, & Baldassaro, 2007).

Delimitations of the Inquiry

This conceptual paper has several delimitations. According to The University of Florida Graduate Studies, (2005) delimitations include the specific population/sample included, the main parameters covered in the research, and variables used in the research. First, the paper was delimited to a conceptual review of literature on the effects of FPS video game exposure on adolescent behavior. This does not take into account third-person shooting video games, or non-violent video games and effects they have on adolescent behavior. Second, this paper was delimited by only studying adolescents that engage in video game play and not taking into account adults or young children. Both males and females were used in this conceptual paper and ages ranged from 8-18. Third, this paper was also delimited by focusing on FPS video games and changes in behavior that occur as a result of exposure to these games.

Limitations of the Inquiry

According to The University of Florida Graduate Studies (2005), "The limitations set forth reservations, qualifications, or weaknesses inherent in the design. Generally, these will reflect anticipated inadequacies in regard to internal validity of results" (Graduate Student Services: Thesis and Dissertations, 2005). This conceptual paper had several limitations as defined by the literature.

The first limitation in this paper is the lack of empirical data gathered. Instead of using raw quantitative data from a current study to support hypotheses, this conceptual paper uses the data collected throughout the research of violent video games and adolescent aggression.

The second limitation in this conceptual paper is time. Due to a small frame of time it was difficult to fully exhaust the literature. Given more time, more research can be conducted, which may lead to more data and more or less support for the predictions in this conceptual paper. Time also was a contributing factor in not being able to collect raw data and having to resort to using the literature to support predictions.

The third limitation was the disparity between male and female participants in most research involving video games and adolescent aggressive behavior. In the majority of video game studies used as a source in this paper, males outnumber females as participants. This limitation restricts results from being completely generalized to the entire population of adolescents that play video games.

Lastly, the theoretical framework also has limitations by only explaining increases in aggression for adolescents who already exhibit aggressive thoughts and behaviors.

Analysis and Discussion of the Literature

This chapter analyzes the current research on media violence, video game violence and aggression, and first-person shooter games in relation to the Social Learning Theory. This chapter also lays out the theoretical framework that will be used throughout this conceptual paper.

Literature on Violent Media

In the United States, media violence is all around us. Whenever a person is watching movies, news, music videos, surfing the net, or playing a video game, violent content is typically viewed. Being an adolescent is extremely difficult in today's society with the inevitable onslaught of media violence. Research by Roberts, Foehr, Rideout, and Brodie (1999) showed that youth ranging from ages 8-18 spend 40 hours or more per week viewing some form of media. Huston, Donnerstein, Fairchild, Feshback, Katz, Murray, Rubinstein, Wilcox, and Zuckerman (1992), report once the average child completes elementary school; they will have viewed about 8,000 murders and more than 100,000 additional forms of violence on TV. Consistent findings in various randomized experiments show youth who watch violent scenes usually show more aggressive behavior, thoughts, and emotions in

comparison to those that do not watch violent scenes (Anderson & Bushman, 2001). Reviewing research on media violence is important to know when researching video game violence because many of the psychological processes recognized in the research on television and movie media apply to video games (Anderson & Bushman, 2001).

Literature on Video Game Violence and Aggressive Behavior

Roberts, Foehr, Rideout, and Vrodie, (1999) report about 10% of youth ranging from age 2-18 engage in video and computer game play more than 1 hour a day. In addition, 8-13 year old males average more than 7.5 hours per week of video game play. Of the video games that are marketed to the youth, violent video games seem to be the most attractive. Game Stop (2008) rated the number one game as of April 2008 to be Grand Theft Auto IV. The Grand Theft Auto series of games include stealing vehicles, having sex with and then murdering prostitutes, gunning down cops and criminals, and using inappropriate language in the face of authority (gamestop, 2008). The combination of video games and violence has become attractive to youth in today's society. The Grand Theft Auto Series has been very popular among youth as far as violent video games, but many other violent video games are being played.

Approximately 68% of the most popular video games contain acts of violence (Smith, Lachalan, & Tamborini, 2003). Even when video games first began gaining popularity in 1990 with games like *Mortal Kombat, Wolfenstein 3D, and Street Fighter*, violence was still incorporated like video games today. The focal points in all three of those games were to maim, wound, or kill opponents (C.A. Anderson & Bushman, 2001). A plethora of non-violent, educational games exist; however, adolescents seem to be more drawn to games that contain blood, screams, and gore. Buchman and Funk (1996), report that 73% of fourth grade male's state that most of their favorite games contain violence. Not only do video games contain violent materials, but higher levels of aggressive thoughts and behaviors have been observed among individuals who play these types of games (Cicchirillo & Chory-Assad, 2005). To find empirical evidence that a relationship between violent video games and aggression exist, research has been conducted by many for investigation.

A meta-analytic study (Anderson & Bushman, 2002) found that after 54 independent tests of the relationship between violent video games and aggression, including 4,262 participants, the average effect size was both positive and significant. For example, a study conducted by Irwin and Gross (1995) measured physical aggression (kicking, hitting, pinching, shoving, etc) between males who either played a non-violent or violent video game. Results showed that the boys who played the violent video game exhibited more physical aggression toward their peers with an average effect size of .31. In another study, Bartholow and Anderson (2002) observed that college students playing a violent video game administered more than two and a half times as many high-intensity punishments than those that played a non-violent game. For both males and females, the average effect size was significant with males being .57 and females .50. In another example, Calvert and

Tan (1994) measured aggression in participants that played a violent virtual reality game titled, Dactyl Nightmare, in comparison with participants that simply acted out movements similar to those playing the actual game. Calvert and Tan's findings showed that participants who played the game displayed significantly higher rates of aggression in comparison to participants that only followed the movements (r =.50).

In addition to randomized experiments, cross-sectional surveys have also been conducted to further investigate this relationship. For example, Anderson and Dill (2000) formed a measure that took a deeper look at college students that played a violent video game recently before taking the survey and their self-reported acts of delinquent behavior in the last 12 months. Anderson and Dill (2002) described delinquent behavior as threatening or hitting other students, engaging in gang fights, throwing things at other people, or attacking someone with the intent of harming that person seriously or killing him/her. The correlation between the two variables resulted in being significant (r =.46, p <.05).

Literature on First-Person Shooter Games and Observational Learning

First-person shooter games are first-person perspective action based violent video games that haven been increasingly more popular throughout the last 20 years. The player gets to play the game through the characters eyes with the weapon of choice being shown on the screen. This aspect of first-person shooters creates a real-life, personal simulation for the player. The user gets to practice aiming and shooting at enemies and can also be shot at and killed, which elevates the realness of the video game (gamestop, 2008). *Goldeneye 007* was a very popular first-person shooter video game that came on the scene for Nintendo 64 in 1997. *Goldeneye* was a highly crafted game that incorporated artificial intelligence, a realistic setting, a hero in James Bond, and head shot accuracy shooting (gamestop, 2008). Users could now be able to practice aiming at the enemies head and killing them in one shot. In *Goldeneye*, users were praised for killing off enemies and reaching destinations by completing the mission and moving on to the next. Adolescents who are heavily exposed to these first-person shooter video games began to learn the rewards of their aggression.

First-person shooting violent video games has been increasingly teaching adolescents that it is better to be aggressive and use violence as a means of solving problems. Myers (2008) asserts that, "By experience and by observing others, we learn that aggression pays off" (p.352). The social learning theory proposes that we learn social behavior by observing and imitating others and by being rewarded and punished. Albert Bandura believes in a social learning theory of aggression. He believes that we learn aggression not only by experiencing its payoffs but also by observing others. He believes that the consequences of other's actions play huge in our decisions to act similarly or differently.

When an adolescent is engaging in a first-person shooter game, the player is not allowed to move on to the next level until every enemy is shot and killed. A form of positive reinforcement for killing all enemies opposing your character in

the violent game is now being created. Adolescents are able to watch television and learn aggressive responses through viewing others on the TV. Aggressiveness is then experienced when engaging in first-person shooter games because of how close to reality a lot of these games have become. Experience is one of the greatest tools for learning and adolescents are gaining tremendous amounts of experience with real life violence in first-person shooter games so much that they are beginning to carry out this violence into the real-world in schools. Lynch et al, (2001) found that adolescents who are exposed to more video game violence are more involved with arguments with the teacher and physical fights with other students.

Summary and Implications of the Literature

The aforementioned literature shows today's youth are viewing an extreme amount of violent media. Among the most popular of this violent media are violent video games as stated by Roberts et al., (1999). After a meta-analysis conducted by Anderson and Bushman (2001), showed a sufficient amount of empirical evidence that exposure to violent video games increase adolescent aggressiveness, one can see how significant violent video games are detrimental to youth behavior. In addition, Anderson and Dill (2000) showed that specific types of violent video games (first-person shooter) are contributing to violence among youth in school environments with the evidence of school shootings in Kentucky, Arkansas, and Colorado. Anderson and Dill (2000) showed a direct link between the shooters of the Columbine Massacre and the first-person shooter video game, Doom. The literature reviewed in this chapter highlights how much of an impact violent video games have on adolescent behavior and how FPS games contribute to adolescent aggressiveness through the Social Learning Theory.

Methodology

This section addresses the methodology used to search for the literature reviewed for this conceptual paper, as well as the methodology for a future study.

Purpose of Inquiry and Inquiry Questions

The purpose of this conceptual paper is to review the literature on the effects of adolescent behavior when exposed to violent video games. The purpose of a future study will be to compare adolescent behavior when exposed to different first-person shooter video games. Research will address the following questions:

1. How does video game violence affect adolescent behavior?
2. What are the different types of first-person shooter video game?
3. Is there a change in adolescent behavior when exposed to different first-person shooter video games?

Literature Search Procedures

An extensive search in Research Port through the University of Maryland College Park Library system was used to find and analyze the literature. Research Port was used because it contains thousands of academic and peer-reviewed journals that would provide the greatest amount of validity and reliability for this conceptual paper. The two main databases used were Psych Info and Academic Search Premier because Research Port contains so many peer-reviewed journal articles. To narrow down the articles, Psychology based indexes (e.g. Psych info and academic search premier) were only used. The following terms were used to further narrow down the research: (violent media, computer games, video games, first-person shooter violent games) and (aggression, aggressive behavior, aggressiveness, General Aggression Model, violence, hostility, and school violence/behavior). Studies were used if they measured the effects of adolescent exposure to violent video games. Studies were also used if they contained information on the way in which adolescent aggression and first-person shooter games are related to the general aggression model (GAM)

To address the lack of research on the topic of first person shooter video games, a future study will consist of the following data collection and data sources.

Data Sources for Future Research

Participants

Similar research (Anderson & Bushman, 2001) found on video game literature consists of sample sizes 50-100 with ages less than or equal to 18 years of age. Age in a future study will be defined as 13-18. Fifty (30 males, 20 females) high school students from Baltimore County Public schools who have been suspended or expelled at least once because of behavioral issues will be targeted for participation. Research (Anderson & Bushman, 2001) shows that males show higher levels of aggression than females when exposed to violent video games, which justifies having more males than females in this study. The general aggression model is based on the assumption that aggression is a characteristic of the adolescent playing the game, and that video games increase that level of aggression. Therefore, the participants will have displayed levels of aggression because of their suspensions or expulsions from school.

Materials

Two first-person shooter violent video games compatible with the Microsoft XBOX360 game console will be used. There will be two different video game conditions (fantasy and reality) and each condition will contain one game. In the fantasy FPS game condition, adolescents will play Halo and adolescents in the reality FPS game condition will be playing Call of Duty 4: Modern Warfare.

Fantasy Game. Halo has been rated by gamestop (2008) as one of the top ten best first-person shooter games available. Introduced by Bungie Studios, Halo is a game series that is about a war among future people and a group of alien races

called the "The Covenant." In addition to their war, each side is trying to protect themselves from a deadly virus called "the flood" (wikapedia, 2008). The main character, Master Chief, is a super-soldier teamed with the future people in the fight against "The Covenant".

Reality Game. Call of Duty 4: Modern Welfare is unlike the previous Call of Duty games because the setting is in a more modern day in age. According to Activision (2007) "Armed with an arsenal of advanced and powerful modern day firepower, players are transported to treacherous hotspots around the globe to take on a rogue enemy group threatening the world. As both a U.S Marine and British S.A.S. soldier fighting through an unfolding story full of twists and turns, players use sophisticated technology, superior firepower and coordinated land and air strikes on a battlefield where speed, accuracy and communication are essential to victory" (Activision, 2007).

Aggression Questionnaire (AQ). Using a version of a scale of measured aggression from Garcia-Leon, Reyes, Vila, Perez, Robles, and Ramos (2002), participants will be asked to rate themselves using a Likert-type scale from 0-4, where 0 is never and 4 is always (see Appendix). According to Garcia et., al (2002), The AQ is a 29-item instrument designed to measure the different dimensions of the hostility/anger/aggression construct. It consists of 4 subscales that assess: (a) anger, (b) hostility, (c) verbal aggression, and (d) physical aggression" (p.45). Through three different studies, this questionnaire has proven to be both reliable and valid (Garcia-Leon et al., 2002)

Data Collection for Future Research

Procedure

Participants will be randomly assigned to one of the two game version conditions. Each participant will play the video game assigned to their specified video game condition in an average size classroom. The participants will come into the classroom individually during the times that each participant volunteer for in advance. Each participant will sit approximately 6 feet directly in front of the TV and the volume will be set at 20 while the lights remain on. Prior to any game play, each participant will be given a consent form and the experimenter will go over the consent form with participant. If participants choose to continue with the experiment, the experimenter will administer the first part of the aggression questionnaire to measure the participant's aggression level prior to video game exposure. Upon completing the questionnaire, the experimenter will also give brief instructions on how to play the game and administer a chart that reviews where each button is located including the function for each of those buttons. Following completion of 20 minute play of the video game, participants will be given another part of the aggression questionnaire to measure how aggression changed once exposure to the FPS video game took place.

Strategies for Minimizing Bias and Error

In order to further enhance the validity and reliability of this conceptual paper, certain precautions will be used to minimize biases and errors

Strategies for this Inquiry

In this conceptual paper, the researcher minimizes bias and error by providing citations of different researchers and scholars that have provided insight in the field of violent video games and aggressive behavior. Throughout this conceptual paper, references were made to scholarly journals, dissertations, and reliable gaming web sites to provide factual information as opposed to opinion. When providing evidence for a relationship, direct quotes from credible scholars and authors are used with statistical evidence to further increase validity of the information and decrease the lack of error.

Strategies for Future Inquiry

In order to limit bias and error in a future study, the research will use the same techniques conducted in this conceptual paper when reviewing the literature. The researcher will follow other methodologies used in similar research by scholars and doctors to provide reliability and validity in a futures study.

Ethical Considerations

APA ethical guidelines will be followed in a future study. According to APA Ethical Principals (2003), "When obtaining informed consent as required in Standard 3.10, Informed Consent, psychologists inform participants about (1) the purpose of the research, expected duration, and procedures; (2) their right to decline to participate and to withdraw from the research once participation has begun; (3) the foreseeable consequences of declining or withdrawing; (4) reasonably foreseeable factors that may be expected to influence their willingness to participate such as potential risks, discomfort, or adverse effects; (5) any prospective research benefits; (6) limits of confidentiality; (7) incentives for participation; and (8) whom to contact for questions about the research and research participants' rights. They provide opportunity for the prospective participants to ask questions and receive answers" (APA, 2003)

The researcher will follow all APA ethical considerations when conducting a future research study.

Findings, Conclusions, Recommendations for Future Research

This chapter reports the findings of this conceptual paper and makes conclusions on what was found throughout the review of video game literature. Recommendations for future research are also included in this chapter.

Findings

RESEARCH QUESTION 1:
How does video game violence affect adolescent behavior?

FINDING:
A meta-analytic study by Anderson & Bushman (2002) found that after 54 independent tests of the relationship between violent video games and aggression, including 4,262 participants, the average effect size was both positive and significant. Throughout Anderson & Bushman (2002) "r" is used to define correlation.

According to Heiman (2001), "The Pearson correlation coefficient is used to describe the linear relationship between two interval or ration variables. The statistical basis for r is that it compares how consistently each value of Y is paired with each value of X in a linear fashion" (p. 265).

In addition to the Pearson Correlation Coefficient, Anderson and Bushman (2002) also used effect size to describe relationships. According to Heiman (2001), "The effect size indicates how consistently differences in the dependent scores are caused by changes in the independent variable. The larger the effect size, the more consistent is the influence of the independent variable" (p. 421). The following were used in this meta-analytic study: Irwin and Gross (1995) conducted a study in measuring physical aggression (hitting, kicking, pinching, shoving, etc) between males who either played violent or non-violent video games. Results showed that the boys who played the violent video game exhibited more physical aggression toward their peers with an average effect size of .31. Bartholow and Anderson (2002) observed that college students playing a violent video game administered more than two and a half times as many high-intensity punishments than those that played a non-violent game. Calvert and Tan (1994) found that participants who played the aggressive game, Dactyl Nightmare, displayed significantly higher rates of aggression in comparison to participants that did not play. In addition to randomized experiments, cross-sectional surveys have also been conducted. For example, Anderson and Dill (2000) found that the correlation between violent video games and delinquent behavior resulted in being significant (r =.46, p<.05).

RESEARCH QUESTION 2:
What are the different types of first-person shooter video games?

FINDING:
After reviewing the literature, there was no evidence found on the different types of first-person shooter games. However, using the definitions of fantasy and reality as cited by Potter (1988), first-person shooter video games can be split into two groups: fantasy and reality.

RESEARCH QUESTION 3:

How does exposure to different FPS video games affect behavior in adolescents?

FINDING:

Though there is inconclusive evidence to answer the research question, using the research conducted by Potter (1988) and Anderson and Bushman (2001), one can make certain predictions. Anderson and Bushman (2001) showed there is a positive correlation between video game violence and aggression which includes first-person shooter violent video games. In general, perceived reality research has suggested that more realistic content can lead to larger emotional or behavioral effects (Potter, 1988).Using Anderson and Bushman (2001) and Potter (1988), research shows that adolescents exposed to reality first-person shooter games will show higher aggressiveness than adolescents exposed to fantasy based first-person shooter video games.

Conclusions

First, today's youth are bombarded everyday with new violent media. Anderson et. al (2003) provide empirical data that reports violent media has negative effects on adolescent behavior. It is important to consider research on violent media when reviewing video game literature because research has shown that the two can be linked when measuring the effects of adolescent aggressiveness (Anderson et. al, 2003). Current research has also provided tremendous empirical data to prove that violent video game exposure leads to aggressive behavior in adolescents (Anderson & Bushman, 2001). A meta-analytic study conducted approximately 50 independent tests on about 4,000 participants and found a positive and significant relationship between violent video games and aggressive behavior.

After reviewing similar research on video game literature and school shootings, research has shown that the shooters of massacre that took place in Columbine were heavy players of the first-person shooter video game, Doom, and many of the techniques used on the day of the killings were similar to the actual game (Anderson & Dill, 2000). School violence is in relation to adolescent aggressiveness, for aggression is a direct cause of much of the arguments, altercations, and physical fights of adolescents that take place in a school setting (Lynch et al, 2001). School violence, aggression, and video game violence are all interrelated for video game violence affects aggression, and aggression is related to school violence. Therefore, violent video games have an extremely important impact on the effects of adolescent behavior and consequentially school violence.

Second, limited to no research was found on the different types of first-person shooter video games and the effects they have on adolescent behavior. However, research on reality and fantasy has contributed to the notion that in the genre of first-person shooter video games, two types of games exist: fantasy and reality. Based on the conceptual review of literature conducted by Potter (1988), people have shown to exhibit more emotional and behavioral problems after exposure to

reality forms of media. Potter's conceptual review, has led the researcher to the belief that reality based first-person shooter games will cause adolescents to display more aggression than fantasy based first-person shooter games.

Recommendations for Future Research

After critically reviewing the literature on video game violence, there is need to further research the area of first-person shooter video games. Since there was no research on the different types of FPS video games, in a future research study the different types of FPS video games need to be explored. After studying what the different types of FPS video games are, a future study can then measure the different effects that different types of FPS games have on adolescent behavior. To address the major disparity in gender throughout the literature, future research needs to focus more attention on the effects video game violence has on females. Once more research is available to female behavior after being exposed to video games, better comparisons can be made between the two genders. Because the General Aggression Model is key in understanding video game literature, future research needs to follow this model more. The GAM is based on the premise that adolescents who play violent video games hold aggressive characteristics; future research can look at naturally aggressive adolescents (i.e. adolescents with ADHD or juvenile delinquent history). Many factors can contribute to the aggression that is learned through playing violent video games, and lots of future research can address these different factors.

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A Conceptual Paper on Factors That Affect Public Perceptions of Welfare

Connie Yarborough

Mentors: Dr. Wallace Southerland III, Associate Director
McNair Scholars Program, University of Maryland, College Park and
Dr. Maureen Connelly, Frostburg State University

Abstract

This is a conceptual paper to study the effects of external factors on public perceptions of social welfare. The study reviews literature on the history of social welfare during the presidencies of Franklin Roosevelt, Lyndon B. Johnson, and William Clinton. The paper goes on to analyze three factors that play role on perceptions. These factors are values, environmental factors (economics and politics), and the media. Studies and surveys from Gilens, Gilliam, Los Angeles Times, and the National Election study were analyzed and discussed throughout the paper in the context of factors that influence perceptions.

The factors outlined in the paper are analyzed using the theoretical framework of symbolic-interactionism. Symbolic-interactionism states that people act toward things based on the meaning those things have to them; and these meanings are derived from social interaction and modified through interpretation (Blumer, 1969). The model is appropriate for this inquiry because it allows the reader to understand how public perceptions are influenced. Minimal biased methods were used for acquiring literature for the paper. A number of databases in fields such as sociology, social sciences, psychology, and economics were used to acquire literature on the topic. Methods for conducting future research on the effects of experience on perceptions and attitudes towards welfare are provided.

The findings of the paper include the types of factors that play a role on perceptions (values, environmental factors, and media), what factor appears to be most influential (media) and whether public perceptions of welfare has changed over time. Conclusions from the literature are drawn that states that living in society plays a key role in how perceptions are made, but the individual's interpretation of the information should be taken into consideration. The paper ends with recommendations on future research on how experience with welfare affects perceptions and attitudes towards welfare; and future research to better public perceptions of welfare.

Introduction

Problem Statement

The first problem to be addressed in this research is that some people tend to take stances on issues to which they have no connection. There are instances with public assistance, commonly known as welfare, where middle-class citizens take a position on government funding without having insight into public assistance programs. In addition to the first problem, being a recipient of means-tested welfare programs is stigmatizing. Means-tested programs are "programs that provide cash or services to people who meet a test of need based on income and assets" (McCracken, 2005, *Means Tested Programs*). Examples of these programs are Medicaid, Food Stamps, Supplemental Security Income, family support programs, and veterans' pensions. A possible reason these programs are stigmatizing is due to the media's portrayal of traditional welfare recipients as "welfare queens" or persons that abuse the welfare system (Kohler-Hausmann, 2007). Yet a majority of the public is uniformed as to the other types of welfare (e.g. corporate welfare, fiscal welfare and occupational welfare) that caters to middle and upper-class citizens (Abramovitz, 2001).

Purpose of Inquiry and Inquiry Questions

This conceptual paper is intended to identify and understand the factors that affect the public's perception of public assistance through an analysis of welfare history starting with the Great Depression and ending with Clinton's welfare reform in the 90s. Therefore, the inquiry questions for this paper are:

1. What factors affect the public's perception of public assistance?
2. How have public perceptions of public assistance changed over time?

The answer to the inquiry questions will be based on an extended review and analysis of literature.

Significance of the Inquiry

This conceptual paper is significant because it will explore a number of factors that affect the public's attitude towards traditional welfare. This paper will examine those factors and make recommendations for future research

Summary of Theoretical Framework

This conceptual paper integrates public programs and public perceptions which make it necessary to give a theoretical framework on public perceptions. The theoretical model that best explains how perceptions are formed is symbolic-interactionism. Symbolic-interactionism states that people act toward things based on the meaning those things have to them; and these meanings are derived from social interaction and modified through interpretation (Blumer, 1969). The model

is appropriate for this inquiry because it allows the reader to understand how public perceptions are influenced.

Delimitations and Limitations

This conceptual paper is delimited by several elements. First, this paper only reviews three historical periods of social welfare. This is delimiting because it excludes periods before the social welfare system was in place and other time periods where social welfare was being implemented. Second, the theoretical framework uses sociological theories to explain and understand social welfare and how people create perceptions. This is delimiting because when understanding people and public policies one must go into other subjects such as psychology, politics, and economics. This conceptual paper has its analytic restraints. For example, this paper relies on data previously collected by other researchers because of the inability to collect data of my own on the topic. A second limitation was that all the literature on the topics was not explored due to time constraints.

Analysis and Discussion of the Literature

This section will explore the history of welfare in the United States during the Great Depression, Johnson's administration, and Clinton's administration. Using the historical knowledge of social welfare, key factors that influence the public's perceptions toward welfare will be explored. The implications of the literature will be summarized in chapter two also. In addition to the review of literature, chapter two will include a presentation and discussion of the theoretical framework.

Literature on Social Welfare in the United States:
A Historical Perspective

U.S. social welfare dates back to the early colonization period of the mid–1800s. Although no formal system was in place for social welfare, the public expressed concern for the well-being of others. The result of such concerns was an uneven blend of programs and services, such that the beneficiaries of some programs received substantial help and others received very little (Kirst-Ashman, 2007). Communities made decisions about who was worthy to receive benefits and who was not. The decisions made by the community "demonstrated the concept of the *worthy poor* versus the *unworthy poor*; [which meant] the former deserved help and the latter did not (the implication being that they were doing something wrong)" (Kirst-Ashman, 2007, 164). The worthy poor were pitied and, therefore cared for by the community. The community would take in less fortunate families during the year, reduce their taxes, and give them free medical attention. By the late 1820s and 1830s people were beginning to view poverty as a social problem and a potential source of crime, social unrest and long-term dependence, which led to reform of social welfare in the U.S. (Kirst-Ashman, 2007).

The concerns of the pubic reflected those of functionalists. Functionalism, also known as a social systems paradigm, focuses on ways in which social institutions fill social needs, especially social stability (Poore, 1999). The starting point of functionalism is that all societies have certain basic needs, or functional requirements, which must be met if a society is to survive (Poore, 1999). Functionalists are therefore concerned with the contributions that various parts of a society make towards those needs. For example, public assistance is intended to care for those citizens that are unable to care for themselves. Public assistance provides those basic needs to the less fortunate in order to maintain social order.

In the 1930s during the time of the Great Depression, an overwhelming amount of families sought food, clothing, and shelter from local and state governments and private charities (Constitutional Rights Foundation, 1998). As a result, in 1935, the federal government became responsible for the welfare of poor children and other dependent persons. This was America's first attempt at a social welfare state and it remained so for 60 years (Constitutional Rights Foundation, 1998).

The Great Depression and the Welfare State

The purpose of the "New Deal," implemented by President Franklin Roosevelt, was to provide work relief for the millions of unemployed Americans during the Depression. Direct relief was to be a temporary yet necessary measure until those who were employable could be employed (Kirst-Ashman, 2007). The federal government would provide monies to the state governments who would in turn pay for public works projects, which employed those out of work (Constitutional Rights Foundation, 1998). At his State of the Union Address in 1935, President Roosevelt decided to expand public welfare to include federal unemployment, old age insurance, and benefits for poor single mothers and their children. Later that year the Social Security Act was signed into law.

The Social Security Act included what Roosevelt suggested in his State of the Union Address (e.g. old-age pensions, unemployment insurance). The new law also, established a national welfare system (Constitutional Rights Foundation, 1998). Perceptions of welfare recipients also came along with the Social Security Act. To ensure that those who were truly needy, benefited from social welfare programs, means testing was implemented. Means-tested programs are "programs that provide cash or services to people who meet a test of need based on income and assets" (McCracken, 2005, *Means Tested Programs*).

An example of means testing during the time of the Great Depression was Aid to Dependent Families (later named Aid to Families with Dependent Children), which required it's recipients to be unemployed and living below the poverty line. Means testing became a stigmatizing factor in the distribution of assistance and the recipients who were originally intended to benefit, the "worthy widows" were excluded from the scheme (Skocpol, 1995). The government's attempts to offer assistance only to those who qualified molded attitudes about women on welfare. Consequently, the lasting legacy of maternalism has been a stigmatizing program designed to assist only those mothers who needed help while continuing to have

children that who would be dependent on public assistance.

Although the intended goal of Aid for Dependent Children (ADC) was to provide for a sector of society unable to care for itself, ADC evolved into a program that faced hostility for giving to unworthy immoral women. The idea of immoral women on welfare was explored in Gilliam's 1999 experiment. Gilliam conducted an experiment to determine how viewers react to images of African-American mothers on welfare. He found that among white subjects, exposure to elements, such as race and sex, reduced support for various welfare programs, increased stereotyping of African-Americans, and heightened support for maintaining traditional gender roles (Gilliam, 1999). The disqualification of 'worthy widows' meant that the recipients became increasingly single, never marrying and perhaps, should not have been claiming money from the government (Constitutional Rights Foundation, 1998).

Johnson's Great Society

The era that challenges the individualistic attitude of American political culture is the period referred to as the Great Society of the 1960's. President Lyndon B. Johnson initiated the "War on Poverty," with the intent to eliminate poverty and provide a high quality of life for all. The war on Poverty was founded on the idea that what poor families really needed was encouragement and training to acquire needed job skills, allowing them to achieve economic independence (Leiby, 1987). However, the poor faced not only economic hardship, but also psychological and sociological barriers (e.g. discrimination and prejudice) to living successful lives (Leiby, 1987).

In an attempt to address these issues, several new programs were developed at the federal level (e.g. Volunteers in Service to America and Operation Head Start). Noble (1997) argues that the 'window' for reform was opened not via demands from the working class or economic depression but as a result of a 'newly found affluence' and the demands for civil rights from African Americans (Noble, 1997). This era is perhaps the first fully-fledged attempt to move from individualism to community with a little encouragement from the federal government. By increasing its role, the federal government 'could help people help themselves' (Camissa, 1998). This would eventually lead to a decreased need for government intervention, as the development of the community would revert responsibility back to the local level.

In the late 1960s ADC name was changed to Aid to Families with Dependent Children (AFDC) in part to increase public credibility of the program (Mittelstadt, 2005). Eligibility laws on the state level that denied benefits to the undeserving poor (single-never-married-mothers) were thrown out. Therefore, many of the poor who were previously denied assistance were now eligible (Moffitt, 2002). The increasing number of program participants was primarily due to changes in eligibility criteria, yet this shift led to perceptions of increasing dependency among the poor. As the number of participants grew, so did the cost to fund AFDC. Rising caseloads and welfare spending fueled concerns that welfare programs were growing out of control and supporting unacceptable family forms (DeParle, 2004)

Welfare Reform in the Clinton Era

Concerns about social welfare from the 1960s continued through the 1970s and 1980s. During this time conservative politicians portrayed welfare clients as lacking ambition toward hard work and having a propensity to cheat the system (Weaver, 2000). Conservative writers such as George Gilder, Charles Murray and Lawrence Mead spoke of the devastating impact of "learned dependency" and promoted reduction in social support programs (Mittelstadt, 2005). For example, Murray (1988) explored the consequences of custodial democracy by proposing the question, "What constitutes success in social policy?" (p.23). Murray (1988) wondered for example, if "providing food stamps to poor families creates a situation where no young man ever had to worry about whether a child that he caused to be conceived would be fed. Would that really be a better world for children to be born in? (p.23). The thoughts and concerns of conservatives were reflected in the 1990s when Bill Clinton came to office. When Clinton was elected president in 1992, liberals hoped for positive changes in social welfare policy. What Clinton had planned was to "end welfare as we know it" (DeParle, 2004, p.7). Clinton's goals for welfare reform were clear: requiring work, promoting responsibility, and protecting children.

In August 1996, the congress passed and President Clinton signed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA). The passage of PRWORA enacted federal changes to cash assistance programs. The act most notably abolished Aid to Families with Dependent Children (AFDC) and in its place Congress created the Temporary Assistance to Needy Families (TANF) block grant. The effects were: the act gave more discretion over welfare program designs and TANF provided funds to state programs as a block grant instead of funding states through a matching grant like AFDC did. The effects meant that the federal government was no longer in control of welfare and that federal dollars going toward welfare were now limited to a specific amount.

In addition to the TANF block grant, the PWRORA legislation had a number of other provisions that limited the availability of cash assistance and increased the incentives for low-income families to move into work. PRWORA increased federal work requirements by placing mandates on states to do so; it enacted time limits to receive TANF cash benefits to 60 months over a lifetime; and limited access to income assistance programs among target groups (DeParle, 2004).

Although the welfare reform of 1996 primary goal was to address the issue of unemployment and getting citizens to work, the policy also addressed the issue of poverty. Some studies indicate that under TANF fewer children were living in poverty (Chase-Lansdale & Duncan, 2001; Haskins & Primus, 2002), and more single mothers were engaged in paid employment (DeParle, 2004). The welfare reform of 1996 addressed the concerns of conservative ideas by placing restrictions on those who could benefit from social welfare programs.

What affects Americans Attitude toward Welfare?

From research of U.S. history, it is undeniable what factors influence public opinions. Some of the factors will be explored in this paper, such as values, environmental factors, and the mass media.

Values

Perhaps the most important concept in public opinion research is that of values. Values are of considerable importance in determining whether people will form opinions on a particular topic; in general, they are more likely to do so when they perceive that their values require it. Values are adopted early in life, in many cases from parents and schools. They are not likely to change, and they strengthen as people grow older (*Britannica Encyclopedia*, 2008). Values encompass beliefs about religion—including belief (or disbelief) in God—political outlook, moral standards, and the like.

As Worcester's (1991) analogy suggests, values are relatively resistant to ordinary attempts at persuasion and to influence by the media, and they rarely shift as a result of positions or arguments expressed in a single debate. Yet they can be shaped—and in some cases completely changed—by prolonged exposure to conflicting values, by concerted thought and discussion, by the feeling that one is "out of step" with others whom one knows and respects, and by the development of significantly new evidence or circumstances.

An example of a value that may play a role in perceptions towards welfare is individualism. Individualism is a "commitment to the values of hard work and individual responsibility" (Gilens, 1999, p.5). Those who have individualist values believe in the importance of the individual rather than the community and are therefore, less likely to be in favor of public assistance. But most Americans temper their commitment to individualism with the understanding that people cannot always support themselves, and most believe that when individuals are in need the government has a responsibility to help (Gilens, 1999). Gilens (1999) goes on to argue that individualism does not lead to a rejection of government support for the poor, but rather to a strong demand that welfare recipients, like everyone else, share a commitment to individual effort and responsibility.

Gilens (1999) supports his argument with results from a number of surveys conducted on the matter of beliefs about individual responsibility, principled support for government help for the poor and principled support for welfare. One survey reported that 96% of Americans believed that "people should take advantage of every opportunity to improve themselves rather than expect help from the government" (National Election Study pilot survey, 1989). Another survey reported that 88% of Americans "favor the government helping people who are unable to support themselves" (*Los Angeles Times* poll, 1985). A survey conducted by National Race and Politics Study (1991) found that 78% of Americans believe that "when people can't support themselves, the government should help by giving them enough money to meet their basic needs." Gilens work supports the idea that values can influence a person's perceptions of public policy.

Values are supported by the theoretical framework of symbolic interactionism because values are instilled in a person from birth and it is his or her choice to interpret them and act them out as he or she pleases.

Environmental Factors

Environmental factors play a critical part in the development of opinions and attitudes. Most pervasive is the influence of the social environment: family, friends, neighborhood, place of work, church, or school. People usually adjust their attitudes to conform to those that are most prevalent in the social groups to which they belong.

One environmental factor that may play a role in perceptions is economic factors. It is widely presumed that hard times strain the public's generosity of spirit for their fellow citizens. When the economy is growing, it is believed, many citizens are willing to share some of their economic gains with those less fortunate than themselves. Gilens (1999) found that these ideas are not always true. Since measures of public preferences toward welfare spending dated back to 1972, Gilens (1999) was able assess both the claim that the economic problems of the mid–1970s led to greater public opposition to welfare spending and the more general claim that with hard times comes hard hearts. Gilens (1999) provides a double line graph to show the annual change in per capita gross domestic product and public preferences for increasing or decreasing welfare spending. What Gilens (1999) finds is that when the economy was declining in 1973, opposition to welfare spending was low, and when the economy improved briefly in the late 1970s, public opposition to welfare spending increased.

Another environmental factor that influences perceptions is political factors. A majority of Americans identify themselves with the Democrat or Republican parties. Political parties are an important influence on Americans' voting behavior and political attitudes. For people who think of themselves as Republicans (or Democrats), knowing what the Republican (or Democrats) leadership thinks about welfare may influence their own position. For example, former president Ronald Reagan voiced his opposition towards welfare when he said "I believe that the government is supposed to promote the general welfare. I don't think it is supposed to provide it" (Hayward, 1999, par 5). Reagan's conservative ideals where heard throughout the nation and reflected through opinion polls. When Reagan left office in 1992 opposition to welfare spending increased by 28% from 1992 to 1994 (Gilens, 1999). This shows how influential political affiliation can be on attitudes toward public assistance.

The implications of the study of environmental factors suggest that as we interact with society we form a number of ideas and perceptions of the world that can be in favor or in opposition to an issue. The idea of environmental factors such as the economy and politics aligns with the theoretical framework of symbolic interactionism because it show how contact with society influences perceptions.

The Media

Newspapers, radio, television, and the Internet—including e-mail and blogs—are usually less influential than the social environment (Encyclopedia Britannica, 2008), but they are still significant, especially in affirming attitudes and opinions that are already established. The news media focus the public's attention on certain personalities and issues, leading many people to form opinions about them. The mass media play another important role by letting individuals know what other people think.

An assessment of how news media portrayed poverty was conducted by Gilens (1999) in 1999. Gilens analyzed three weekly news magazines, *Time*, *Newsweek*, and *U.S. News and World Report*. The reason Gilens chose these three magazines is because "they are widely read, are national in coverage and distribution, and have been published continuously for many decades…." (Gilens, 1999, p. 111). Gilens' interest was in the perceptions of the racial composition of the poor that magazine readers are likely to form, which is why Gilens' study focused more on the pictures of poor people than the textual information. Gilens' found past research that concluded the impact of news stories and the process by which readers (or TV viewers) assimilate information suggests that people are more likely to remember pictures than words and more likely to form impressions based on examples of specific individuals than on abstract statistical information. In Gilens' study he found that magazines tended to overrepresent African Americans in pictures of the poor. In 1972, Gilens found that African Americans were portrayed to be living in poverty at a rate of 75% when in actuality African Americans only made up 30% of those who lived in poverty. Another finding of Gilens was that during the mid 1970s welfare was being attacked by the media. Times declared that "practically everyone feels that welfare has become a hydra—sustaining many who do not deserve help, breeding incredible bureaucracy and inefficiency, and entangling the nation in ideological clashes over just how much aid should go to whom" (Time, 1975, p. 7). The negative coverage of poverty tended to be associated with African Americans while any positive coverage was illustrated with pictures of whites.

Another study by Gilliam (1999) was conducted to determine how viewers react to images of African-American mothers on welfare. Gilliam assumed that the notion of the welfare queen had taken on the status of common knowledge. The welfare queen, according to Gilliam, had two key components: "welfare recipients are disproportionately women and women on welfare are disproportionately African-American" (Gilliam, 1999, par. 5). Gilliam found that among white subjects, exposure to the elements previously stated reduced support for various welfare programs, increased stereotyping of African-Americans, and heightened support for maintaining traditional gender roles. To come to the conclusion above, Gilliam conducted an experiment in which three groups were presented the same news report, one with an African American character, one with a white character, and one with no image at all. Three different categories of attitudes were addressed in Gilliam's study being: the subjects' attitude about the causes of and solutions to welfare; whether attitudes is related to racial beliefs; and attitudes about gender were numerically measured by the percentage of people who preferred women to play more "traditional" gender roles. The result of Gilliam's experiment was that seeing a women in a the news story actually decreased opposition to welfare spending; and exposure to the welfare queen in the news significantly increased support for negative characterizations of African-Americans by an average of 10 percent

The implications of the two studies on the impact of media on public perceptions are that the media is biased when it presents coverage on poverty and welfare. Though it is fully up to the public to believe these stories, it is clear that the media has an impact on attitudes and opinions towards welfare.

The influence of the media falls in line with the theoretical model because the media feeds the public information. It is the public's choice to accept the information and interpret it the way he or she wants to.

Methods for Collecting and Analyzing Literature

This conceptual paper is based solely on a review and analysis of research and data from the literature. Several methods were used to collect and analyze the literature.

First, research was conducted using the Google search engine. Terms such as 'welfare fraud' and 'opinions towards welfare fraud' were used, and a limited amount of information was found. Information on an experiment on welfare fraud by Gilliam proved promising. Literature from the experiment was used to further the research on opinions towards welfare fraud. The most helpful piece of literature was Gilens' work, *Why Americans Hate Welfare* that contained results of surveys that collected data on the public's opinion toward welfare and factors that influence a person's view of welfare.

Second, research on three databases pertaining to social work and sociology were examined. The databases were SocIndex, JSTOR Sociology, and Social Work Abstracts. When 'attitudes toward welfare' was searched in the Social Work Abstract database, 11 journals/articles were found. Of the 11 found, 10 were deemed to be relevant to this conceptual paper. The articles were retrieved and reviewed. Other terms were searched and sorted in the same manner. The terms searched on each

Terms	JSTOR	Social Work Abs	SocIndex
Social welfare opinions	35470	0	1
Attitudes toward welfare	46291	11	30
Attitudes toward welfare during the great depression	6659	0	0
Attitudes toward welfare during the Johnson administration	7332	0	0
Attitudes toward welfare during the Clinton administration	1889	0	0

database are listed below along with the amount of articles that came up.

Third, books on the topic for this conceptual paper were searched using the University of Maryland catalog. The same terms used in the database search was used to find books related to the topic. Three books were deemed useful and were borrowed from the library for further reading.

Fourth, psychology databases were reviewed to obtain insight on perceptions and how people come to make perceptions in general. Also, a dissertation database, for social sciences, was explored in order to gain insight on how to prepare a scholarly paper.

Since the topic deals with social policy and economics, the last method for collecting literature was using economic databases. The most helpful database was Berkley, where a number of articles were deemed useful for the topic of social welfare and social policies.

Data Collection and Data Sources for Future Research

This is a conceptual paper that is based solely on a review of literature on the topic of attitudes and perceptions towards welfare. For future research a quantitative study would be conducted to obtain data on the public's perception of welfare in 2008. A quantitative method would be used because the research question would be a casual one ("Does being a recipient of welfare affect a person's perception of welfare?").

The procedures for conducting research would be to create a valid instrument that measures perceptions toward welfare. Such an instrument was created by the Los Angelos Times in 1985 that measured attitudes towards welfare. That survey has been validated, and if it could be obtained, would be a good instrument for a future study.

The sample population to be studied would be adults, ranging from ages 30 – 40. A population of that age range would be used because they are more likely to be established in society. The sample would consist of person's who have had some type of experience with the welfare system and those who haven't had any exposure to the welfare system. The sample size would be 30 participants because it would be difficult getting a larger number of participants in a timely manner. As an incentive to participants, those who fill out the survey in it's entirety will receive five dollars for his/her time.

For ethical reasons, participants will be asked to read and sign a consent form stating that they willingly participated in the study and that any answers provided will be used as data and compiled into a report. The participants will also be informed that participation in the survey is completely confidential and voluntary and they are free to leave at any time.

Data Analysis Strategies for Future Research

Since future research will rely on a survey, strategies for data analysis would be to separate the surveys from those who have had experience with welfare from

those who have not.

If the questions from the survey use a likert scale it will be easier to analyze the data. The responses to each question will be tallied in an excel spread sheet. Responses from those who have experiences with welfare will be placed in a separate spreadsheet from the other respondents.

From the responses, conclusions will be made about whether experience with welfare affects a person's perception of welfare and whether those who have experience with welfare have a more positive attitude toward welfare.

Strategies for Minimizing Bias and Error

Strategies Related to this Inquiry

To minimize bias related to this inquiry a number of aspects to the topic was explored before writing the report. General terms related to the topic were searched on a number of databases. The databases were in disciplines such as sociology, social sciences, economics, and dissertations. To limit the amount of bias topics that consistently showed up in literature were included in the paper. The topics had to deal with historical periods in social welfare, sociological theories, factors that influence public opinions, and how public opinions are developed. This method of choosing literature was chosen instead of limiting the paper to the areas of my own interest in order to effectively analyze public opinions toward social welfare.

Strategies Related to Future Inquiry

Response bias will be an issue when conducting future research. Participants will be inclined to give responses that do not reflect their true beliefs. Respondents may deliberately try to manipulate the outcome of a poll by advocating a more extreme position than they actually hold in order to boost their side of the argument. Respondents may also feel under social pressure not to give an unpopular answer. For example, respondents might be unwilling to admit to unpopular attitudes like racism or sexism, and thus polls might not reflect the true incidence of these attitudes in the population. In order to minimize these possible biases, the researcher will not inform the participants of her hypothesis. The researcher will ask participants to be as truthful as possible and as incentives give the participants five dollars once they complete the survey.

Another possible bias may be with the wording and order of questions. In order to minimize this possible bias the researcher will ask enough questions to allow all aspects of an issue to be covered and to control effects due to the form of the question (such as positive or negative wording).

Ethical Considerations for Future Research

A potential risk to those who participate in future research is feeling uncomfortable with the questions. The survey will ask questions that the participant may not want to respond to because they feel it is personal (such as have they ever

been on welfare). Before the study is conducted a proposal for the study will be given to the Internal Review Board (IRB). Until the proposal is approved, no data will be collected. Precautions will be taken to ensure informed consent and to minimize the risks to participants in the research. The participants will all be given a briefing of the purpose of the study and what is expected of them. Those participants who are still interested in participating will be given a consent form to sign that will restate all the information they were previously informed about. Before the survey is administered the participants will be informed about the five dollars for completing the survey in its entirety and that their participation is voluntary which means they are free to leave whenever they want.

Findings from Literature

Literature was useful for understanding the topic for this conceptual paper. The literature enabled me to answer the two inquiry questions.

INQUIRY QUESTION 1:
What factors affect the public's perception of public assistance?

FINDING 1:
Stereotypes aren't consistent with actual attitudes towards welfare.

It is thought that most people who value individualism are not likely to support welfare spending. In Gilens' study of welfare opinions he found that 96% of Americans believed that "people should take advantage of every opportunity to improve themselves rather than expect help from the government" (National Election Study pilot survey, 1989). Another survey reported that 88% of Americans "favor the government helping people who are unable to support themselves" (*Los Angeles Times* poll, 1985). A survey conducted by National Race and Politics Study (1991) found that 78% of Americans believe that "when people can't support themselves, the government should help by giving them enough money to meet their basic needs."

In Gilens (1999) review of studies conducted on the issue he found that when the country was in economic distress in 1973, opposition to welfare spending was low, and when the economy improved briefly in the late 1970s, public opposition to welfare spending increased. Another finding that Gilens gave was that even when the economy is doing well, political factors can impact attitudes towards welfare. In the 1980s when the U.S. economy was in surplus, president Ronald Reagan, made statements in opposition to welfare. Polls following the statements mad by Reagan showed a 28% increase in opposition to welfare spending.

The two environmental factors, economic and political, play a role in public perceptions. Though it is widely believed that during economic hardships, that public support for welfare will decline, it was disproved by Gilens (1999). The idea that political party affiliation influences perceptions towards welfare was supported by research conducted by Gilens (1999).

FINDING 2:
Race and gender play a role on approval of public assistance.

The media is very influential on public perceptions. In Gilliam's (1999) study, it was found that media was biased it also showed that based on these biases, the public showed a preference for welfare only when women and children were involved. In Gilens' (1999) study he found that when race is involved, media portrays welfare in different lights. When a white face is put on welfare, the media promotes the public policy, but opposes welfare when an African American face is provided. This was based on Gilens' observation of negative and positive diction used in news articles dealing with welfare.

INQUIRY QUESTION 2:
How have public perceptions of public assistance changed over time?

FINDING:
Based on literature it is clear that perceptions of welfare have changed over the years.

The best source of information is in Gilens (1999) work where he provides a graph of how public attitudes towards welfare have changed during the time period of 1972 – 1994. When you look at the graph it shows that public perceptions are constantly fluctuating. In 1972 40% of Americans were opposed to welfare spending. In 1983, 25% of Americans were opposed to welfare spending. In 1991 only 15% of Americans were opposed to welfare spending. There's no way of knowing what factor's directly impacted public perceptions, but a number of events happened during this time period that may have had an effect. These factors are a change in presidencies, economic recession and economic surplus, the influence of the media, literature put out on the topic, and welfare policy changes.

Conclusions

The findings led me to draw conclusions about what factors affect public perception towards social welfare and make recommendations for future research. It is obvious that no single factor is responsible for perceptions about welfare. We live in a society were we are constantly receiving information and opinions are being formed accordingly. In order to gain acceptance of public assistance, policy makers must access all the factors that impact perceptions and get those factors to promote social welfare.

Another conclusion that was drawn from this conceptual paper is that some factors have more influence on perceptions than others. Media is able to influence opinions by presenting information in a manner that will get the public to think a certain way towards a topic. The public is in constant contact with the media and in order to lessen the media's influence on opinions something must be done to question the credibility of the media.

Recommendations for Future Research

Based on the literature the following recommendations for future research are below:

Recommendation 1: Further research should be conducted to test whether experience with welfare acts as an influential factor on attitudes towards welfare.

Recommendation 2: Further research should be conducted to better public

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