McNair Summer Research Journal 2005

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About TRiO Programs

TRiO refers to six programs funded by Title IV of the Higher Education Act of 1965. The original Title IV TRiO programs are Upward Bound, Talent Search, and Student Support Services. Even though more programs were added to the grant, the name TRiO has been retained. The additional programs include Educational Opportunity Centers, the Ronald E. McNair Post-Baccalaureate Achievement Program, and a training program for TRiO staff. In general, TRiO programs are focused on providing educational opportunities to first-generation college students who come from low-income families and students with disabilities.

About Ronald E. McNair

Ronald Erwin McNair was born October 21, 1950, in Lake City, South Carolina. He attended North Carolina Agricultural and Technical State University, where he graduated magna cum laude in 1971 with a Bachelor of Science in physics. He continued his education at the Massachusetts Institute of Technology, earning his PhD in 1976. He went on to become a recognized expert in the field of laser technology with the Hughes Laboratory. In 1978, McNair realized his dream of becoming an astronaut. Selected from a pool of 10,000 applicants for the space shuttle program, McNair became the second African American to fly in space. After his death aboard the space shuttle Challenger in 1986, Congress approved funding for the Ronald E. McNair Post-Baccalaureate Achievement Program, which is dedicated to the support and promotion of the high standards of achievement exemplified by McNair. Those who knew McNair characterized him as fearless, determined, and accustomed to applying all available resources to resolving any problem he faced.

The Ronald E. McNair Post-Baccalaureate Achievement Program State University of New York College at Brockport

Designed for first-generation and low income students as well as students from groups underrepresented at the doctoral level, the Ronald E. McNair Post-Baccalaureate Achievement Program at SUNY College at Brockport encourages talented students to pursue a doctoral degree.

The program promotes graduate studies by providing participants with seminars and workshops germane to the pursuit of graduate education, a mentored summer research experience, and opportunities to present their research at professional conferences.
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Dear Readers:

I am pleased to introduce you to the 10th volume of the Ronald E. McNair Summer Research Journal. This journal is a compilation of the work our scholars complete each summer as they learn to conduct research in their chosen field.

Under the guidance of dedicated faculty members, McNair scholars design and implement projects that teach them the fundamentals of creating and using knowledge, and provides them with their first taste of the graduate and professional world they are preparing to enter.

The Summer Research Program takes our students beyond the average undergraduate experience, setting them apart from their peers as it elevates their education to a level not usually available to students pursuing a bachelor’s degree.

I am sincerely grateful to the 40 faculty members who invest so much of themselves in moving our students forward. The expertise and encouragement they provide is critical to the success of our McNair scholars, not only during their undergraduate years, but most importantly when they enter the competitive world of graduate school. The fact that 160 of our 451 McNair alumni have successfully earned master’s degrees, 14 JD’s, three MD’s, and 20 doctoral degrees is a tribute to the quality of the work our mentors expect and elicit from their students. Those involved in nurturing our future professionals in this manner deserve to be highly recommended.

I look forward to seeing our scholars enter the ranks of academia and continue the process of personally investing in future generations, passing on what they have received through the dedication of our mentors, program staff and campus community.

Acknowledgements

The McNair staff would like to take this opportunity to thank Dr. John Halstead, Dr. Timothy Flanagan, and Dr. Susan Stites-Doe who have assisted in strengthening our program this past year. Although the Office of Academic Affairs administers the program, the support base represents a university-wide commitment to achieving our program goals. The United States Department of Education, other TRiO Programs, the Research Foundation and the entire institution collectively lend their efforts to the program’s success.

Barbara J. Thompson
Project Director
Ronald E. McNair
Post-Baccalaureate
Achievement Program
Recent research has shown that adherence to medication is an important factor when it comes to patients with HIV/AIDS; it minimizes complications of secondary diseases like renal and heart disease as well as thrush. It is especially important for patients living with HIV/AIDS because of the threat for viral resistance development and the development of drug resistant strains.

For the purpose of this study, adherence means taking medication at the correct time and dose, keeping clinic appointments, having tests done when needed, and keeping up-to-date on other health maintenance activities such as yearly physicals, flu vaccine and good nutrition. Also for the purpose of this study, patient-nurse engagement means a relationship between the patient and nurse based on mutual respect, caring behaviors, and trust that results in the patients feeling well-cared for by the nurse. There is no pharmaceutical involvement in this study. It is being practically funded by the Delta Pi Chapter of Sigma Theta Tau International Honor Society of Nursing.

The purpose of this non-experimental quantitative study is to examine if there is a relationship between the way patients feel about their nurses and whether their nurses have an effect on how they take their medications and keep their appointments. The hypothesis is that there is a relationship between the way patients feel about their nurses and how well HIV/AIDS patients take their medication and keep their appointments. This study was conducted by using a convenience sample of 70 patients with HIV/AIDS. They were recruited by using word of mouth, flyers and letters requesting support form healthcare leaders in HIV/AIDS care. The subjects were self-referred in two north-eastern cities in the United States (Albany, NY, and Boston, MA).

The subjects were to participate in this investigation by completing a questionnaire consisting of three tools. The first tool is the demographic form, which consists of questions such as age, gender, education, financial status, sex, sexual preference and the number of people living in the household. The second tool is the Oncology Patient Perception of the Quality of Nursing Care Scale, which measures the quality of nursing care from the patient’s perception. It also comprises four subscales that includes responsiveness, individualization, coordination and proficiency. The third tool is the Medical Outcome Study. This form is a general health survey that is for comprehensive and psychometric information yet short enough to be practical for use in large scale studies of individuals in an outpatient setting. These tools were chosen because they are standardized and have proven reliability and validity related to the major variables, which are engagement and adherence.

All data was anonymous. The data obtained from the questionnaire were analyzed by using the Statistical Package for the Social Science version 11.0 for Windows 95/98. An exploratory and descriptive statistical analysis will be used to examine the patterns in individual scores as well as exploratory data analysis that will consist of frequency distribution of demographic variables. Results will be reported in aggregate form.
This study examines global and event-level relationships between substance use and sexual HIV risk behavior among gay men. It was expected that substance users would be more likely to report HIV risk behavior and sexual episodes that included substance use. In addition, quantity, frequency, and choice of substances used in the last month compared with those used in the sexual episode were examined. As part of an ongoing study, self-report surveys were distributed at the gay pride parade in Buffalo, NY. A total of 138 surveys were returned from gay men. Results indicated that the relationship between alcohol use and risk over the last year did not reach significance, whereas the relationship between other drug use and risk behavior was significant. Drug users had twice as many unprotected sex partners in the last year. However, neither alcohol nor drug use in the last episode were related to UAI in that episode. These findings were consistent with the review by Leigh and Stall (1993), suggesting that global relationships between substance use and risk have been stronger than situational and event-level relationships.

Introduction

This study examines global and event-level relationships between substance use and sexual HIV risk behavior among gay men. In 2005 there have been a number of articles in the popular press about the connection between high-risk sexual behavior among MSM and substance use. While the focus of this research is to establish a correlation between these two variables, there is one drug of particular concern.

Two recent articles in The New York Times (2005) and Newsweek (2005) focused on crystal methamphetamine use among MSM population. The Newsweek article quoted the Center for Disease Control and Prevention as saying that “men high on “Meth” are four times more likely to engage in high risk sex.” The article also noted the false sense of security that has accompanied the introduction of retroviral medications since the late 1990’s and how this has affected the attitude towards sex in many uninfected men and the younger generation.

The New York Times states “nationwide methamphetamine is the second most frequent reason for seeking substance abuse treatment behind alcohol” and that frequently it is used with viagra to help prolong unprotected sex with multiple partners. High risk sexual behavior and HIV is increasingly affecting MSM of all ages from San Francisco to New York.

These popular press articles mirror scientific literature, which has examined the relationship between HIV risk behaviors and substance use with methamphetamines being a more recent focus. Therefore, the main objective of this research is to further examine the relationship between substance use, including methamphetamine and sexual HIV risk behavior among MSM.

This research has evaluated the relationship in several ways, which include 1) Global relationships: Do substance users engage in more risk? 2) Event-level relationships: Do situations involving substances involve more risk? 3) Event-level relationships: Do events differing only by substance use, for the same individual, involve more risk? This design is the closest to establishing causality, given that a true experiment would be impossible.

In a study of 4,295 men, 48.0% had receptive anal sex while 54.9% reported having insertive anal sex in the last 6 months (Koblin, Chesney & Coates, 2003). The sample consisted of HIV negative men from 6 major cities: Boston, Chicago, Denver, New York, San Francisco, and Seattle. In the examination of the different regions they reported high levels of use of amphetamines, cocaine, marijuana, hallucinogens, and alcohol use. This report showed a strong association between drugs and alcohol use, with substance use being a more recent focus.
and high-risk sexual behavior. One of the main conclusions of this study is the need for interventions targeted at MSM and the need to focus on drug use and high-risk sexual behavior with sex partners with unknown or positive status.

In a study conducted by Hirshfield, Remien, Humberstone, Walavalkar & Chiasson (2001) they found that the number of unprotected anal intercourse (UAI) incidences increased dramatically when substance use was involved. In addition to substance use, the authors cited complacency about safer sex practices related to attitude changes toward HIV due to antiretroviral medications now available. This online survey of 2,916 gay and bisexual men in multiple regions of the U.S. found that emerging new drugs such as crystal methamphetamine and Viagra along with availability of meeting new partners via the Internet were significantly associated with high-risk sexual behavior.

In a recent study, from the University of British Columbia (Rusch, Lampinen, Schilder & Hogg, 2004), the research question was not the relationship of substance use and high-risk sexual behavior, but which drugs were associated with insertive unprotected anal intercourse (IUAI) and receptive unprotected anal intercourse (RUAI). The study consisted of 261 men who have sex with men (MSM) ages 18 to 30 from 1997-2002. In their examination of situation specific drug use RUAI appeared to be directly related with crystal methamphetamine, while IUAI was associated with GHB (gamma hydroxybutyrate) and special K (ketamine hydrochloride). Essentially, the study found that the type of drugs used correlated with specific roles of sexual behavior.

Reback & Grella (1999) found that 37 percent of participants in this study reported having used methamphetamine in the last 30 days and that they were less likely to use condoms when high. Methamphetamine was described as a vehicle for having continuous sexual encounters with multiple sexual partners. All methamphetamine users including those who exchange sex for drugs or money viewed it as a functional benefit because it allowed them to engage in sexual activities for long hours. This study included 908 gay and bisexual drug users from a street outreach HIV risk-reduction program in Hollywood, California, over a 12-month period.

In another research article by Frosch, Shoptaw, Huber, Rawson & Ling (1996), high-risk behaviors were examined as they relate to methamphetamine use. In this small sample (n=16), 62.5% of participants reported having IUAI in the last 12 months. Participants referred to methamphetamine as “the sex drug” because it is believed to increase sexual drive and lead to “marathons”. Also stated in the study was that methamphetamine use can lead to what is known as “crystal dick” an inability to achieve a full erection creating “instant bottoms” which can lead to high risk sexual behaviors. All participants of this study completed a detailed inventory of HIV related risk behaviors (NIDA/ WAVE survey) and it found a strong connection between high-risk sexual behaviors and methamphetamine use.

In contrast, Leigh & Stall (1993) examined the causal relationship between alcohol and/or drugs and high-risk sexual behaviors and had difficulties in reaching causal conclusions in their studies. But despite a lack of causal evidence it was clear that a positive relationship existed between UAI and substance use. What was unclear was the level at which they were linked in global, situation-al, and event analyses. Specifically, one limitation of the design was its inability to determine causality between substance use and risk behaviors. In their article methodology, interpretation, and prevention were the issues examined. These design limitations, although identified in the early nineties remain a problem in the studies mentioned above, which identify significant relationships between drug use and risk behavior, but cannot statistically infer causality.

Hypotheses

The present study examined several hypotheses regarding substance use and high-risk behavior including quantity, frequency, and choice of substances used. Specifically, 1) the global relationship between alcohol use and HIV risk behavior, over the last year. 2) The global relationship between other drug use and HIV risk behavior, over the last year. 3) The event-level relationship between alcohol use and HIV risk behavior, in the last thirty days and 4) the event-level relationship between other drug use and HIV risk behavior in the last thirty days.

Methods, Sample

In the most recent survey from 2005 we received a total of 338 completed questionnaires. Of these surveys we were able to use a total of 138 from gay and bisexual men for this research. The total sample represented 81.2% Caucasian, 5.3% African American, 6.0% Latino, 2.3% Asian, 2.3% Native American, 3.0% other ethnicity. The average age of respondents was 40.5(SD = 13.709) and included a range of participants from 18 to 72 years. The average number of years of education was 15.4 (SD = 2.379) with the median and mode both at 16 years, and included a varying range of education from 12 to 24 years. The average annual income was $42,211 (SD = 27,175) with a range of $0 to $150,000. The relationship status of subjects was 50.4% single, 17.5% in a non-monogamous relationship, 28.5% in a monogamous relationship, and 3.6% in a relationship without the discussion of monogamy.
**Instrument**

In this self-report, paper and pencil survey, a multitude of questions were asked, some of them being sexual preference, HIV status, substance use in a typical month and also in regard to most recent sexual episode, sexual practices in the last year and most recent episode, if condoms were used, etc.

**Procedure**

Volunteers at the Gay Pride parade and rally in Buffalo, NY distributed about 900 surveys in June 2005. Each survey had a postage paid stamp and could be mailed in. As an incentive, if the questionnaire was completed at the Gay Pride rally, it could be turned in for a free can of soda or a bottle of water. A total 338 completed surveys were returned from the rally and though the mail.

**Results**

HIV Risk Behaviors were looked at within the most recent sexual episode and during the last year. In the most recent episode 19.3% reported having (UAI), during the last year the number of (UAI) partners were, 55.9% had zero (UAI) Partners, 23.7% had one (UAI) partner, and 20.3% reported having two or more (UAI) partners, with a mean of 1.03 (SD = 2.021), and median and mode at zero. 5.4% of the men reported being HIV Positive for the AIDS virus.

Substance use in the most recent episode was recorded at 40.2% sober, 31.1% used alcohol, 4.5% used inhalants, 5.3% used cocaine/crack, 11.4% used marijuana, 1.5% used hallucinogens (1.5% ecstasy, 0.8%PCP, 0.8% LSD), 1.5% amphetamines (0.0% methamphetamine), 0.8% used sedatives, 0.8% used opiates, and 0.8% used other drugs.

Statistics for substance use in a typical month were 85.5% used alcohol, 14.2% used inhalants, 9.3% used cocaine/crack, 26.3% used marijuana, 3.4% used hallucinogens, 4.2% used amphetamines, 3.4% used sedatives, 3.4% used opiates, and 4.2% used other drugs.

In combining the results and testing the hypotheses the conclusions are:

The global relationship between alcohol use and HIV risk behaviors during the last year found no significant difference between drug users (M = 1.56 UAI partners, SD = 2.8) and non-drug users (M = 0.71 UAI partners, SD = 1.3). The event-level relationship between alcohol use and HIV risk behaviors during the last sexual episode found that no significant relationship existed ($X^2 = 0.135$, df = 1, $p = .713$). The event-level relationship between drug use and HIV risk behaviors during the last sexual episode found that no significant relationship existed ($X^2 = 0.020$, df = 1, $p = .889$).

**Discussion, Summary**

In the previous literature cited we found consistent global and situational relationships did exist between alcohol and/or drug use and HIV risk behavior. This study did find a global relationship between other drug use and HIV risk behavior (double the number of annual UAI partners among drug users versus none drug users).

No event-level relationships were found between alcohol and/or drug use and HIV risk behavior, and no global relationship was established between alcohol use and HIV risk behavior.

**Limitations**

There are important limitations to our study. First, selection bias—es limits external validity because of self-selection of participants. Second, because of the gay-identified recruitment venues we were unable to get a true sample of men who have sex with men. Third, the sample was highly educated with an average of 16 years education and included no high school dropouts. Next, there were a limited number of ethnic minorities because of the large Caucasian sample. Also, because of the limited sample size the statistical power is reduced and as with all self-report surveys there are limits on reliability and validity. Finally, because of the nature of the research causality cannot be established between global and situational relationships.

**Implications, Research**

To avoid limitations in replication studies a more diverse sample should be used. One of the main problems with the current study is sample size and its lack of diversity. This limits the results in regard to the general population of men who have sex with men. Also, if drug use isn’t causing HIV risk behavior, what is the third variable? With further research this third variable such as poverty, intoxication, addiction, prostitution, self-esteem, sensation seeking personality, etc. may be revealed.
Prevention

Designing and targeting prevention should be aimed at the drug user. But the causal relationship between drugs and risk should not be implied. Idiosyncratic examination of factors leading to HIV risk behavior among these drug users need to be included to help shape prevention and thus helping to discover this unknown third variable.

Conclusions

Alcohol had no relationship to HIV risk behavior at either the global or event-level. Also, event-level drug use was not related to HIV risk behavior. Drug users are at higher risk of engaging in more HIV risk behavior than non-users at the global level. There is some difference for drug users that yields HIV risk behavior that is not related to drug use in the sexual situation.

References


West African Female Beauty: Caught Between Two Worlds

Kayla L. Dorsey
Faculty Mentor: 
Tom O. Kargbo, PhD
African & Afro-American Studies

The concept of beauty has been a constant phenomenon and a changing pre-occupation among females of various cultures. Like the continent itself, West African women have mirrored Africa’s historical transitions through changes in their physical appearances. The advent of colonialism with its emphasis on westernization became the most decisive period in West African history, even affecting the ways in which women perceived and expressed themselves aesthetically.

No matter how beauty is perceived, there is clearly no universally acceptable definition. Every geographical region and/or culture of the world has their own distinct perception and cognition of physical attractiveness. However, whereas standards of beauty vary from culture to culture, it is generally agreed that beauty has outer and inner components. The former emphasizes a person’s physical appearance and the latter focuses on inner qualities, which are radiated and reflected through one’s character, personality and mentality. Physical beauty is visible and can be easily judged. Beauty can thus be defined as aesthetically pleasing, appealing and attractive to the eye of the beholder.

This study is based on the hypothesis that the western world has tremendously influenced West African females’ concepts of beauty. The research will give an evaluation of West African women’s conceptions of beauty and determine whether, and to what extent they have been influenced by westernization. It gleans from the scantily available literature and my stay in Ghana, West Africa, which allowed me to observe and participate in beauty activities. Information has also been derived from qualitative research. Additionally, it examines the scope of such influences by focusing on traditional, colonial and post-colonial periods, comparing and contrasting concepts of beauty as understood and perceived in the West African sub-region, stretching from Senegal to Nigeria. Not only did this region experience colonial occupation, but it also endured the inhumane slave trade, both of which dehumanized Africans and deprived them of their history, culture and ultimately affected their own self-perception.

Furthermore, the literature pertaining to beauty and the West African female is very limited. Much of what is available on Africa is written by Westerners whose negative portrayals of anything non-western are very well known. However, little has been documented that provides an accurate, detailed and more positive physical description and portrayal of West African women across time.

Since there is such a dearth of information on West African women and the perception of beauty, one of the aims of this study is to provide an efficient contribution to the research on these very significant and diverse women.
Methodology

Although there have been studies examining the preference of the ventrogluteal vs. dorsogluteal sites for IM injections, there is a paucity of recent work done. A meta-analysis was employed to determine which injection site is preferred and why. Thirteen articles were included in the final analysis. The eligibility criteria established were to include any article that assessed or compared the effects of the ventrogluteal vs. dorsogluteal route for IM injection, in relation to: medication absorption, absence of major blood vessels and nerves, ability to easily locate anatomical landmarks, uniformity of adipose tissue and the absence of pain and/or discomfort. Using these eligibility criteria, the articles were coded and an inter-rater reliability was performed.

Results

The results indicate a preference and recommendation for the ventrogluteal site due to ease of location based on anatomical landmarks, uniformity of adipose tissue, absence of major blood vessels and nerves and better absorption of medication. Ventrogluteal injections are administered into the Gluteus Medius and Minimus, whereas the dorsogluteal injections are administered into the Gluteus Maximus. The ventrogluteal site can be found by placing the person in a side lying position, placing the palm on the greater trochanter above the patient’s hip, extending the index finger to touch the ASIS, and stretching the middle finger to form a “V” as far as possible along the iliac crest. The injection should then be administered at a 90 degree angle in the middle of the “V.” The ventrogluteal site also provides a relatively consistent depth of adipose tissue, 3.57 cm, as compared to the dorsogluteal site, which ranges from 1-9cm in depth. The ventrogluteal site is free of any major blood vessels or nerves. Sciatic nerve injury may result from administration of an injection into the dorsogluteal site. Better medication distribution is directly related to successful penetration of the muscle. This has been associated with administration into the ventrogluteal site because of the uniformity of the adipose tissue. Many of the articles reviewed for this meta-analysis, utilized information gleaned from common earlier studies. Five of the articles cited information gained from a single earlier study; six of the articles cited yet another earlier study; and five articles cited a third earlier study.

An informal survey of four health care facilities was conducted to determine the most frequently used site. Although nursing literature recommends using the ventrogluteal site, it is rarely, if ever, implemented into practice. In fact, the only site used by those interviewed was the dorsogluteal site. This could be due in part to outdated teaching methods in which the IM site was identified by visually dividing the buttock into four quadrants and administering the injection into the upper-outer quadrant.

Recommendations

Current research is needed on the advantages and complications of administering IM injections via the ventrogluteal vs. dorsogluteal, as well as an evaluation of the most frequently used site and why it is being chosen. The investigators recommend that teaching sessions in a skills laboratory be held directed at current staff and students to implement a change of practice.
Mathematicians have always looked for devices that would help them accomplish specific tasks. From the simple abacus to the modern supercomputers, these tools have assisted them in numerical calculations, drawings, and more recently in symbolic computation and analysis.

The tool I used for my research was the computer algebra system Maple 10. The developers of this powerful mathematical software describe it as “the ultimate productivity tool for solving mathematical problems and creating interactive technical applications.” The graphic capabilities and the friendly interface were the main features that made me select this software over other symbolic computation systems.

In this project I studied fractals with the help of Maple. The French mathematician Benoit Mandelbrot introduced the word “fractal” in 1975; the term comes from the Latin “fractus”, meaning “broken.” Although the beauty of fractal images is captivating, in my work I focused on the mathematical aspects of these interesting objects.

There is no precise mathematical definition of a fractal, but the self–similarity structure of its image is a defining characteristic. This means that if we divide the whole into parts, each part will be similar to the original, and this occurs at all scales. From the point of view of classical geometry, we notice another intriguing property: an infinite perimeter encloses a finite area. Some examples of natural fractals are: trees, ferns, mountains, clouds and coastlines.

My research consists of three parts. In the first section I examined the properties and the dimensions of fractals. I started by analyzing Von Koch snowflake, Von Koch Island, Mandelbrot and Julia sets, Sierpinski’s triangle and Sierpinski’s carpet. For all these objects I have also computed the fractal dimension. This quantity is a number that shows how irregular, or rough, a fractal is. While the dimension of a line is 1, of a plane is 2, and of a cube is 3, fractals can have fractional dimensions. For example, the dimension of the Koch snowflake is approximately 1.2618.

I dedicated the second part of my project to different methods of generating fractals. In creating two and three-dimensional fractal images I wrote the Maple program for the recursive formulas that defined the fractals and then I used the plot and the plot3d commands to get the images. I also came up with new patterns by changing the original functions. Such an example was based on the “logistic equation,” the equation that models population growth.

The third part of my research contains applications. As I have mentioned before, the fractal dimension gives information on the complexity of the fractal structure. Based on this observation I computed dimensions and I compared different patterns.

Other applications that I explored dealt with the links between fractals and chaos. I illustrated this connection with Sierpinski’s triangle and the chaos game.

Modeling the real world is a fascinating and challenging subject. Fractals have stimulated my interest in this direction and further research will focus on applications of fractals in astronomy, biology, chemistry, economy, geography, and music.

Michelle Osei
Mentor:
Mihail Barbosu PhD
Mathematics
Traditionally, pensions have been payments made in the form of a guaranteed annuity to a retired or disabled employee or to a deceased employee’s spouse, children or other beneficiaries. A pension that is created by an employer for the benefit of its employees is usually referred to as an occupational or employer pension. The steel industry, the airline industry and now the automobile industry are all seeking relief from their pension obligations. Like so many legacy corporations with pension plans, the commitment to pension payments is driving these industries out of business. This leads us to the problem of today; with health care rising every year and people living longer, the US corporations are faced with competing in a global environment against companies that do not have these same debt obligations. The past obligations include caring for past employees who no longer are of value to the company. With labor costs around the world at half or even a third of American corporations, US companies are competing globally at a disadvantage.

The purpose of this study is to contribute to a better understanding of the effects of pension obligations on American companies and analyze the business model under which they operate. This study was conducted through interviews, collecting data, periodicals and literature reviews. This study is attempting to determine the feasibility of American companies who keep their current system of pensions as opposed to having a federalized system that will manage and maintain the process of collecting and controlling the funds.

For instance, the first time pensions came under federal law was when the Studebaker Car Company closed its plants in America. Studebaker had a pension plan for its employees, and when sales declined, the company decided to move to Canada. Although the company was no longer in the US, the employees thought they had a pension. However, when they tried to draw their pensions, they were shocked to discover that the funds were not there. As companies look at their business models, they are often forced to make hard decisions regarding the use of resources, including pension payments.

Herman Perry
Mentor:
Jeffrey C. Strieter, PhD
Business-Economics

Should Pensions Be Federalized?
Last semester I participated in a theater arts program at the Eugene O’Neil National Theater Institute, which included a two-week trip to St. Petersburg, Russia. Before leaving, the minority students were told that Russia is not as open as America and to be careful when traveling alone. Nevertheless, I was not prepared for the racist experiences I was about to encounter.

For instance, one particular evening I came across a Russian male who blurted out, “Hey Nigger girl.” Later I was told that in Russia the word ‘nigger’ replaces the word ‘African American.’ This became yet another label I was forced to carry, along with that of ‘student’ and ‘female.’ Another experience involved an encounter with a group of intoxicated Russians who yelled: “Hey girl, black girl…you wanna’ come with us.”

Fortunately, there were also pleasant experiences, such as our very first night in Russia when the Russian students performed an American play titled *Our Town*. They were so precise, so disciplined that ignoring the language barrier became effortless. That night both the Russian and American students exchanged something very special: respect for culture, art and each other. The last few days proved to be the best. While my fellow students and I were listening to some music, one of the musicians approached me with an unsettling comment, which eventually became a revelation. “You very beautiful, this is the first time I meet someone from another continent.” This statement shocked me to the core because of its validity. This musician had never seen a person of color before.

It was because of this trip that I fully realized my dissimilarity in society. After returning to the States, I decided that this story needed to be told. The last week of the program I prepared a project on identity, a spoken word piece entitled “Identity in Numbers,” which focuses on identity as represented by numbers i.e. Social Security number, credit card number and college ID. This piece eventually became the 45-minute spoken word artistry entitled “Identity Unmasked…Who ‘I’ Be.”

There are five stations. The first station is represented by an identity equation (A + 0 = A + 0 = A). Essentially, it is a representation of human identity comprised in an equation. The second station represents identity in human form. In this station the artist travels through cellular activity, Mitochondrial DNA and organ/bone quantity. The next two stations are reflections of society and the continuation of “Identity in Numbers.” Thus, the audience views the deconstruction of labels such as tracking, privacy, SSN, ID, mandatory and individual. The last two stations are representations of cultural identity; it is a combination of a short dance piece and spoken poetry through a childhood reflection. The piece ends with a culmination of all the stations reacting together, eventually breaking the machine and producing one label, that of the individual.

My experience in Russia made me realize that I was not only a student, but also an artist, a woman and an African American. These labels were just as transparent when I returned to the States. The purpose of this one-woman show is therefore to enlighten the audience on identity and the extent to which society’s perception can deter one’s view of oneself.
This study focuses on the adaptation of Bosnia’s refugees to American culture and its social, economic and political systems. The purpose of this research study is to explore how Bosnians are adapting through assimilation, from an initial period of separation from mainstream society to a stage of accommodation, and to a final stage in which the values and life styles become similar to the majority population.

The United States continues to become an increasingly diverse society. According to the 2003 Office of Immigration Statistics, in the past 10 years, approximately 350,000 refugees from Bosnia-Herzegovina have settled in the United States. The economic adaptation of refugees is the central concern of US refugee resettlement programs. This concern derives from the fact that refugees face greater difficulties adapting to their new lives compared to immigrants. There is a difference between refugees and immigrants. Refugees are people who have fled their countries due to fear of political, religious or ethnic persecution. Immigrants are people who have voluntarily left their countries in search of better economic opportunities or family reunification (Office of Immigration Statistics, 2003).

My interest in this area was developed as the result of having been a refugee for 12 years, living in five different countries. There are several studies on health care and mental health interventions after resettlement in the United States. However, there are few studies on refugee adaptation to American culture among Bosnian refugees. This particular study focuses on the effectiveness of refugee resettlement programs in refugee adaptation. The Refugee Resettlement Match Grant Program in Rochester, New York is a public/private partnership between a voluntary agency and the Office of Refugee Resettlement under which the government and a local community share refugee resettlement costs.

The unit of analysis is adult Bosnian refugees in Rochester, New York. The concept is the effectiveness of the Refugee Resettlement Match Grant Program in the adaptation of refugees to US culture. The independent variable is the Refugee Resettlement Program Service, and the dependent variable is refugee adaptation. Extraneous variables include coping with cultural shock and disconnection from country of origin, self-esteem, history of war trauma, type of sponsorship, and degree of motivation to adaptation.

Maturation or the passage of time will be different because some Bosnians arrived directly from Bosnia to the US while some arrived from other countries. Those who already experienced some kind of refugee programs process adaptation to US culture differently. War experience and trauma also differs; these are important limitations that should be taken in consideration.
An Experimental Evaluation of the Order of Lecture and Application

When arranging the material for a class presentation, a presenter considers many different aspects to maximize learning. In presenting the material, some features may be emphasized to direct the learner’s attention to important parts of the lesson. Information may be presented a number of ways — such as using didactic lecture or simulation software. According to Gagne and Briggs (1988), “Instruction is a set of events external to the learner which are designed to support the internal process of learning” (p. 352). The type of instructional activity or the sequence of presentation of the information may affect the student’s learning. It is useful to use examples of the instructional material to fully engage the students in the learning process (Palmere, 1983). Gagne and Briggs have indicated that “retention and transfer are likely to be enhanced by presenting information in words, diagrams and in combination of the two” (p. 352). The purpose of this study is to compare the effectiveness of two instructional strategies that differ in terms of sequence of instructional material and format type.

This study compared the effectiveness of simulation software (SIDD) versus a didactic lecture to teach with 11 SUNY Brockport students in an upper-level Applied Behavior Analysis class. The participants were randomly assigned to one of the two conditions: lecture then SIDD vs. SIDD and then lecture. Each of the participants completed a pretest and a midtest after the introduction to one of the two learning materials: SIDD or lecture material. A posttest was delivered following instruction on both materials.

Students preferred the SIDD software to the lecture. Participants in both conditions scored 50 percent on a pretest that tested their knowledge on functional assessment; in the midtest the condition SIDD vs. lecture scored only two percent higher than the second condition lecture vs. SIDD. On the posttest the SIDD-Lecture group performed better than on their pretest. Additionally, the SIDD-Lecture group did better than the Lecture-SIDD group on the posttest. However, these findings are inconclusive because of the small number of students who participated; moreover, some students dropped out of the study because of technical difficulties while using SIDD. We are currently in the process of acquiring new students for a new study using the same content to conduct a more conclusive analysis of the study.
Without the confrontational protests or media scrutiny, one would think that book banning has all but disappeared in this country. However, the American Library Association (ALA) Office for Intellectual Freedom has "documented more than 6,000 [book] challenges in the United States between 1990 and 2000." Most teachers and librarians won’t acknowledge that they self censor so we don’t know how deep or widespread censoring is," according to the ALA.

These statistics indicate how well democracy is working in our country. While some would consider these statistics in a negative light, instead I propose that it is a sign of active citizens and groups exercising their rights. Still, there is a genuine problem associated with these statistics that needs to be addressed. Namely, while I support the rights of individuals and groups to assert their opinions, I do not believe they should have the power to inflect their beliefs on everyone else. This is the heart of the problem of book banning. How do we create a system that addresses all sides of the issue equally?

I view this controversy from three different perspectives: as a college student, a parent and a soon-to-be educator. It is from these vantage points that I have focused my research. From the viewpoint of a college-level student, I propose little to no censorship. The assumption here is that a college student is educated and therefore able to decide for his or her self which materials offend their individual belief system. From the standpoint of a parent, however, I do not believe children are mature or educated enough to protect themselves from offensive or harmful materials. Therefore, I believe the responsibility falls on parents and educators to control the type of materials that students K-12 can have access to. From my view as a future educator, I believe it is my responsibility to communicate with parents to give them the opportunity to have a voice in their child’s education.

Taken all viewpoints of this issue into consideration, I propose the following solution. First, it is clear that each community must decide for their individual school districts what the role and function of the school system is. For those community members who are unable to form a consensus, I propose that alternative materials be made available. Then, having gathered the input from the community, those in the field of education must speak about how those goals can be best taught and supported from the aspect of an educator. In other words, all interested parties must have a voice in the decision making process.

In almost every contemporary controversy, there are the extremists who are unwilling to accept compromise; instead it must be their way or not at all. Still, I believe over time this solution will become the “norm” and should alleviate the majority of the controversy surrounding this issue.
Technology puts many organizations in the lead for success. The more technologically advanced an organization, the more of an advantage that organization has. The purpose of this research project is to define and understand virtual organizations. Many organizations use the term “virtual” because they believe that an increase in their technology usage or the creation of virtual teams means a change in their organizational structure and/or operational method. Since there is no single, clear definition of what a virtual organization is, being virtual can cause confusion to organizations looking to become a virtual entity. The term virtual contains the idea of being geographically dispersed, culturally diverse and technologically dependent. The problem with being a virtual entity is that many virtual organizations aren’t truly virtual organizations. The term virtual is used loosely and therefore any organization can become a virtual organization without clearly defining its virtual-ness. The techniques these organizations use to become virtual entities are not adequate to form such virtual organizations and therefore it is important that a definition be created.

The first step is to define attributes of virtual-ness and in turn compose a definition. Defining attributes of virtual organizations include finding what makes up an organization and what makes a virtual entity virtual. The two ideas together help form a clearer definition of virtual organizations and their levels of virtual-ness. Researching guidelines taken from other documents will help form an understanding of what virtual-ness consists of. Thus, a definition can be rendered and used as a guideline for more organizations that wish to become virtual organizations. This research will therefore help prove or disprove the new definition of a virtual organization and its virtual-ness.

Although the particular organization that will serve as a test case for this project has levels of virtual-ness not yet determined, it is believed that the organization will have some levels of virtual-ness. However, it will not be a complete virtual organization because it will not fit within the definition of virtual-ness. Making an organization fit within the context of the new definition will be a challenge. To find even one virtual organization that does not completely fit into the definition proves that a clear definition of a virtual organization is needed to improve the communication between organizations and the business world.

In general, defining virtual-ness and virtual organizations can lead to more clarity of what is included in being a virtual organization. More specifically, it will provide comprehensible insight for organizations striving to become virtual entities. The final definition will allow an organization to understand what is involved in becoming a virtual entity. It also helps an organization define itself as complete virtual organization or decide its level of virtual-ness.
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