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The artwork on the cover was created by our Executive Support Specialist, Mrs. Barb Yeager. It is adapted from a photograph of the 13 Winthrop McNair Scholars who participated in the 2017 Winthrop McNair Summer Research Experience.

The Winthrop McNair Research Bulletin

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Volume 4

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Gloria Jones (Dean), Cheryl Fortner-Wood (Director), Barb Yeager (Executive Support Specialist), Ashley Watson (Graduate Associate), Matthew Hayes (Stats & Methods Coach), and Stephanie Bartlett (Head Writing Coach & Journal Editor)

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Shifting the Margins: Music Educators' Self-Reported Inclusion Practices for Marginalized Students in Southeastern Public High Schools

Frances "Ana" Barkley
Scot Rademaker, Ph.D. (Mentor)

ABSTRACT

There exists a significant underrepresentation of racial minorities, low-income students, and English Language Learners (ELLs) in the average American music program (Elpus & Abril, 2011; Hoffman, 2011). Factors that perpetuate this underrepresentation include cultural homogeneity of music educators, and a Eurocentric approach to music education that does not validate the musical skills of students from other cultures. This study examines the self-reported inclusion, diversification, and accommodation strategies of public high school music teachers in the southeastern United States. This study explores what measures music educators are taking to combat underrepresentation, and to what extent they are prioritizing inclusion. This study seeks to understand the role of the music educator in directing marginalized groups into music programs. Music educators, of any music class taught, from roughly fifteen of the largest public high schools in twelve southeastern states were recruited to share their experiences in an online survey. Results indicated that, although there was a theme of deeper commitment to including low-income students, music educators lack a sufficient toolbox of accommodation strategies for marginalized groups. These findings could possibly direct music educators toward designing equitable public music curricula that is equipped to serve all students in future classrooms. These findings also implicate that reforms in conventional music programs toward student-service, rather than product-centered, may increase diversity in participants.

INTRODUCTION

The purpose of this study was to examine strategies of public high school music teachers in 12 southeastern states that aim to include marginalized groups in music instruction. The national demographics of music classes do not represent the national general student populations (Elpus & Abril, 2011). Therefore, this study explored the following questions: (1) Are music educators making *any* effort to create music programs that accurately reflect the demographics for that school? (2) If so, *what* are music educators doing to make accommodations for ELLs, low-income students, and racial minorities, and to what *extent*?

An improvement plan toward equitable music education can be most efficiently established if the existing common practices are recorded and understood. Additionally, information regarding the current status of

access in music education will guide us educators toward developing both in-service praxis and music teacher education curriculum.

Social Justice in Education

Few teacher education programs are deeply committed to social justice issues in teacher education, and teacher education programs have inconsistent definitions of social justice and inconsistent approaches to applying that to education (Salvador & Kelly-McHale, 2017). Social justice, according to Gewirtz (1998), is based on ideas and actions that disrupt systems perpetuating marginalization and exclusion. The result of educators being ignorant to the nature of the systems that create inequality include a perpetuation of that inequality. To disrupt inequality, educators must understand it and understand its causes. This is why social justice should not be considered merely a humanities subject. Each educator holds the responsibility to always be asking:

what can we do as music educators to disrupt systems that funnel marginalized groups *away* from music education programs?

Intersectionality

Intersectionality, first coined by Kimberle Crenshaw (1991), is an approach to identity politics that states that all aspects of one's identity influence each other. When looking to create equity in circumstances of oppression, it is necessary to consider how those identities, and their respective oppressions, are inherently blended and interwoven. This study is premised on an intersectional approach to music education. These questions and goals are based on the belief that all individuals, regardless of race, social class, religion, gender, or ability, deserve access to quality music education.

The oppression that occurs in public schools regarding access to music classrooms involves not only race, class, ability, and ethnicity (including first language), but every combination of each of those factors as experienced by the individual. Intersectionality recognizes that a female student who is an undocumented Hispanic immigrant moving to the United States in the past year, has very limited English proficiency in a school where English is the only language of instruction, and comes from a low-income household will face a different set of academic challenges that call for a different toolbox of strategies than would be appropriate for a White female student from a low-income household who speaks English as a first language in the same school.

When speaking of music education in public schools, the appropriate toolbox of strategies for classroom teachers cannot be a relevant issue if oppression prevents access in the first place. It first becomes a matter of music enrollment, which is the foremost issue this study will examine.

Intersectionality is an excellent tool to understand how a combination of oppressions inhibits one's access to music instruction in public schools. For instance, the aforementioned Hispanic student's new immigrant status affects her class, as her parents struggle to find and keep work to financially support the family. Her class then affects her

academic achievement, as she struggles to manage taking care of her four small siblings (her parents are constantly working) while maintaining a level of academic achievement comparable to that of her previous high school. Her ethnicity also inhibits her success, as she must take a remedial English language class. Because she must take this remedial course to be able to succeed in this English-speaking high school, and this course happens to conflict with every elective music class offered at her school, music education is out of the question at least until she obtains English proficiency. Then it very well may be a matter of catching up in core classes: social studies, sciences, and literature.

Intersectionality serves as a reminder that the oppressions that prevent equity do not exist in a vacuum. An oppression from one identity can and will perpetuate an oppression from another. Our responsibility as music educators, then, is to have an intimate understanding of oppression as it manifests in the lives of our students so that we may know how to eliminate the barriers it creates in our classrooms.

Marginalized Groups

The results of a study by Elpus and Abril (published in 2011, using data from 2002 and 2004) lays the foundation of this study by providing estimates for cultural demographics of high school music students in the United States. The authors concluded that ELLs, low-income students, and racial minorities are underrepresented in public high school music programs nationwide.

English Language Learners

Hispanics are the largest group of ELLs and the fastest growing student population in American public schools (National Center for Educational Statistics, 2017). The NCES reported that 9.4 percent of high school students in the United States were ELLs in 2014-15, which is a smaller figure than the 10 percent that Elpus and Abril (2011) reported for ELL music students. However, the authors note in their methods that Hispanics and Asians were deliberately oversampled to ensure that they were adequately represented in the study. The researchers noted that, regarding this

oversampling, reported results ought to be considered estimates.

Students of Low Socioeconomic Status

The proportion of students of low socioeconomic status, “low SES students,” in music classrooms are incongruent with nationwide demographics of all students. In 2013, 50 percent of all students in America were considered low income (SEF, 2006), while 17 percent of music students were within the lowest socioeconomic quartile in 2004. For 11 of the 12 states included in this study, over 50 percent of students came from low-income households (determined by eligibility for free or reduced lunch) in 2015. The only state involved in this study that did not have over half of its public school students from a low-income household is Virginia, with 39 percent. The average percentage of all low-income public school students from the states involved in this study is 57.4 percent (SEF, 2015).

Racial Minorities

Schools with high racial minority populations are less likely to offer music courses (Salvador & Kelly-McHale, 2017). Sixty-five percent of music students in American high schools were white in 2004, while in 2013, 50 percent of all American public school students were white, making them only slightly overrepresented in nationwide music programs (Elpus & Abril, 2011; NCES, 2014). This survey will record the following races of music students and the music teacher: White/Caucasian, African American/Black, Asian, two races, American Indian, Pacific Islander, and other. This survey will also record the number of students who are Hispanic/Latino.

Limitations of these Sources

Several of these studies provide information on student demographics that may be considered slightly outdated. The cultural demographics provided by Elpus and Abril were for high school students in 2002 and 2004, over a decade from the time of this study. NCES (2017) reported a fall in White public school student enrollment from 2004 to 2014, from 58 percent to 50 percent. NCES also reported a 1 percent decrease in Black student enrollment, a 6 percent increase in Hispanic enrollment, a 1 percent increase in

Asian/Pacific Islander enrollment, no change in American Indian/Alaska Native enrollment, and a 1 percent increase in mixed-race enrollment. The projected distribution also reported a decline in White enrollment and an increase in minority enrollment in the next 12 years, excluding Black and American Indian/Alaska Native students.

Contributing Factors of Inequities in Music Education

Cultural Homogeneity of Music Teacher Education

When homogeneous groups are placed in a majority position, they tend to perpetuate traditional values. . . . Inflexibility and stagnation often result not only in practice but also in training new recruit. (White, 1967, p. 10)

Past research has examined questions such as “What factors are perpetuating the cultural disparity of music students?” Another facet of the issue of underrepresentation is the even deeper cultural homogeneity of the population of those *pursuing music as a profession* and those who train music teacher candidates. According to demographic information collected from Praxis II™ music tests, music educator candidates are 86.02 percent White, and 95 percent of candidates spoke English as their first language (Elpus, 2015).

Salvador and Kelly-McHale found that “10 percent to 20 percent of [post-secondary music teacher educators] asserted that they had no interest in teaching social justice topics, that it was irrelevant, and that it was not their job...” (2017). In the same study, over half of these respondents approached education with the belief that all students will succeed should they receive the same treatment and make sufficient effort.

Culturally sensitive music educators understand that one’s culture heavily influences one’s learning processes (Butler, Lind, & McKoy, 2007). The implications of a predominantly white music educator force in the United States include a perpetuation of inequity and limited access music education, especially if no reforms in music teacher education are created or effective in shaping

candidates into culturally sensitive educators. Twenty-four percent of undergraduate music teacher education programs offer no course to prepare music teachers to work with exceptional populations (Salvador, 2010).

There exists a pervasive, traditionally narrow scope of what is considered musical competence in Western classical music pedagogy. This includes, for example, the culturally inconsistent practice of learning a gospel piece by sight-reading from notation. Considering gospel is often learned aurally, those who identify with the culture of gospel may have lost an opportunity to engage in their culture in a way that is natural and appropriate for them (Shaw, 2012). Moore (1993) found that pre-service and in-service music teachers alike lack an understanding of the relationship between culture and learning, ignoring those factors in instruction. Additionally, individuals who receive music education in suburban, middle-class schools prefer to teach in suburban, middle-class schools, further suggesting a lack of confidence in music teachers' ability to teach across cultures (Kelly, 2003).

METHODS

Participants

A survey was administered electronically using Qualtrics, a web-based survey creation software, to public high school music educators in the states of West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Arkansas. These participants were not only teachers of ensembles such as band, orchestra, and chorus, but also other courses such as music theory, music appreciation, guitar, and piano.

The education site, Startclass by Graphiq™ (<https://www.startclass.com>) was used to select participating schools and to collect information for those schools. Graphiq is a "semantic technology company that instantly delivers deep insights from the world's data," designed for researchers, journalists, and enterprise (Retrieved from <https://www.graphiq.com/>). Startclass provided information for public (and private)

schools regarding race/ethnicity, socioeconomic breakdown, gender distribution, state testing results, English Language Learner (ELL) populations, learning disability populations, bullying, absenteeism, teacher experience, district information including expenditures and revenue, and free/reduced lunch eligibility. Startclass also provided contextual information regarding the cost of living of that city, state and district averages for each aspect, and an overall, one-out-of-ten "Startclass Rating."

To recruit participants, Startclass' enrollment information was used. The names of roughly twenty of each state's largest schools were entered into a table. The email addresses of music educators at those schools were then collected from the high school's website staff directory. This table was preserved as the email addresses were then transferred to Qualtrics contacts, so that the email address could be matched with a school if need be.

Many public school websites did not make teacher name, subject taught, and email address easily available. For some schools, a staff directory could not be found. These schools were eliminated from the participant pool. Since many schools categorized teachers by department, it was often unclear which teachers on that webpage were teaching music. In the scenario that there was no information to distinguish a fine arts teacher as a music teacher, each fine arts teacher was added to the contact list for that high school. The very first statement of the participation invitation email aimed to target only music educators: "If you have received this email, it is because you have been chosen as a music educator teaching in a public school in the southeast. If this description does not fit you, please disregard and delete this email."

A total of 567 contacts were invited to participate from a total of 174 schools in 12 states.

Survey

The survey provided between 31 and 51 questions, depending on responses to questions that prompted follow-up questions. The questions were sorted into two categories: director/school basic information and accommodation and inclusion efforts.

The first section recorded basic information, including name of the teacher, the name of his/her school, the state in which it is located, and the gender, age group, race, and ethnicity of the teacher.

The second sections provided open-ended response fields for teachers to describe their accommodation and inclusion efforts for ELL students and students with financial limitations. The participants were also asked to describe their efforts to attract and recruit racial minorities, if applicable.

RESULTS

Data Analysis

Data were analyzed using quantitative and qualitative methods. Percentages are used to quantify basic information of participants. Open-ended responses regarding recruitment were divided into four groups: feeder programs, performances/trips, reputation, and student-oriented outreach.

Of the 567 individuals contacted, 28 responses were recorded, yielding a response rate of 4.9 percent. Not all of these responses were complete, and some responses were completely empty. Of the 12 states selected, 23 percent of respondents were from Alabama. Five participants were from Mississippi; 3 from Tennessee; 2 from Florida, Georgia, Kentucky, North Carolina, and South Carolina; 1 from Virginia and Arkansas; and 0 from Louisiana. 53.85 percent of participants were male, while 46.15 percent were female (see figure 1). Most participants were between the 56-60 and 41-45 age ranges (see figure 2.) 85.19 percent of participants were White/Caucasian, 3.7 percent were Black/African American, 3.7 percent chose not to answer, and 7.41 percent chose other (see figure 3). Of the “other” responses, one participant entered “Half White/Half Japanese” into the text field and the other entered “Human.” One participant was Hispanic and of Cuban descent.

General Recruitment Strategies

54 percent of participants chose to share their recruitment practices. The responses were organized into four categories: feeder programs, performances/trips, reputation, and student-oriented outreach. 66 percent

mentioned that they used a feeder program, visiting middle schools to encourage enrollment in music classes. 33 percent used performances and trips to entice students to enroll into their ensemble. 26 percent relied on reputation to attract new members, with at least one participant implying they exclusively rely on their reputation to attract members. 26 percent asked their students to recruit their friends. It is important to note that these percentages indicate the frequency of method, and that participants could have used more than one method.

Racial Minority Recruitment

When asked if they make concerted efforts to attract and recruit racial minorities, 71 percent said they do not. The 29 percent who claimed they made concerted efforts to attract racial minorities were provided an open-ended text field to describe their recruitment methods. 3 of the 4 open-ended responses claimed to use variety in music to attract racial minorities, while one stated: “*I invite everyone to join the choir, my Varsity and Jr. Varsity choirs are racially balanced.*”

English Learner Inclusion Efforts

When asked if they implemented accommodations for ELLs in their music classes, 57.14 percent said they did while 42.86 percent said they did not. Two responses indicated that they followed what was administered by their mentoring teacher, while one response was more in-depth: “*I work with their main teacher to see what their specific needs are. The beauty of music literacy is that most of my students are new to the process so the playing field is even. We incorporate technology into the efforts, and also try to learn a song in their language (ESL) or from their culture- even if it is a unison folk song. Creates a positive climate for the others as well.*”

Low SES Students

When asked to share their accommodations efforts for students with financial limitations, 53 percent of respondents mentioned the use of booster club funds, 24 percent arranged transportation for students for rehearsals and performances, and 24 percent claimed to use fundraising to support students with financial limitations. Other methods mentioned include grants, donations, private

instruction, and fee waivers. One participant said that they provide free instruments, instrument repairs, and free food to their students. 43 percent of participants responded to this question.

DISCUSSION

This study examined the following questions: Are music educators making *any* effort to create music programs that accurately reflect the demographics for that school? If so, *what* are music educators doing to make accommodations for ELLs, low-income students, and racial minorities, and to what *extent*?

The results of this study suggested that, while some music educators are making some efforts to include racial minorities, low-income students, and English learners, an alarming percentage of music educators are not. Regarding the *extent* of accommodations for these marginalized groups, it is, in most cases, inadequate. Few music educators who participated in this study seemed to have a holistic appreciation for the nature of marginalization, how it manifests in a music classroom, and how to combat it. For instance, a music teacher incorporated technology into English learner instruction and performed music in their native language. One teacher implied a dedication to including low-income students, stating “We never let financial issues affect student participation.”

From the responses regarding inclusion, there existed a general theme of a deeper commitment for students who are financially disadvantaged than those who are English learners or those who are racial minorities. Rather than it be a matter of apathy toward certain groups, it seemed likely that music teachers have a larger toolbox of practices to include low-income students, and a smaller toolbox of inclusion practices for English learners and racial minorities.

It is a norm among high school music educators to focus less on the process and potential of learning music and more on the product, i.e. the concert or state festival competition. *We have to produce an excellent product. We have to distinguish ourselves as a program of*

superiority. We need to perform challenging repertoire. Our students need to sound good.

If that is at the center of the director’s agenda, then diversifying the music classroom is not likely to be a priority. At that point, it becomes less about the cultural composition of the ensemble and more about 1) the size of the ensemble and 2) Eurocentric musical skill of its members. If a music director is playing a numbers game for the most musically-literate teenagers, that naturally excludes students who, by consequence of their culture, have not developed cultural capital appropriate for the often elitist field of “concert music.”

This raises a new set of questions that cannot go unexamined if we are to understand this issue of cultural underrepresentation. First, what are we hoping to achieve with music education in our public high schools? Second, in what ways are we helping our students grow as musicians? Third, are we honoring students’ inherent musicality, or invalidating it by measuring their skills exclusively with Eurocentric standards of musicianship? Fourth, are we placing the musical development of the student first, or are we prioritizing our reputation in the field of music education? Finally, considering the culture disparities that exist in high school music ensembles and the professional music sphere, are we creating a music culture in our classroom that attracts all students, or only a certain demographic?

When we create a music class culture that is focused less on the concert-ready product and more on a contemporary idea of music’s *universal* potential for enrichment, we may find that students feel they have more to contribute in a music class. In other words, our exclusive adherence to *concert* music traditions may be an outdated approach to music education. Perhaps if, and when, exceptional groups exist more frequently in the music classroom, we will be forced to expand the limited toolbox of accommodations. The underrepresentation could be a direct cause for the lack of inclusion practices we have ready to implement. The less students to accommodate for, the less experience making accommodations.

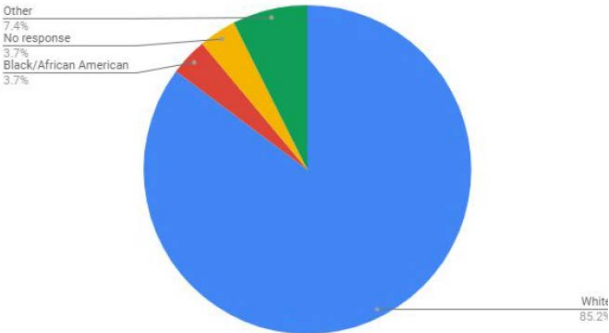
Teachers bear a responsibility of being innovators, lifelong learners, and compassionate leaders. Embedded within this modern teacher is an appreciation for the lives of our students, how they differ from our own, and an intersectional awareness of social issues that inhibit our students' ability to learn. Our interest should not end with the students who are already enrolling in our classes, who are proficient sight-readers and love Bach. We carry an obligation to serve every young person in our communities. Perhaps it is time for music education to evolve.

REFERENCES

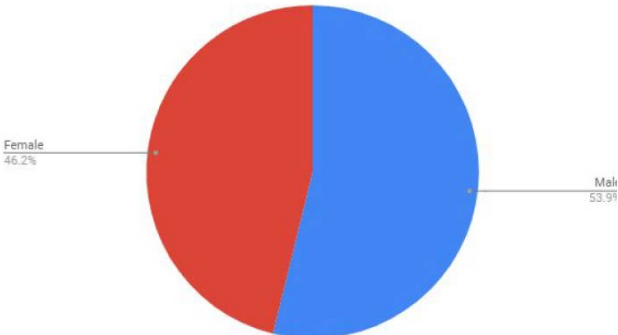
- Butler, A., Lind, V. L., & Mckoy, C. L. (2007). Equity and access in music education: conceptualizing culture as barriers to and supports for music learning. *Music Education Research*, 9(2), 241-253. doi:10.1080/14613800701384375
- Elpus, K. (2015). Music teacher licensure candidates in the United States: A demographic profile and analysis of licensure examination scores. *Journal of Research in Music Education*, 63(3), 314-335. doi:10.1177/0022429415602470
- Elpus, K., & Abril, C. R. (2011). High school music ensemble students in the United States: A demographic profile. *Journal of Research in Music Education*, 59 (2), 128-145. doi:10.1177/0022429411405207
- Gewirtz, S. (1998). Conceptualizing social justice in education: Mapping the territory. *Journal of Education Policy*, 13, 469-484.
- Hoffman, Edward C. III, (2011). The status of students with special needs in the instrumental musical ensemble and the effect of selected educator and institutional variables on rates of inclusion. *Student Research, Creative Activity, and Performance - School of Music*. Paper 45.
- Kelly, S. N. (2003). The influence of selected cultural factors on the environmental teaching preference of undergraduate music education majors. *Journal of Music Teacher Education*, 12(2), 40-55. doi:10.1177/10570837030120020106
- Moore, J. A. (1993). An assessment of attitude and practice of general music teachers regarding global awareness and the teaching of music from a multicultural perspective in American schools. *Dissertation Abstracts International*, 54(08), 2939A.
- NCES Blog. (n.d.). Retrieved May 30, 2017, from <https://nces.ed.gov/blogs/nces/post/the-2017-condition-of-education-report>
- White, H. G. (1967). The professional role and status of music educators in the United States. *Journal of Research in Music Education*, 15(1), 3-10.

APPENDIX 1

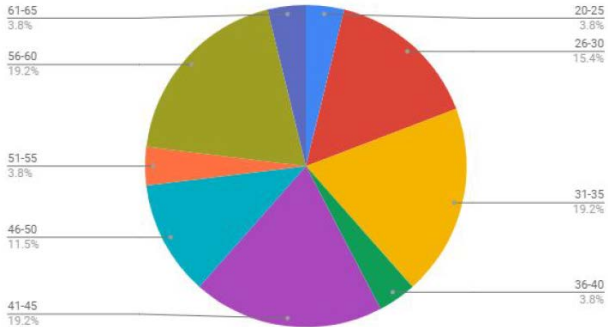
Race of participants



Gender of participants



Age range of participants



Age range	Choice Count
20-25	1
26-30	4
31-35	5
36-40	1
41-45	5
46-50	3
51-55	1
56-60	5
61-65	1

The Effects of Physical Activity Classes on Stress in College Students

Kellie Cooper
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ABSTRACT

Background: While stress is unavoidable, many college students face overwhelming levels of stress and lack proper stress management skills. Increased levels of stress can lead to poor mental and physical health as well as poor academic performance. **Objective:** To examine the differences in stress levels of students of different racial backgrounds who participate in for-credit vs. recreational physical activity (PA) classes. **Methods:** Participants (n=53) completed a survey composed of open-ended questions about stress and stress management, as well as the short-version International Physical Activity Questionnaires (IPAQ). **Results:** Because of limited sample size, no significant differences were found between students who were participants in recreational classes vs. for-credit classes. There were also no significant differences in stress levels between students from different racial backgrounds. However, results indicated that students who participated in recreational PA classes had a higher stress level entering class than students participating in for-credit PA classes. However, both types of PA classes lowered student stress levels. **Conclusion:** Data suggests that compared to students in for-credit PA classes, students participating in recreational PA classes may be doing so for the purpose of stress management and may be more aware of the benefits of PA in regards to stress management.

LITERATURE REVIEW

College students encounter many stressors including social relationships, concerns about future career opportunities, economic standing, and academic performance on a daily basis (Çivitci, 2015). Overall, 12% of college students perceive their stress levels as high, and 75% of college students perceive their stress levels as moderate (Çivitci, 2015). According to Jahan (2016), stress results when a person does not believe in their ability to cope with their stressors (Jahan et al., 2016). Transitioning and adjusting to a new environment can prove to be very difficult for many students. College students need as many outlets as possible for coping with daily stressors. Decreasing one's levels of stress through adequate stress management can improve an individual's overall education and academic performance. The present paper investigates the effects of physical education and recreational courses, as well as their various components—particularly the types of physical activity and socialization—on the stress levels of college students. This topic is important because health in college students is an increasing concern as curricula and

responsibilities become more demanding. Also, the college campus learning environment is the ideal time to explore stress management. Learning stress management techniques early increases the chances of them becoming habits and following a person throughout the rest of their life.

Stress can be defined as “environmental events or chronic conditions that objectively threaten the physical and/or psychological health and well-being of individuals of a particular age in a particular society” (Grant et al., 2003, p.462; Sharp & Barney, 2016). Students who are of racial minorities often deal with race-related stress in addition to the stress that the common student faces. Race-related stress is defined as “race-related transactions between individuals or groups and their environment that emerge from the dynamics of racism, and that tax or exceed existing individual and collective resources or threaten well-being” (Harrell, 2000, p. 45). Due to stressors such as discrimination, group conformity, and stereotype confirmation, there is an increased chance of minority students having higher stress levels (Chavez & French, 2007; Turner & Smith,

2015). Research shows that exercise is one of the most effective ways to reduce stress levels (Baghurst & Kelley, 2013; Bland et al., 2014). In a survey conducted by the American College Health Association, students indicated that stress had the most negative effect on their academic performance (American College Health Association [ACHA], 2009; Meier & Welch, 2016). Stress can lead to health conditions and mental health problems that can be avoided through sufficient stress management.

The daily stressors that college students face could have detrimentally negative impacts on their overall health. Increased levels of stress in college students can lead to mental health problems such as depression, anxiety, insomnia, and suicidal thoughts (Keyes, et al., 2012; Lang, et al., 2016; Meier & Welch, 2016). Surveys have shown that mental health disorders are steadily increasing in colleges with the number of students reporting symptoms between 30% and 50% (Blanco et al., 2008; Bland, et al., 2014; Hunt & Eisenberg, 2010). According to the American Psychological Association, stress also has negative impacts on blood pressure, blood sugar, and heart rate, and it can cause hypertension as well as hyperventilation (“Stress effects on the body”). In addition to the negative health effects of stress itself, students often deal with their daily stressors using coping methods that could cause even further damage to their health; some of these methods are using illegal drugs, smoking, and consuming alcohol (Byrne & Mazanov, 2003; Lang et al., 2016; Park, Armeli, & Tennen, 2004). If these coping behaviors are maintained throughout the student’s later years, it is likely that even more serious health problems will arise (Compas, et al., 2001; Lang et al., 2016). It is imperative that students receive education on positive ways to cope with stress. Exercising has shown to reduce anxious moods, lower depressive symptoms, and reduce mood deterioration in both subjects that suffer from psychological disorders and in normal subjects (Moses, et al., 1989; Norris et al., 1992; Salmon, 2001; Steptoe et al., 1989). Spontaneous physical activity in particular has been shown to have a positive impact on depression symptoms (Salmon,

2001). Providing exercise related coping mechanisms for college students could prove to be beneficial in counteracting poor overall health as well as poor mental health, and in reducing long-term risks (Lang, et al., 2016).

Physical activity classes are one of the most accessible ways for college students to deal with stress (Barney, Benham, & Haslem, 2014). A key study conducted by Barney, Benham, and Haslem in 2014 attempted to examine how students perceive the effects of physical activity courses on their life stressors. The study included classes of both individual and team sports: basketball, volleyball, bowling, racquetball, and tennis. The study found that physical activity courses positively affected stress in the lives of most students. Overall, students reported that the physical activity courses helped them to forget their stressors, have more ability to manage school responsibilities, and handle daily stressors; these same results occurred even when the student didn’t enroll in the course for the purpose of stress management (Barney, et al., 2014). This study is relevant and important because it provides concrete evidence that stress levels in college students are positively benefiting from physical activity courses. Physical activity courses are crafting physically and mentally healthier college students, while also aiding them in their studies (Barney, et al., 2014). As of 2014, only 39.6% of universities require students to take physical activity courses in order to earn a degree (Barney, et al., 2014). A similar key study investigated the perceived effects of physical activity classes on stress from students that went to a university that required physical activity courses and students that went to a university that did not require physical activity courses. This study included five different types of physical activity courses: water (swim), team (basketball, soccer, etc.), individual (bowling, golf, etc.), outdoor (archery, rock climbing, etc.), and fitness (yoga, weights, etc.). The only noticeable difference was why the students chose to enroll in the class. Students from the university that did not require physical activity classes were more likely to take the class in order to manage stress; students at the university where physical activity classes were

required were more likely to take the class solely because they needed the credits in order to graduate (Sharp & Barney, 2016). Nevertheless, the same results were found in this study as in the previous one: participation in physical activity classes helped students forget about and deal with stress, and students left class feeling less stressed than they felt when they arrived (Barney, et al., 2014; Sharp & Barney, 2016). This study is important because it adds to the literature by re-affirming previous research and providing evidence in support of physical activity classes in universities. The two key studies previously described contribute greatly to the research literature; however, they are limited because they only compare differences in gender. These studies are also limited because they are both looking at classes where students earn academic credits.

Current research is lacking in studying differences between races, and differences between structured and leisure physical activity classes. Things that we do not know yet are whether or not perceived stress in students differs based on whether they are enrolled in a credited physical activity class that results in earning credits towards their degree, and has requirements and structure that may place limitations on students; or a recreational physical activity class that does not have requirements and structure that places limitations on students. Also, we do not know whether or not these physical activity classes have a different effect on students of different races. Any noticeable differences will add to research literature and could provide evidence in favor of altering the types of classes, instructional methods, attendance requirements, etc. that are offered in physical activity classes at universities.

METHODS

Participants

College students enrolled at Winthrop University participated in this study (n=53). Winthrop University's Institutional Review Board (IRB) granted permission to conduct this research. Participants were active in either a for-credit or recreational physical activity class

located on campus. All participants were volunteers and at least 18 years of age.

Materials

This study employed a modified version of the Physical Activity and Stress Survey developed in a previous research study (Barney, Benham, & Haslem, 2014). The survey was modified to include two questions identifying race/ethnicity, one question identifying whether the class was credited or recreational, a question identifying the name of the class, and seven questions from the International Physical Activity Questionnaires-Short Version (IPAQ). There were two other demographic related questions: one to identify sex and one to identify academic classification. There are eight open-ended questions and two Likert-scale questions (1=low; 2=medium; 3= high; & 4=very high) related to the physical activity classes and daily stress. Another question asked students to indicate how many physical activity classes they've participated in on campus. Validity and reliability have been determined from a previous study (Barney, Benham, & Haslem, 2014).

Procedures

Researchers approached professors and instructors and gained permission to hand-out surveys either before (in for-credit classes) or after (in recreational classes) class, or surveys were completed online. Participants received information regarding the purpose, risks, and benefits of participating in the study. Participants were also made aware that participation was completely voluntary and that they had the right to withdraw from the study at any point. Surveys were then distributed to all students and participants were asked to answer each question completely. Students also received an information sheet containing researcher and Compliance Officer contact information, as well as the project's purpose, risks, benefits, and privacy. Students who did not wish to participate in the study were allowed to hand back blank surveys. Participants were thanked for their participation and told to contact the researcher if they had any questions or wanted any further information regarding the project.

Data Analysis

T-tests were run to determine a difference in stress levels between for-credit and recreational physical activity classes. Descriptive statistics tests were used to determine the average amount of exercise from the IPAQ questions. IPAQ scoring protocol were used to determine the median MET—minutes/week and the level of physical activity for the population.

RESULTS

Demographics

A total of 53 students at Winthrop University have participated in this research project (n=53). The number of participants from the recreational classes (n=25) was one less than the number of participants from the for-credit classes (n=26). More females (n=44) have participated in this study than males (n=4). The majority of participants were in their junior academic year (n=24). Other academic years that have participated include freshmen (n=3), sophomores (n=4), seniors (n=15), and graduate students (n=5). Participating racial groups include white (n=23), black or African American (n=26), Hispanic (n=1), and multi-racial (n=3) students.

Stress Ratings

Stress was examined using a Likert-scale rating from 1 to 4 (1=low, 2=medium, 3=high, 4=very high). In the survey, students were asked to rate their stress before [Q12] and after [Q13] their participation in their physical activity class. Out all of participating students, 47.06% rated their stress as medium (n=24) and 25.49% of students rated their stress as high before the class (n=13). There was a significant difference in these stress level ratings between for-credit and recreational classes. Students participating in recreational classes reported higher levels of stress coming into class than students participating in for-credit classes. Of the students who rated their stress as high before the class, 15.38% were participants in the for-credit classes (n=2) and 84.62% were participants in the recreational classes (n=11) (M= 1.9 +/- 0.9 vs. 2.5 +/- 0.7; p=0.011) [Figure 1]. There was no significant difference by race.

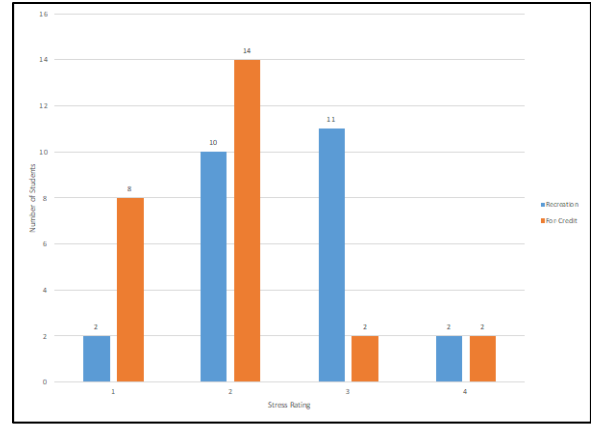


Figure 1: Stress ratings before class of students participating in recreational and for-credit PA classes.

Out of all participating students, 54.90% reported their stress level as low (n=28), 39.22% reported their stress level as medium (n=20), and 5.88% reported their stress level as high upon leaving the class (n=5). There was no significant difference in these stress levels between for-credit and recreational classes. There was also no significant difference in these stress levels by race [Figure 2].

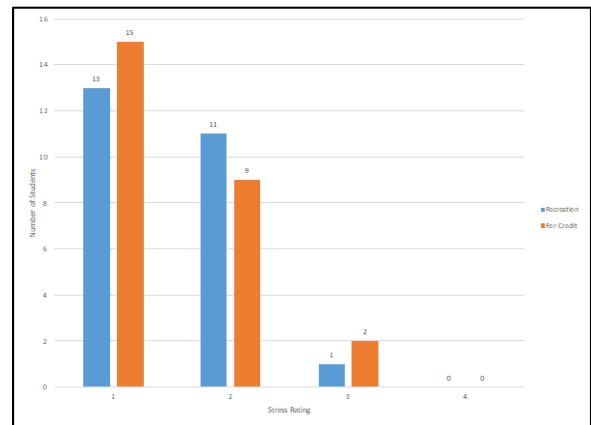


Figure 2: Stress ratings after class of students participating in recreational and for-credit classes.

IPAQ data showed that students participated in an average of 3.1 +/- 1.6 days of physical activity per week. This student population had a median MET—minutes/week of 1000 minutes, a 'moderate' physical activity rating according to IPAQ scoring protocol.

Stress Perceptions

Eight open-ended yes/no questions were asked in the survey. Students were asked if participation in their physical activity class helped them to better accomplish their school responsibilities. Of all student participants, 50.98% claimed that it did (n=26), 13.73% claimed that it did not (n=7), and 35.29% of students claimed that it sometimes did (n=18). Of the students that claimed that it did help them better accomplish their school responsibilities, 42.31% were participants in for-credit classes (n=11) and 57.69% were participants in recreational classes (n=15). 50% of these students identified as white (n=13) and 50% of these students identified as a minority student (n=13). Of the students who claimed that it did not help them better accomplish their school responsibilities, 85.71% were participants in for-credit classes (n=6) and 14.29% were participants in recreational classes (n=1). 57.14% of these students identified as white (n=4) and 42.86% of these students identified as a minority student (n=3). Of the students who claimed that it sometimes helped them better accomplish their school responsibilities, 50% were participants in for-credit classes (n=9) and 50% were participants in recreational classes (n=9). 44.44% of these students identified as white (n=8) and 55.56% identified as a minority student (n=10) [Table 3]. One student who responded “yes” stated, “I feel like I have relieved some stress, and now I am able to focus on my school work.” One student who indicated “sometimes” stated, “Sometimes I dread going from a relaxed state after yoga back into studying or other school activities.”

Participants were asked if they feel they can better handle the stressors in their life after participating in their physical activity class. Of all student participants, 56.86% claimed that the class does help them better handle their stressors (n=29), 15.69% claimed that the class doesn't help them better handle their stressors (n=8), and 27.45% claimed that the class sometimes helps them better handle their stressors (n=14). Of the students who claimed that the class does help them better handle their stressors, 51.72% were participants in for-credit classes (n=15) and 48.28% were participants in

recreational classes (n=14). 51.72% of these students identified as white (n=15) and 48.38% of these students identified as a minority student (n=14). Of the students who claimed that the class doesn't help them better handle their stressors, 50% were participants in for-credit classes (n=4) and 50% were participants in recreational classes (n=4). 50% of these students identified as white (n=4), 50% of the students identified as a minority student (n=4). Of the students who claimed that the class sometimes helps them better handle their stressors, 50% were participants in for-credit classes (n=7) and 50% of students were participants in recreational classes (n=7). 42.86% of these students identified as white (n=6) and 57.14% identified as a minority student (n=8) [Table 3]. One student who answered “yes” indicated, “It is a healthy way to cope with stressors. It allows me to be stressed and essentially sweat it out!” Students who answered “sometimes” stated that it “depends on the stressors.”

Students were also asked if they took the class to help reduce or manage the stress in their lives. Of all participants, 41.18% said they did (n=21), 45.10% said they did not (n=23), and 13.73% said they sometimes did (n=7). Of the students who said they did take the class to help reduce or manage stress, 42.86% were participants in for-credit classes (n=9) and 57.14% were participants in recreational classes (n=12). 57.14% of these students identified as white (n=12) and 42.86% identified as a minority student (n=9). Of the students who said they did not take the class to help reduce or manage stress, 69.57% of students were enrolled in for-credit classes (n=16) and 30.43% of students were enrolled in recreational classes (n=7). Of these students, 39.13% identified as white (n=9), and 60.87% identified as a minority student (n=14). Of the students who said that they sometimes took the class to help reduce or manage stress, 14.29% were enrolled in for-credit classes (n=1) and 85.71% were enrolled in recreational classes (n=6). Of these students, 57.14% identified as white (n=4) and 42.86% identified as a minority student (n=3) [Table 3]. Students who answered “yes” indicated that the classes are “fun” and help them “feel more

relaxed.” Students who answered “no” indicated that they took the class to be active.

		Yes	No	Sometimes
After participation in this physical activity class, I feel more able to accomplish my school responsibilities?	Recreational	15	1	9
	For-Credit	11	6	9
	White	13	4	8
	Minority	13	3	10
After participating in the class activities, I feel I can handle the stressors in my life?	Recreational	14	4	7
	For-Credit	15	4	7
	White	15	4	6
	Minority	14	4	8
Did you take this class to help reduce or manage the stress in your life?	Recreational	12	7	6
	For-Credit	9	16	1
	White	12	9	4
	Minority	9	14	3

Figure 3: Stress perception responses of students according to class type (recreational and for-credit) and racial background (white and minority).

CONCLUSIONS & DISCUSSION

Data trends are showing that all physical activity classes (both for-credit and recreational) are helping students effectively lower their stress levels. There was a difference in stress levels coming into class between students participating in for-credit classes and those participating in recreational physical activity classes. More students participating in recreational classes indicated that they took the class to help them manage or reduce their stress. This data suggests that more students who participate in the recreational PA classes may be more aware of the effects that PA can have on stress. Universities should use this information to make efforts towards educating their students on the benefits that all PA and the PA classes that may be offered on campus can have in terms of stress management in order to make students more aware of the healthy options they have for managing their stress levels.

Data trends are also showing that recreational students may be benefitting more from their physical activity classes than for-credit students. More students from recreational physical activity classes are claiming that their classes help them handle their school and life stressors better and that they take the classes specifically for those reasons. This data suggests that the participants in recreational PA classes find the classes to be more enjoyable than for-credit PA classes and believe that they are more effective at relieving stress. This may be because the for-credit PA classes come with attendance

requirements and physical and written assessments, which are not a component of recreational PA classes. Data shows no differences in stress levels between races, meaning that PA classes are effective at lowering stress levels regardless of racial background.

REFERENCES

- American College Health Association. (2009). American college health association–national college health assessment spring 2008 reference group data report (abridged). *Journal of American College Health*, 57(5), 477–488. doi:10.
- American Psychological Association. Stress effects on the body. *American Psychological Association*. Retrieved from <http://www.apa.org/helpcenter/stress-body.aspx>
- Baghurst, T., & Kelley, B. (2013). An examination of stress in college students over the course of a semester. *Health Promotion Practice*, 15(3), 438-447. <https://doi.org/10.1177/1524839913510316>
- Barney, D., Benham, L., & Haslem, L. (2014). Effects of college student's participation in physical activity classes on stress. *American Journal of Health Studies*, 29(1), 1–6. Retrieved from <http://ezproxy.library.yorku.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=sph&AN=96385175&site=ehost-live>
- Blanco, C., Okuda, M., Wright, C., Hsin, D. S., Grant, B. F. Liu, S. M., & Olfeon, M. (2008). Mental health of college students and their non-college-attending peers: Results from the National Epidemiologic Study on Alcohol and Related Conditions. *Archives of General Psychiatry*, 65(12): 1429-37. doi: 10.1001/archpsyc.65.12.1429.
- Bland, H. W., Melton, B. F., Bigham, L. E., & Welle, P. D. (2014). Quantifying the impact of physical activity on stress tolerance in college students. *College*

- Student Journal*, 48(4), 559.
<https://doi.org/A398073347>
- Byrne, D. G., & Mazanov, J. (2003). Adolescent stress and future smoking behaviour: a prospective investigation. *Journal of Psychosomatic Research*, 54(4), 313–321. doi:10.1016/S0022-3999(02)00411-7
- Chavez N. R., & French, S. E. (2007). Ethnicity-related stressors and mental health in Latino Americans: The moderating role of parental racial socialization. *Journal of Applied Social Psychology*, 37, 1974-1998.
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127(1), 87–127. doi:10.1037/0033-2909.127.1.87
- Harrell, S. P. (2000). A multidimensional conceptualization of racism-related stress: Implications for the well-being of people of color. *American Journal of Orthopsychiatry*, 70, 42–57. <http://dx.doi.org/10.1037/h0087722>
- Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health*, 46(1), 3-10.
- Jahan, F., Siddiqui, M. A., Mitwally, M., Said, N., Al, J., Said, H., & Al, J. (2016). Perception of stress, anxiety, depression and coping strategies among medical students at Oman Medical College, 14(14).
- Keyes, C. L., Eisenberg, D., Perry, G. S., Dube, S. R., Kroenke, K., & Dhingra, S. (2012). The relationship of level of positive mental health with current mental disorders in predicting suicidal behavior and academic impairment in college students. *Journal of American College Health*, 60(2), 126–133. doi:10.1080/07448481.2011.608393
- Lang, C., Feldmeth, A. K., Brand, S., Holsboer-Trachsler, E., Puhse, U., & Gerber, M. (2016). Stress management in physical education class: An experiential approach to improve coping skills and reduce stress perceptions in adolescents. *Journal of Teaching in Physical Education*, 35(2), 149–158. <https://doi.org/10.1123/jtpe.2015-0079>
- Meier, N., & Welch, A. (2016). Walking versus biofeedback: a comparison of acute interventions for stressed students. *Anxiety, Stress, & Coping*, 29(5), 463–478. <https://doi.org/10.1080/10615806.2015.1085514>
- Moses, J., Steptoe, A., Mathews, A., & Edwards, S. (1989). The effects of exercise training on mental well-being in the normal population: A controlled trial. *Journal of Psychosomatic Research*, 33, 47–61.
- Norris, R., Carroll, D., & Cochrane, R. (1992). The effects of physical activity and exercise training on psychological stress and well-being in an adolescent population. *Journal of Psychosomatic Research*, 36, 55–65.
- Park, C. L., Armeli, S., & Tennen, H. (2004). The daily stress and coping process and alcohol use among college students. *Journal of Studies on Alcohol*, 65(1), 126–135. doi:10.15288/jsa.2004.65.126
- Salmon, P. (2001). Effects of physical exercise on anxiety, depression, and sensitivity to stress: A unifying theory. *Clinical Psychology Review*, 21(1), 33–61.
- Sharp, E., & Barney, D. (2016). Required and non-required college physical activity classes effect on college students' stress. *American Journal of Health Studies*, 31(2), 74-81.
- Steptoe, A., Edwards, S., Moses, J., & Mathews, A. (1989). The effects of exercise training on mood and perceived coping ability in anxious adults from the general population. *Journal of Psychosomatic Research*, 33, 537–547.
- Turner, F. D., & Smith, J. K. (2015). A comparative study of the stress levels of black, white, Asian, and Latino undergraduate students. *Journal of Research Initiative*, 1(3), 1-10.

Adverse Childhood Experiences and the Social Environment

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ABSTRACT

The purpose of this study is to explore and then narrate the lives of women of color from South Carolina and their personal experiences with regard to their social environments. Much adverse childhood experience research is focused on the immediate family system, and research regarding the social environment is typically broken down into segments, failing to address a more holistic approach to promoting child well-being. Using the ecosystems perspective as a framework for exploration, the researchers used a semi-structured interview schedule, the BFRSS ACEs Survey, and a resilience scale to collect data with participants. Using Facebook as a recruitment tool, the researchers collected data with a convenience sample of five women. Interviews ranged from 18 to 34 minutes in length and occurred in various locations of choice for participants. After data collection, the researchers used case study analysis to identify emergent primary, secondary, and tertiary themes. Brief contextual profiles of each participant are provided to give background information about each individual. Qualitative data reveal themes of internal and external social pressures, coping mechanisms, values, and life-shaping experiences among participants. ACEs Scale data and Resilience Scale data are provided. The primary and secondary research questions, methodology, findings, limitations, and implications of the study are shared, and next steps are discussed.

INTRODUCTION

Each year people across the United States are dying from diseases that are preventable. In 2016, more than 633,842 people died from heart disease alone (Centers for Disease Control and Prevention, 2016). Other public health issues such as obesity, drug abuse, mental health issues, and sexually transmitted infections and diseases are becoming more prevalent. Many public health issues' beginnings can be found in an individual's lack of preventive measures. However, questions surrounding why certain individuals are more likely to experience major health issues have led to more research in understanding why some individuals experience more sickness and disease in comparison to others. Recent research has begun to provide an answer, an answer that lies within an individual's childhood and the number of Adverse Childhood Experiences (ACEs) they endured.

Adverse Childhood Experiences as a research topic first came about after Felitti et al. (1998) conducted a study that explored the relationship between abuse and household

dysfunction and health outcomes in adulthood. The research team developed the ACEs Scale, a scale that explored adversity and psychological, physical, and sexual abuse; violence against the participant's mother; substance abuse in the home; mental illness or suicidal tendencies; or exposure to members of their family being imprisoned. After having each participant complete standardized medical evaluations and the ACEs survey, Felitti and colleagues compared both tools and found that, as the number of Adverse Childhood Experiences (ACEs) increased, the number of health-risk behaviors and chronic health issues also increased (Felitti et al., 1998). ACEs survey questions (see Appendix A) had a strong focus on the immediate family system and what took place within the home.

Flaherty, Thompson, Litrownik (2009) conducted a study with 805 high-risk children by evaluating them at ages six and twelve, using similar concepts from Felitti and colleagues' ACEs study. Flaherty and colleagues found that ACEs are very common, even in the earliest years of childhood.

ACEs and Diverse Populations

The original ACEs study was limited in nature due to the population sampled. Though the original ACEs study had a very large sample size (N = 9,508), an overwhelming majority of participants were white. Because the original ACEs study was limited in scope in terms of diversity, there have been studies conducted to get a better understanding of vulnerability for more racially diverse populations. For instance, Kenney and Singh (2016) conducted a study that examined ACEs among participants who were Native American or Alaskan Natives between the ages of 0 and 17. Native American youth were more likely to have a parent serve jail time or witness domestic violence compared to white youth. The likelihood of Native American youth experiencing an ACE was much higher compared to their white peers (Kenney and Singh, 2016).

Individuals who identify as lesbian, gay, or bisexual have also been interviewed to study adverse childhood experiences among people who are members of sexual minority communities. Andersen and Blosnich (2013) used Behavioral Risk Factor Surveillance System (BRFSS) surveys from multiple states to create a total sample size of 22,071. Within the sample, 1.2% self-identified to be gay/lesbian and 0.9% self-identified to be bisexual. Andersen and Blosnich found that while sexual minority participants made up only a small percentage of the total sample, these participants were twice as likely to experience physical, emotional, and sexual abuse in their childhood. Bisexual participants were three times more likely to experience sexual abuse than their heterosexual peers. Overall, gay/lesbian and bisexual participants were found to have experienced more ACEs than their heterosexual peers (Andersen & Blosnich, 2013). Although the original ACEs study consisted of a large heterogeneous sample size, additional studies have been conducted to provide insight on how ACEs can affect minority communities.

The original ACEs study has created a shift in the way health outcomes and adversity are viewed and has opened pathways for a more holistic understanding and approach to health. However, much of the ACEs literature is

limited due to the fact that the primary focus is on the immediate family system. Because of this point of view, one can miss the potential adversity that is experienced within the entire social environment. Other systems within a child's social environment can be physical institutions such as schools, systematic oppression, such as disproportionate poverty or racism, and harmful ideologies such as rigid gender roles and beauty standards. Depending on the severity of various systematic or social adversities, a child could experience ACEs from the environment in which they live. Felitti and colleagues' ACEs study provided a base to discuss the importance of healthy childhood, but further investigation is needed to help promote child wellbeing in all areas of life.

METHODS

Methodology

In the social work profession, there is a strong focus on understanding the person in the environment and how people interact within the various systems within their environment. The ecosystems perspective, a foundational perspective in social work education, brings together both systems theory and ecological theory. Hutchinson (2008) describes the systems theory as a "perspective that sees human behavior as the outcome of reciprocal interactions between people and their environments, focusing on their interconnectedness of all life" (p. 2). Hutchinson also discusses ecological theory as a theory that focuses on interactions between organisms and their many environments with a strong focus on how organisms adapt to their environments. Using both systems theory and ecological theory, one is able to see the individual is able to adapt with multiple systems influencing them. Understanding these perspectives allows one to develop a fuller understanding of childhood adversity by examining one's reactions to internal and external relationships. This study applies the ecosystems perspective by exploring the social environment, which was not addressed in the original ACEs study. Additionally, this study explores how individuals cope with adversity

and provides additional voices to the discussion of childhood adversity.

Research Questions

The primary research question for this study is: *How do women of color describe the social environmental factors and experiences of their childhood?* The first goal of the research is to explore how women of color from South Carolina describe their childhood social environments and their experiences in these environments. This primary question is designed to allow the author to develop a deep understanding of the participants' childhoods. The secondary research question is: *What role do adverse or traumatic childhood experiences within the social environment play in the lives of women of color?* This question was designed to explore what adverse childhood experiences may have stemmed from participants' social environments.

The researcher used a qualitative-based research design to allow individuals to describe, in detail, their childhoods with an emphasis on childhood adversity and coping. A semi-structured interview schedule was used to develop a thorough understanding of individuals' social environments, resilience factors, and childhood adversity. Qualitative data gives information that cannot be collected from polls or questionnaires. Using interviews, the researcher is able to gather emotional reactions and the tone of each participant in addition to the vast amount of data that is gathered. Qualitative research gives room for participants to speak on issues that they find important, empowering them to speak up and speak out about experiences that may go unnoticed in quantitative inquiries.

Research Design and Rationale

Using a mixed-methods approach with a focus on the qualitative portion of the study, the researcher strived to identify what strengths and barriers exist in South Carolina for women of color by empowering women to share about their childhood experiences. In addition to in-depth interviews with clients, guided by a semi-structured interview guide, the researcher used a demographic questionnaire, the BFRSS ACEs Scale, and a Resilience Scale to collect additional data. After the instruments were developed and assembled, the researcher obtained approval

from the Winthrop University Institutional Review Board (IRB) and began recruiting participants who identified as women of color and resided in South Carolina at the time of the interview.

Sampling

The original inclusion criteria for this study required participants to be women of color who were born in South Carolina. Using Facebook as a means of recruitment, the researcher posted to multiple Facebook groups, on an individual Facebook timeline, and allowed other Facebook users to share the post to reach out to more people. The researcher did not reach out to particular people to recruit participants, but allowed individuals to come forward and chose to participate on their own. Having participants who were wanting to participate in the study allowed for a richer interview and to prevent any potential bias in gathering potential participants. However, due to an initial low yield, the researcher modified the IRB application to widen the potential pool of participants. After changing the sample inclusion criteria to include women who were not born in South Carolina, but were living in South Carolina at the time of the interview, the researcher allowed interested participants to contact her via social media to notify her of their interest in participating. There were no screenings for women to participate. Interviews were organized through mutual agreement by both parties and took place in a variety of settings such as coffee shops and participants' homes.

To begin each interview, the researcher started the data collection process by briefly explaining what the study was and discussed confidentiality. The researcher emphasized how the materials would be stored, who would have access to the data, and allowed the participants to create a pseudonym for themselves. After explaining the informed consent form and allowing the participant to read the informed consent form and ask any questions they may have had, the researcher emphasized that participants were in a safe space and that anything that the participant said would be looked at in a non-judgmental way. The researcher provided the participants with a

demographic questionnaire and asked them to self-identify where they were from, their gender, their highest educational attainment, and their race/ethnicity. Upon completion of the demographic questionnaire, the researcher then began the interview process. The interviews followed a semi-structured interview schedule that included eight broad questions which allowed the participants to interpret the questions in their own way. The researcher provided prompts and clarification for participants as needed. The interviews lasted between 18 and 30 minutes, depending on the participant's willingness to share and the overall depth of their responses. Interviews were recorded using a digital recorder and were later transcribed by the researcher. After the interview, the researcher then provided the participant with the BRFSS ACEs scale (see Appendix B) and the Resilience scale (see Appendix C), in that order. The completed surveys were then placed in an envelope and labeled with a case code. The surveys were completed within approximately 10 minutes by each participant.

In addition to the data that was gathered from the interviews and surveys, the researcher also took notes during the discussion. The notes allowed the researcher to highlight important parts of the conversation or document reactions of the participants towards different parts of the conversation. The notes were taken during the interview but were not taken into detail. The notes served the researcher as a reminder of major topics or events throughout the conversation.

Data Analysis

Throughout the interview, the researcher took various notes that provided clarification on the discussion, emotions, and topics that stood out to the researcher. After completing each interview, the researcher transcribed the discussions. Both the digitally recorded interviews and the hand-written notes served as data to be analyzed in this study. Creswell's (2007) case-study analysis framework was used to analyze the qualitative data. According to this framework, each interview can be thought of as an individual case and the five total interviews can be thought of as the

collective case for this study. The steps involved in Creswell's framework for data analysis are as follows:

1. Read each case
2. Provide a detailed description of each case
3. Re-read each case
4. Identify themes within each interview case
5. Develop assertions – an interpretation of the meaning of the cases, lessons learned

After transcribing each interview, the researcher read each interview and created a broad, detailed description of each case. The researcher then re-read each interview and made a more comprehensive and detailed description of each case. After completing two rounds of case descriptions, the researcher then identified themes within each case and created a bulleted list for each case that consisted of various topics, phrases, and potential themes. Using the bulleted list, the researcher identified themes within each individual case. After identifying themes for each individual case, the researcher then compared each case to see if there were any common themes across cases. The researcher also had a second coder for reliability purposes who followed the same data analysis process outline above. After the researcher and second coder finished identifying common themes within cases, the coders then compared their findings. After comparing the themes and identifying quotes that served as evidence, the coders grouped themes by significance, creating primary, secondary, and tertiary themes. After establishing themes, the researcher reviewed the primary and secondary research questions and identified assertions that are rooted in the data that was gathered through the participant interviews. In case study analysis, assertions can be thought of as take-away messages from the data.

FINDINGS

Data from the qualitative interviews as well as participants' surveys provided rich findings related to the adverse childhood experiences and social environments of women of color in South Carolina. In an effort to

contextualize the qualitative data, brief contextual profiles for each participant is provided. Additionally, demographic, ACEs, and resilience scores are presented within the contextual profiles. The ACEs score is out of a possible 10 while the resilience scale is out of a total of 70.

Contextual Profiles

Holly. Holly Day L. is 19-year-old Black female and is currently attending a small liberal arts college in the South. She had an overall positive view of herself at the time of the interview, but said that she never felt good enough for people, which she believed stemmed from a childhood filled with abuse. She was either too much or not enough for people, which had a major impact on her. She believed that she developed an alter-ego very young to cope with the difficulties that she faced in her home. Holly's ACEs score was a seven out of eleven and had a resilience score of 63 out of seventy.

Nancy. Nancy D. is a 42 year-old, Black female and describes herself as very family-oriented. She has two degrees and is currently working on her third degree. She described her childhood as privileged because her parents were able to be involved in her life and were very supportive, while other children were not as fortunate. She discussed how her two sisters served as her "backbone" in difficult times and though she was not raised in an extremely religious home, she was taught to pray and reflect on difficult situations. Nancy's ACEs score was zero out of eleven and her resilience score was 69 out of seventy.

Sierra. Sierra J. is a college graduate from a large, liberal arts college in the South. She is a bi-racial woman (Black and White) but feels that she identifies more with her "black side" because she was around Black people more as a child. She believes that there were many cultural differences in her families that allowed her to be a more well-rounded person. Her conversation focused primarily around race and family. Sierra's ACEs score was a three out of eleven while her resilience score was 70 out of 70.

LaKrisha. LaKrisha R. is a Black female and a student at a small liberal arts

school in the South. She described herself as studious and inquisitive. She is involved in a sorority and is studying to enter a helping profession in the future. Throughout the conversation, her passion for her education was evident and she spoke about her belief of the importance of teachers. She also discussed the roles that social workers played in her life and how that influenced her to go to college and study social work. LaKrisha's ACEs score was one out of eleven while her resilience score was 65 out of seventy.

Kathy. Kathy R., is a 43 year-old black female and is a very family oriented person. She is married and is a devote Christian. She described her childhood as fun and family-oriented with parents who were education advocates. She discussed that she did not have everything growing up, but had just enough. She graduated with an associate's degree and married young. She discussed how her experiences surrounding bullying and losing a close friend affected her. Towards the end of the conversation, she reiterated that she had a good childhood, but it was not perfect. Her interview focused on the positive parts of her childhood; however, towards the end of her conversation she discussed how her life was not perfect and how there were many difficulties her family faced. She mentioned at the end of her interview that her mother was a partier and a heavy drinker, that she had siblings who were abusing drugs, and that her sisters all had children while they were teenagers. Although her ACEs score was four out of eleven and her resilience score was 70 out of 70, she revealed that there were additional adversities in her life in the interview.

Emergent Themes

After analyzing the data, two primary themes were established. The primary themes that were identified were external social pressures and protective/promotive factors. Focusing on the External Social Pressures, -isms are identified as a secondary theme. Three tertiary themes are identified under -isms and these themes are racism, sexism, and classism. Racism, sexism, and classism were discussed directly and indirectly by the participants. Out of all five conversations, Sierra focused the

most on racial issues and colorism. Sierra discussed how being bi-racial was difficult for her because she did not fit the mold of what a typical mixed girl would look like.

I definitely got teased about being too skinny or being too pale for mixed person. But I wouldn't say that. . . I definitely wasn't a hated person. . . I wasn't constantly bullied but of course there is always teasing even though we would laugh and I would tease back. Things I'd be teased about I was really insecure about but I didn't like let it get at me on the outside but on the inside a tear me apart.

Sexism was another tertiary theme that was identified by the researchers. Holly Day had many experiences with direct sexism and injustice as a child. Some of her experiences were directly related to sexism while others were more subtle. She described her experiences as a young woman going through puberty:

Like 8th grade this guy told me, I'll never forget, I was sitting at the lunch table across from him [and he said] you're really cute I said thanks. He said that guys would really like you more if you talk less. The next year I didn't talk a lick. I stayed quiet unless someone spoke directly to me. I didn't talk did not say a peep.

I remember one time this guy you know you know middle school to start getting your boobies and everything. . . he punched me in the tit for no reason. . . the middle of a conversation and he punches me! I was like what excuse me and then he did it again. So I broke his nose. And apparently they don't consider that sexual harassment they consider that a fight. Girls get zero respect.

Additionally, classism was discussed briefly by Nancy. Nancy was afforded the privilege to grow up in a middle-class family and experience many of the benefits that come with this privilege. She discussed how other students who were in her classes as a child were not given the same benefits or help due to the fact that their families were poorer and parents

could not be as active in the child's life like her parents were:

Because they [the teachers] knew my parents I think I was able to get away with things that kids whose parents who were working and didn't have the opportunity to be in a school setting. . . they weren't afforded the same types of things.

Additionally, Nancy discussed how her middle-class background created barriers for her in regards to developing relationships with her black peers in particular.

I was open to being friends with whoever. As long as you treat people with respect and kindness I didn't care. And that for some people was difficult. They felt like everyone should have kind of been segregated. You stick with yours, I stick with mine. And like I said it was more of the African American kids then it was with the white kids. And even when I came to college I had that same situation. People judge me based in the car that my parents drove before they even took the time to get to know me.

Although not all of the participants discussed race, sex, or class in their conversation, these were some of the major topics that were voluntarily discussed. The second secondary theme that was identified by the researchers was Coping Mechanisms. Coping Mechanisms were skills that the participants developed to help the deal with difficult circumstances in their lives. Underneath coping mechanisms are three tertiary themes that identify ways in which the participants handled difficult experiences and circumstances: bottling up feelings, religion, and reliance on family and friends. Throughout the conversations with some of the women, the theme of relying on themselves or bottling up their emotions was subtly hinted on. Holly Day talked extensively on how she was forced to hold in her feelings or thoughts:

So I guess I kind of ignored it a little bit. If it was really bad I talk to my grandma about it but in the end I just kinda had to ignore it.

Like, you ever just giving yourself an alter ego it's like I didn't go through that someone else went through that I'm cool.

Additionally, LaKrisha stated how she would cry or hold in emotions when she faced difficult situations that she did not understand:

When I was a child like, when I was younger and there were things I didn't understand. . . I would question a lot. And I tended to cry that was a big way that I handled stuff. I still do that today. that was a big one though. I also kept things in. Especially things that were.... I did that more and middle school and high school. Things that bother me or that were said to me, I'd wear a straight face.

The importance of religion was discussed on many levels in the conversations with the participants. Participants had varying levels of religious devotion and had many ways in which they used religion to cope with difficulties.

We weren't a family that necessarily with the church every Sunday [but] my dad pushed us to pray and really think about and reflect on what we could do to change the situation. – Nancy

As I've grown and matured, the way I've handled things has changed drastically. I still do cry, but I've grown more of a spiritual faith. So I pray which especially helped me since I joined my church and 2013. I got baptized and saved and establish my faith more. That's really been the number one focus. - LaKrisha

Through all that I guess it made me who I am today. It made me stronger. It made me to value family, value your friends. It made me get close to God. It made me pass it on to my kids. Even the good and bad things that occur during that time that I was thought was so bad, I realized they wasn't as bad as it was. You know what I'm saying... like it could have been worse. – Kathy

For these participants, religion was used to help guide Nancy's plan of action, used to help provide comfort for LaKrisha in difficult circumstances, while Kathy developed a stronger faith through trials. Additionally, Sierra discussed the role of religion in her life; however she discussed her conversation from Christianity rather than how religion was used to cope with difficult circumstances.

Finally, the third tertiary theme under coping is reliance on family and friends. Both immediate family and extended family played a role in helping the participants cope with difficulties. Sierra discussed how she would discuss what she was dealing with to her friends and receive advice from her older siblings:

I might talk about it to a friend who is my age but that's not really good advice. I don't know, I didn't. . . I wasn't very open with my mother. Not that we don't have a close relationship, I just didn't tell her about deep stuff. I guess, well I would say that there was some older siblings or friends that I would rely on. So I talked to them.

Additionally, Nancy would turn to her father to discuss what she was facing:

I'm very family-oriented and I always went and talked to my dad when things were going on.

Finally, Holly Day talked about how she would turn to her grandmother to receive support even though her grandmother living far away:

I'd always go to my grandma. My grandma is in Maryland so I don't know if you know but that's 9 hours away so I didn't get to see her as much. But we talked on the phone a lot so talking to my grandma. . . like I said if I needed to cry, cry on the shower because if I cried for any other reason. . . oh I'd get a reason to cry.

The first primary theme that was identified was External Social Pressures with two secondary themes, -isms and coping. A second primary theme was also established that highlights the internalized and externalized protective

influences in the participants' lives. Internalized and External factors have been identified as the secondary themes within the primary theme of protective/promotive factors.

Internalized factors are divided into two tertiary themes, Immediate Family Members and the value of education. Immediate family members planned a large, supportive role for most of the participants in the study. Nancy discussed extensively on how she would turn to her family and was supported by them. She discussed her father as well as her sisters:

We were each other's backbones so we constantly talked about things even though. . . we pretty much always stuck together. We were each other's sounding boards and just kind of helped each other. We still do.

She also discussed the role of her father and their close relationship:

When I think about growing up my dad and I was very close. So close that he would get me up in the morning, get me dressed for school do my hair fix my breakfast. So like I have a very close relationship with my father. I'm a huge daddy girl.

Along with the impact of immediate family, the women also discussed how the value of education within their family affected them. For Kathy's parents, education was the key to success. Kathy stated in her interview:

We didn't have much the older economically, money-wise. But we had a lot. We grew up in a Christian home. My father was a deacon my mother was a Deaconess. We went to church. They [parents] always provided our needs. Education was the key. They didn't push, I'm the only one who has a college degree which is two years, but they pushed high school education.

Additionally, Kathy stated:

It was God, family, education, work for what you want, and the rest will come. That's what my child who was about.

Nancy also stated that her parents were very active in her education and that allowed her to have a better educational experience:

My parents were very involved in school. My mom volunteered, She was a stay-at-home mom so the teachers knew my mother. My father was a SSC chair so they knew my father. Because they knew my parents I think I was like to get away with things that kids whose parents we were working and didn't have the opportunity to be in a school setting... they weren't afforded the same types of things. I think I was given extra help on things when I needed it but those kids who probably needed it more than I did. . . weren't privy to the same types of situations. And again I think it was mostly because my parents were so involved in every aspect. My mom chaperoned on field trips. I mean every little step of our education they were there.

The immediate family system played a large role in these women's lives and their family created an environment in which education was highly valued. Additionally, these women discussed how protective external factors supported and influenced them to push through their obstacles. The tertiary themes identified under external factors consist of extended family, the role of teachers, and for two participants, life-shaping experiences that propelled them into their career.

Firstly, extended family played a large role in support for the participants. Sierra discussed the role of her godfather and her extended family had in her life and the impact that they made:

I can touch on my godfather. He was a big part. Now he's married and has an almost three-year-old. So, that's my little brother. So when I say all my siblings, I'm the youngest of my father's kids. I didn't know this until I graduated high school, but if anything had happened to my mother I would have gone to his brother and wife. They have two kids and my cousins. So I'm pretty close to his family, they treat me like their own family.

I found out I had all these siblings didn't know I had . . . and nieces and nephews. A whole big family I never knew I had. But once I met them and start going there every summer, that played a really big part and who I am today.

Furthermore, LaKrisha talked on how her grandmother has held an important part in her life:

I can tie it back to family because I really prize family, being as traditional as I am. My paternal grandmother and my dad's mother. She's been very influential went to me. She gives a lot of good insights. I really cherish and love her. Even though she's the only grandmother I have left. I just wish we talked more and that I could see her more

The second tertiary theme that was identified focuses on the role of teachers. The participants discussed the value of education, however they also discuss the role that teachers and other educators played in their lives. LaKrisha stated this in her interview:

I keep referring back to school but the teachers I had in the primary elementary levels. . . I had really good teachers that work with me, they really truly believed in me and help me break out of my shell. I think that shaped me to be who I am.

Yeah it starts in the home but it continues with them. That chain that connected me and really push me forward.

Additionally, Holly Day highlighted the fact that her teachers were a support for her while she was facing issues in her home.

I always have teachers who I really loved and even when things are tough back home or in general some of those teachers were just always there for me.

Finally, another tertiary theme surrounding major life-shaping experiences that two participants discussed. LaKrisha and Nancy both discussed two experiences that helped

open the door to their prospective/current fields. For Nancy, a major life-shaping experience came from being exposed to her uncle who had a disability:

I had an uncle that was born with Cerebral Palsy. He was a twin he was the only one that survived. So that really shaped who was because you see lots of people who have family especially back then who would just put them in home and you really didn't see them much. And although my uncle was putting a home with my grandma got sick it was still one of those things where I got to see him as much as possible. He was here for my graduation. So because of all the experiences of visiting the hospital and getting a chance to interacting with other residents that was there I think that really shaped what I wanted to do with my life so I really went towards the social side.

LaKrisha also discussed the role that social workers played in her life and how the social workers helped her find a career path into social work:

My grandma died with Alzheimer's. One thing I want to advocate for as a social worker is Alzheimer's disease. The devastating toll that it took my grandmother's life, and especially at the awkward age when everything didn't make any sense, I was twelve I didn't make any sense then. And in January of 2012 my Aunt Mae which is my mother sister had a stroke. And a medical social worker worked with our family and helped her get into occupational speech and physical therapy for her to gain her strength and got her into a rehab hospital in my town. And just those two experiences really affected me and they shaped me to being a social work major.

DISCUSSION & IMPLICATIONS

After examining the data, the researcher then referred back to the primary and secondary research questions that guided the study. The primary question, *how do women of color describe the social environmental factors and experiences of their childhood?* can be answered in many ways by the data provided by the five women. Many of the

women described their social environments as supportive. The five women who were interviewed were in different areas of South Carolina, yet there were support systems in place that allowed each of the women to thrive, even in the face of adversity. Support systems included immediate and extended family, supportive friend groups, and teachers who helped each woman navigate and overcome difficult experiences. Many of these women did not focus on the negative factors in their childhood, but instead focused on the positive aspects that existed within their social environments.

Although the women described their environments as supportive, the participants discussed many obstacles that they faced. Holly discussed the role of institutionalized sexism within her environment and how there seemed to be few adults to advocate on her behalf when she experienced sexual groping and hateful words from her male peers in middle school. Nancy discussed how she felt that because she came from a middle class family she faced difficulties making friends because people would assume that she thought that she was better than them. Her peers had a difficult time relating to her and would often assume that she was “boujee” (stuck up). The third participant heavily discussed the role of race in her life. Being biracial, she felt that she had more well-rounded experience compared to those who identify as only one race. However, due to her very light skin and being skinny, she was often picked on for not looking like a “mixed girl.” Though she acted as if comments based off her racial identity did not bother her, she admitted that comments really affected her.

The secondary research question is *What role do adverse or traumatic childhood experiences within the social environment play in the lives of women of color?* Traumatic childhood experiences played a unique role in the development of the five women who were interviewed. Many of the difficult situations that the women dealt with would have not been acknowledged by the ACEs questionnaire alone. The ACEs questionnaire focuses heavily on the immediate family structure while the data collected from each woman through the interview focused on

the experiences that allowed the women to develop a better sense of themselves. For example, participant five, Kathy, discussed how she experienced bullying due to her weight; although it was difficult to deal with, she was able to find value in herself. She did activities such as trying out for the cheerleading team or running for class president, something that she felt was odd for a young girl who was struggling with her weight to do. Additionally, Sierra dealt with bullying due to her not looking “mixed” enough. Both of these participants overcame these experiences in different ways and allowed them to be more confident and secure with themselves. For many of the participants, their childhood had many difficulties but they did not view their childhood as traumatic or having much adversity. However, there were undertones of racism, sexism, and classism that permeated through the conversations with the women. Nevertheless, the majority of the participants highlighted the strengths and protective factors in their childhood. These positive factors such as family, friends, faith, and education helped them persevere throughout the difficulties.

Although the majority of the participants discussed their childhood in a positive light, Holly Day discussed her experiences in a different way. Due to the abuse that she faced as a child in both her home environment and in school, she felt that her sense of self was constantly being remodeled to please others. “*I was always trying to please someone else. That really affected me a lot I think*” she stated in her interview. She never cried out and her grandmother, who lived in Maryland, was her primary source of familial support. However, she had one teacher who believed in her potential, who she described as one her favorite teachers. Since she has entered college, she has felt a sense of freedom since she no longer lives with her father, who she described to be the primary source of abuse. Additionally, college has provided her with knowledge to better understand herself. At the time of our interview, she was receiving counseling and therapy and said that she is in a good place.

Limitations

This study was organized to allow individuals to tell their stories about their childhood and how adverse experiences in their social environment affected them. However, there are some setbacks that limited the study. The first setback is the lack of diversity within the sample in terms of race and the highest level of education completed. The sample size was limited due to the study being a convenience sample. Additionally, the use of Facebook limited who would have known about the study, as only those who used Facebook and were friends with those who shared the Facebook post would have known about the study. Some may feel that the sample size (n=5) was a limitation; however in qualitative study, data is not meant to be generalizable, so the sample size is not a limitation.

Conclusion

This study highlights many strengths in the women's lives such as a strong support system in their family, friends, and educators. The study also notes that the majority of the participants did not face adversities that were identified in the original ACEs study, but still struggle with societal expectations and an oppressive culture that created obstacles for the women to overcome. Additionally, the study provides an additional lens to look through when exploring and discussing ACEs and human behavior. Understanding what causes individuals to act and react to their environment is important to move forward in developing a comprehensive understanding to use in research and practice. Although research has been conducted that examines how individual factors in the social environment (such as race, sex, education, and family) can impact individuals, families, and communities, more research is needed to provide a fuller picture of adversity and resilience. As stated before, this study is an exploratory study that is not meant to be generalizable. Nevertheless, this study can provide additional information about childhood adversity and the social environment. Additionally, this study uses foundational social work education to assess and understand human behavior in the social environment.

In the future, I plan to continue to develop a deeper understanding of the five women who participated in the study by delving into related literature to provide additional evidence. Additional evidence from other research would allow me to compare my finding to other studies. Additionally, this research has allowed me to develop a deeper understanding of the social environment. I would like to continue furthering my education about ACEs to be a better advocate for children and their families by continuing researching topics related to ACEs, but focus more on resilience promoting factors rather than the adverse experiences.

REFERENCES

- Andersen, J. P., & Blosnich, J. (2013). Disparities in adverse childhood experiences among sexual minority and heterosexual adults: Results from a multi-state probability-based sample. *Plos ONE*, 8(1), 1-7. doi:10.1371/journal.pone.0054691
- Centers for Disease Control and Prevention (2016). Health, United States, 2016. *U.S Department of Health and Human Services*. Retrieved from: <https://www.cdc.gov/nchs/data/abus/hus/hus16.pdf>
- Creswell, J. (2007). *Qualitative inquiry and research design: choosing among five approaches*. Thousand Oaks: Sage.
- Felitti, V., Anda, R., Nordenberg, D., Williamson, D., Spitz, A., Edwards, V., Koss, M., Marks, J. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes in death in adults. *American Journal of Preventive Medicine*, 14(4): 245-258.
- Flaherty, E., Tompson, R., Litrownik, A., Zolotor, A., Dubowitz, H., Runyan, D., English, D., Everson, M (2009). *Adverse childhood exposures and reported child health at age 12. Academic Pediatrics*, 9(3): 150-156.
- Hutchison, E. (2013). Social work education: human behavior and the social environment. *Encyclopedia of Social Work*.

Retrieved 7 May 2018. From <http://socialwork.oxfordre.com/view/10.1093/acrefore/9780199975839.001.001/acrefore-9780199975839-e-616>

Kenney, M. K., & Singh, G. K. (2016). Adverse Childhood Experiences among American Indian/Alaska Native Children: The 2011-2012 National Survey of Children's Health. Retrieved from: <https://www.hindawi.com/journals/scientifica/2016/7424239/>

APPENDIX A

Demographic Questionnaire

1. What is your age?
2. What is your gender?
3. What is your ethnicity?
4. What is your highest level of educational attainment?
5. Where were you born?
6. Where did you grow up (Birth to 18 years)?
7. Where do you live now?

APPENDIX B

Interview Schedule

1. Tell me about your childhood
2. Outside of your family, what other factors or experiences from your childhood/youth do you feel shaped the person you are today?
3. In what ways did those experiences affect you?
4. How, if at all, did you cope with difficult experiences when you were a child? When you were an adolescent? Now?
5. In general, tell me about your current health status.
6. What else would you like to share with me that you have not already shared?

APPENDIX C

ACEs Scale

1. Did you live with anyone who was depressed, mentally ill, or suicidal?

2. Did you live with anyone who was a problem drinker or alcoholic?
3. Did you live with anyone who used illegal street drugs or who abused prescription medications?
4. Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?
5. Were your parents separated or divorced?
6. How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?
7. Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking.
8. How often did a parent or adult in your home ever swear at you, insult you, or put you down?
9. How often did anyone at least 5 years older than you or an adult, ever touch you sexually?
10. How often did anyone at least 5 years older than you or an adult, try to make you touch them sexually?
11. How often did anyone at least 5 years older than you or an adult, force you to have sex?

APPENDIX D

Resilience Scale

1. I believe my mother loved me when I was little
2. I believe that my father loved me when I was little
3. When I was little, other people helped my mother and father take care of me and they seemed to love me
4. When I was a child, there were relatives in my family who made me feel better if I was sad or worried
5. When I was a child, there were relatives in my family who made me feel better if I was sad or worried
6. When I was a child, neighbors or my friends' parents seemed to like me

7. When I was a child, teachers, coaches, youth leaders or ministers were there to help me
8. Someone in my family cared about how I was doing in school
9. My family, neighbors, and friends often talked about making our lives better
10. We had rules in our house and were expected to keep them
11. When I felt really bad, I could almost always find someone I trusted to talk to
12. As a youth, people noticed that I was capable and could get things done
13. I was independent and a go-getter
14. I believed that life is what you make it
15. How many of these 14 protective factors did I have as a youth (how many of the 14 were circled “Definitely true” or “probably true”)

Of these circled, how many are still true for me?

Moral Foundations Theory vs. Schwartz Value Theory: Which Theory Best Explains Ideological Differences?

Marissa T. McNeace
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ABSTRACT

This research examines ideological differences between liberals and conservatives using Schwartz Value Theory (SVT) to analyze claims made by Moral Foundations Theory (MFT). While MFT consists of five scales to measure moral reasoning (Harm/Care, Fairness/Reciprocity, Purity/Sanctity, Ingroup/Loyalty, and Authority/Respect), SVT consists of ten scales that can be grouped into four main categories (Openness to Change, Self-Transcendence, Conservation, and Self-Enhancement). Based on SVT, we created four Moral Forces scales (MF4) using the two response formats of the MFT. Our scales are the following: Obedience, Status, Universalism, and Self-Direction. Data was collected through social media and university classes in the format of online and paper surveys. Using stepwise regression, MF4's scales of Obedience and Universalism emerged as the best predictors for self-reported conservatism. For social-issue conservatism, MF4's Obedience and Universalism were also the best predictors that emerged. Lastly, for economic-issue conservatism, Fairness from MFT and MF4's Self-Direction and Universalism emerged as predictors. Our findings suggest that the MFT measures the moralization of values rather than moral foundations. Additionally, the MF4 identifies moralized values undetected by MFT and thereby provides a more accurate picture of liberal-conservative differences. The logic of this is that other values can be moralized or translated into the MFT "language" and thus they will be treated as moral values.

INTRODUCTION

Both Moral Foundations Theory (MFT) and Schwartz Value Theory (SVT) have been used to explain ideological beliefs (Graham, Haidt, Nosek, 2009; Graham et al., 2011; Schwartz et al., 2012; Schwartz et al., 2014). This paper focuses in on these two competing frameworks for understanding how these values and morals influence political ideology. Schein and Gray (2015) have challenged MFT's claim to have identified specific moral "foundations" (i.e., discrete sensor-like systems attuned to specific phenomena) while other theorists suggest that SVT might provide an even broader framework for recognizing the plurality of moral concerns (Schwartz et al., 2014; Sinn, 2016). This paper offers a direct comparison of the two conceptual schemes by rewriting SVT constructs using the response formats of the principal MFT measure, the Moral Foundations Questionnaire (MFQ) (Graham et al., 2011).

Moral Foundations Theory

Haidt (2008, p.70) defines moral systems as interlocking sets of values, practices, institutions, and evolved psychological mechanisms that work together to suppress or regulate selfishness and make social life possible". Haidt here strives to broaden the conception of morality beyond the traditional focus on harm and fairness. MFT theorists suggest three additional moral domains: spiritual purity, ingroup loyalty, and respect for authority (Haidt, 2008; Graham, Haidt, & Nosek, 2009; Graham et al., 2011). MFT categories the traditional morals into the "individualizing" foundation, which is made up of two sets of moral intuitions of Harm/Care and Fairness/Reciprocity (Graham, Haidt, & Nosek, 2009). These foundations are called "individualizing" because they enable social life by protecting the individual. The Harm/Care foundation thus reflects values such as gentleness, nurturance, and kindness. In other words, it arises from attachment processes and

enables our ability to empathize with others. The Fairness/Reciprocity foundation entails altruism, or the selfless concern for others' well-being (Graham et al., 2011).

In the effort to broaden morality, MFT defines a "binding" morality. The 5 sets of moral intuitions included in the "binding" foundation include those in "individualizing" foundation plus three others (Authority/Respect, Ingroup/Loyalty, and Purity/Sanctity) (Graham, Haidt, & Nosek, 2009). Authority/Respect concerns followership, leadership, and an individual's respect for traditions. Ingroup/Loyalty captures a "one for all, all for one" concept, reflected in patriotism and personal sacrifice for the good of the group. Lastly, Purity/Sanctity addresses religious concerns such as living in a "noble" or morally uncontaminated way. These added moral intuitions in the "binding" foundation seek to enable community differently, that is, not by protecting individuals (as the "individualizing" foundation sees it) but by ensuring people put the needs of the community first (Graham, Haidt, & Nosek, 2009).

MFT scholars have most famously applied their five-factor model to explain ideological differences between liberals and conservatives (Graham, Haidt, & Nosek, 2009; Haidt, 2012). MFT theorists suggest that liberals apply a narrower type of morality. In contrast, MFT holds that conservatives draw upon a broader sense of morality that includes the binding foundations. MFT thus suggests that different approaches to morality can explain liberal-conservative differences (Graham, Haidt, & Nosek, 2009). This difference can be seen in different understandings of loyalty, such as whether one should follow orders given by a commanding officer if one finds those orders immoral. Conservatives would be more inclined to believe that obeying is a moral duty, drawing on the "binding" foundation including authority and respect as part of moral reasoning (Graham, Haidt, & Nosek, 2009; Graham et al., 2011). Liberals, however, would be more inclined to see loyalty as less relevant than their assessment of the harm and fairness issues related to the orders (Graham, Haidt, & Nosek, 2009;

Graham et al., 2011). In other words, liberals would be more inclined than conservatives to imagine cases where disobeying orders would be the moral thing to do. MFT might thus attempt to explain ideological distinct reactions to social protest movements, such as Black Lives Matter, by suggesting that liberals and conservatives' difference in morality oppose such movements because they deem respect for authority as a moral issue.

Criticisms of Moral Foundations Theory

Research has in fact shown that liberal and conservatives differ in their endorsement of across the five domains of MFT (Graham, Haidt, Nosek, 2009). However, others argue that MFT is not discovering new differences, but merely rebranding or rediscovering well-established ideological ones. They argue that the "binding" foundations simply rebrand Right Wing Authoritarianism (RWA) and that the "individualizing" foundations are simply the reverse of Social Dominance Orientation (SDO) (Federico, Weber, Ergun, & Hunt, 2013; Sinn, n.d.; Sinn & Hayes, 2016). The Dual Process Model (DPM) (Duckitt, 2001) presents RWA and SDO as the two principle sociopolitical attitudes shaping prejudice and ideology. DPM theorists view RWA as a type of defensive ethnocentrism, which means that RWA reflects a desire for cohesion and ethnic devotion that entails anti-outgroup attitudes and pro-in-group attitudes (Duckitt & Sibley, 2010). Similarly, the "binding" foundations emphasize ingroup favoritism and deference to authority (Graham, Haidt, & Nosek, 2009).

Similarly, MFT also (accidentally) rediscovers SDO. The so-called "individualizing" foundations (Harm and Fairness) encompass basic concerns related to empathy and egalitarianism. These are the very sorts of concerns rejected by those scoring high on Social Dominance Orientation (SDO) (Duckitt, 2001). Those high in SDO tend to be low in empathy, and favor group-based dominance and intergroup ethnocentrism. Others have also argued that the so-called "individualizing" foundations are misnamed, as they in fact represent a broader set of concerns better labeled as universalism (Sinn & Hayes, 2016).

Schwartz Value Theory

Schwartz Value Theory (SVT), attempts to specify basic human values and the relationships among those values (Schwartz, 1992). Like MFT, it has been used to explain ideological differences (Schwartz et al., 2012; Schwartz et al., 2014). It represents ten personal values in a circular continuum (see Figure 1). The position of values relative to one another reflects the relationships among the values. This is shown by a positive correlation between adjacent values and negative correlations between opposing values. For example, universalism and benevolence correlate positively whereas universalism and power correlate negatively.



Figure 1: SVT model of relations among 10 basic values (Schwartz, 1992)

The ten values fall along two orthogonal axes: *conservation* vs. *openness to change* and *self-enhancement* vs. *self-transcendence* (Schwartz 1992). *Conservation* values focus on safety of society and self, avoiding conflict, and the following of social expectations and norms (e.g. security, conformity, tradition). They oppose *openness to change* values which concentrate on autonomy and expression (e.g. Self-Direction, Stimulation, and partly Hedonism). On the other axis, *Self-enhancement* values emphasize control/dominance, personal success, and pleasure for oneself (e.g. Power, Achievement, and partly Hedonism) and oppose self-transcending values (e.g. Universalism and Benevolence). SVT accurately predicts a range of political views (Schwartz et al. 2014). For

example, the findings show self-transcendence values predict support for civil liberties, conservation values for blind patriotism, and self-enhancement values for free-enterprise.

Comparing SVT and MFT

Unlike MFT, SVT recognizes fundamental tradeoffs that MFT doesn't address (Schwartz et al., 2012). As suggested in the earlier example about the morality of following orders, conservatives are inclined to moralize loyalty while liberals are not. The SVT suggests this tension as conformity and universalism are not adjacent. However, MFT treats each foundation as independent (Graham, et al., 2011). It thus does not consider that some values may conflict with others. Therefore, liberals might not endorse certain MFT foundations not because their morality is narrower, but because they may endorse values MFT ignores.

SVT may also suggest a more complete depiction of conservative motivation by considering motivations overlooked by MFT (Schwartz et al., 2012). From the SVT perspective, what MFT labels "binding" may also involve self-enhancement motivations (power and achievement; Schwartz, et al., 2012). DPM research supports this reasoning as both RWA and SDO drive conservatism (Duckitt & Sibley, 2010). In short, MFT may be missing an SDO motivation behind conservatism.

SVT also explains liberal motivation differently than MFT. Rejecting the "individualizing" label, SVT suggests liberal motivation reflects self-transcendence values such as benevolence and universalism based (Schwartz et al., 2014). This explains why liberals are more concerned with nature and foreign aid, whereas conservatives are not. This potentially could be a better representation of liberal motivations than the "individualizing" label of MFT because it captures more than harm and fairness, which are only part of the overall motivations of liberals. Additionally, the labeling of "individualizing" might be a poor description of what others have argued is a broader, more inclusive construct, namely universalism (Sinn & Hayes, 2016). Therefore, SVT may offer a better framework for

understanding both conservative and liberal motivations.

Constructing the Empirical Test

Based on the above, we can summarize the different explanations of ideological differences as follows: MFT suggests liberals rely on a narrower set of morals/values while SVT argues that different ideologies represent tradeoffs between conflicting morals/values. To empirically test these competing hypotheses, we operationalized SVT in a way that makes it directly comparable to the principal measure of the MFT, the Moral Foundations Questionnaire (MFQ; Graham, et al., 2011). We make two principal changes. First, we reduce from ten to four the number of SVT values so that the five-factor MFT would not be disadvantaged by measurement specificity. We identified four values we believed would capture the essential tradeoffs driving ideological differences. These were Obedience (reflecting Tradition, Conformity, and some Purity), Status (Power and Achievement), Universalism, and Self-Direction. Second, we wrote items for these constructs using the two formats from the MFQ (see Methods).

Operationalizing SVT items in the MFQ format will also offer insights into what the MFQ is measuring. Utilizing the MFQ format for a separate set of constructs will help determine the extent to which the MFQ is measuring distinct and discrete moral *foundations* or simply *one possible* set of moralizations from a broader set of values. Others have suggested that the plurality of moral beliefs requires not separate and discrete foundations, but a more general process of moralization (Schein & Gray, 2015). If successful, the operationalization of SVT constructs overlooked by MFT (e.g., Self-Discipline) as “moral” values would undermine the “foundational” claims made by MFT.

Current Study

To test the competing explanations for ideological differences offered by SVT and MFT, we created the Moral Forces 4 (i.e., MF4) operationalization of SVT values using the scales and instructions of the MFQ (Graham, et al., 2011; see Methods). We test the following hypotheses: (1) The MF4 scales will (a) show acceptable internal reliability, (b) an internal

pattern of correlations consistent with SVT (i.e., positively between Obedience and Status and between Universalism and Self-Direction; negatively between Obedience and Self-Direction and between Universalism and Status), and (c) correlate with self-reported political conservatism (Obedience and Status positively, Universalism and Self-Direction negatively). (2) In simultaneous multiple regressions predicting self-reported conservatism, we predict models based on the MFQ and MF4 will account for approximately equal amounts of variance (despite the MF4 having fewer scales). (3) In stepwise regression analyses with all nine scales as potential predictors of (a) self-reported conservatism, (b) social-issue conservatism, and (c) economic-issue conservatism, the MF4 scales will account for variance unexplained by MFT scales.

METHODS

Participants

Respondents were 175 student and non-student participants. The participants were collected through social media and undergraduate courses offering extra credit for completion. An alternative assignment was offered for extra credit for students that did not want to participate in the study. We excluded 43 participants who missed more than one of the attention check items embedded within the survey, as well as 3 individuals who excluded four or more items across the survey, leaving 129 participants (93 women, 30 men, and 6 other). Participants identified as Caucasians (49.6%), African Americans (32.8%), Multiracial (6.1%), Hispanics/Latinos (4.6%), and other (6.9%). The average age was 21.05 years (SD=6.78).

Procedure

The survey was completed either online or on paper in class and was self-paced. The survey was prefaced with an informed consent page. On the online surveys, participants had to complete an “instructional manipulation check,” or an initial attention check item. This was a question about TV viewing that participants were instructed to skip. If participants answered, they were given a second chance. If they answered again, they were unable to continue.

Participants may have received extra credit in a course; however, no participants were financially compensated. A debriefing followed the survey.

Measures

Our self-report survey contained the MFT's MFQ, our new Moral Forces (MF4) scale, self-report measures of economic and social conservatism, and demographic questions.

Moral Foundations Questionnaire (MFQ)

Respondents completed the 30 item MFQ (Graham, Haidt, & Nosek, 2009). This included the "individualizing scales," Harm/Care ($M=3.89$, $SD=.69$, $\alpha=.564$) and Fairness/Reciprocity ($M=3.74$, $SD=.59$, $\alpha=.511$), and the "binding" scales, Authority/Respect ($M=2.99$, $SD=.81$, $\alpha=.595$) Ingroup/Loyalty ($M=2.67$, $SD=.86$, $\alpha=.621$), and Purity/Sanctity ($M=2.89$, $SD=1.03$, $\alpha=.764$) with six items per foundation.

Moral Forces

We created a Moral Forces scale (MF4) based on SVT (Schwartz, 1992). We first identified four composite constructs we expected to be particularly relevant for predicting political ideology. These were Obedience (Conformity and Tradition), Status (Power and Achievement), Universalism, and Self-Direction. The obedience scale was designed to capture RWA motivations and the "binding" foundations of MFT (Authority/Respect, Ingroup/Loyalty, and Purity/Sanctity). Status was designed to capture SDO-related motivations opposing universalizing. Universalism was designed to capture that SVT construct plus Harm/Care and Fairness/Reciprocity, or the "individualizing" foundations. Lastly, Self-Direction was designed to capture that SVT construct and to oppose Obedience. We wrote two sets of separate items for each scale utilizing the two response formats of the MFQ (Graham, Haidt, & Nosek, 2009). We wrote the MF4 scale items using the two response formats of the MFQ (Graham, et al., 2011), moral relevance and moral judgment. For the moral relevance questions, participants were instructed to respond to the following question: "When you decide whether something is right or wrong,

to what extent are the following considerations relevant to your thinking? Please rate using a Likert scale ranging from 0 (*not at all relevant*) to 5 (*extremely relevant*)". For the moral judgment items, participants were told to respond to the following statement: Please read the following sentences and indicate your disagreement or agreement for each statement using a Likert Scale ranging from 0 (Strongly Disagree) to 5 (Strongly Agree).

Following SVT methodology, the participants' responses were centered based on their average responses. We then administered these 48 items in the survey and conducted a reliability analysis on for each scale, picking the top three items in each format for each scale. This left us with six questions per scale (three per format) with the following reliabilities: Obedience ($\alpha=.802$), Status ($\alpha=.709$), Universalism ($\alpha=.755$), and Self-Direction ($\alpha=.777$).

Economic Conservatism and Social Conservatism

We wrote items to measure this construct based on how people responded to issues, with some coming from Everett (2013) and others constructed and written by us. The issues used for economic conservatism were raising the minimum wage, welfare benefits, and higher taxes on the wealthy. These items were all reverse scored. The issues used for social conservatism were: always siding with your country (right or wrong), patriotism, sex education in public schools (reverse scored), safe and convenient access to abortion (reverse scored) and preventing Muslim immigration. Participants responded to the question of "Please indicate your level of agreement with the following items" using a Likert scale of 1 (Strongly Disagree) to 10 (Strongly Agree). This left us with the following reliabilities: Economic Conservative Issues ($M= 3.76$, $SD= 1.97$, $\alpha= .683$) and Social Conservation Issues ($M= 3.75$, $SD=1.76$, $\alpha= .763$).

Demographics

Participants reported their state of residence, the size of their home town/city, their education level, household income, race, gender, age, religious affiliation and self-rated political ideology (overall, social, and economic) from 1 (Strongly Liberal) to 7 (Strongly

Conservative) or 8 (Libertarian, other, don't know).

RESULTS

Table 1.

Correlations for MFQ and MF4 with Measures of Conservatism

Morality	Self-Reported Conservatism	Social Issue Conservatism	Economic Issue Conservatism
MFT			
Fairness	-.36*	-.24*	-.32**
Harm	-.14	-.05	-.12
Authority	.50**	.32**	.44**
Loyalty	.41**	.32**	.41**
Purity	.51**	.29**	.44**
MF4			
Universalism	-.49**	-.42**	-.45**
Self-direction	-.46**	-.42**	-.48**
Obedience	.59**	.38**	.54**
Status	.39**	.32**	.36**

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

Table 1 compares correlations between MFQ and MF4 scales with self-reported conservatism. All five MFT scales correlated significantly, except Harm, replicating previous results (Graham, Haidt, & Nosek, 2009). Similarly, all MF4 scales correlated with conservatism. Similar patterns are seen with scales of economic- and social-issue conservatism. Additionally, the pattern of correlations among the MF4 scales are consistent with the circumplex structure of SVT; both Obedience and Status correlate positively, $r(129) = .243$, $p = .005$, as do Universalism and Self-direction, $r(129) = .387$, $p < .001$. In contrast, both Status and Universalism correlate negatively, $r(129) = -.687$, $p < .001$, as do Obedience and Self-direction, $r(129) = -.596$, $p < .001$.

Table 2.

Regression Analyses Comparing MFT and MF4 Predicting Conservative Self-Identification

	R^2	b	SE	β
MFT	.45**			
Fairness		-1.33***	.31	-.39
Harm		.15	.28	.05
Authority		.49	.28	.20
Loyalty		.26	.26	.10
Purity		.67**	.21	.34
				$F(5,92) = 14.9$
MF4	.43***			
Universalism		-.85*	.37	-.28
Self-direction		-.03	.38	-.01
Obedience		.97***	.23	.46
Status		.08	.38	.03
				$F(4,92) = 17.2$

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

Table 2 shows simultaneous regression analyses for both the MFQ and MF4 scales. Among the MFQ scales, only Fairness and Purity reached significance. Among the MF4

scales, only Universalism and Obedience reached significance. Overall variance accounted for was similar between the MFQ, $R^2 = .45$, and the MF4, $R^2 = .43$. The F for MF4 was slightly larger, $F(4,92) = 17.2$, than for the MFQ, $F(5,92) = 14.9$.

Tables 3 through 5 present stepwise regressions predicting three different operationalizations of conservatism. In each step, the regression analysis chooses the next best predictor from all remaining MFQ and MFT scales to maximize the overall amount of variance explained.

Table 3.

Stepwise Regression Analysis Predicting Self-Identified Conservatism

	Self-identified Conservatism			
	Step 1	Step 2	Step 3	Step 4
Obedience	.59***	.46***	.45***	.46***
Universalism		-.30**	-.25**	-.27**
Fairness			-.22**	-.30**
Harm				.17*
ΔR^2		.07**	.04**	.02*
Total R^2	.34***	.41***	.45***	.47***

Note. Beta values shown.

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

Table 3 examines self-reported conservatism. Here the M4 scales of Obedience and Universalism emerged as the best predictors, but the MFQ scales of Fairness and Harm also accounted for unique variance.

Table 4.

Stepwise Regression Analysis Predicting Social Conservatism

	Social-issue Conservatism			
	Step 1	Step 2	Step 3	Step 4
Obedience	.57***	.45***	.34***	.33***
Universalism		-.29***	-.26***	-.18*
Loyalty			.26**	.31***
Fairness				-.26***
ΔR^2		.07**	.04*	.06**
Total R^2	.32***	.39***	.43***	.49***

Note. Beta values shown.

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

Table 4 examines social-issue conservatism. Once again Obedience and Universalism were the best predictors followed by the MFQ scales of Loyalty and Fairness.

Table 5.*Stepwise Regression Analysis Predicting Economic Conservatism*

	Economic-issue Conservatism		
	Step 1	Step 2	Step 3
Fairness	-.50***	-.48***	-.43***
Self-Direction		-.27***	-.20*
Universalism			-.19*
ΔR^2		.07**	.02*
Total R^2	.25***	.32***	.34***

Note. Beta values shown.* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5 examines economic-issue conservatism. Here the MFQ scale of Fairness was the best predicted, but the MF4 scales of Self-Direction and Universalism also improved the model fit.

DISCUSSION

MFT claims to have broadened morality and explained differing ideological beliefs with their five discrete, quasi-physiological sensors of morality. As hypothesized in Hypothesis 1a, MF4 scales did show acceptable internal reliability, and correlated with self-reported political conservatism. This suggests that our measure does indeed predict the endorsement of political conservatism. Alongside this, we successfully replicated the correlations between the MFT foundations and self-identified conservatism, excluding harm (Graham, Haidt, & Nosek, 2009). Within this, a substantial correlation ($r = -.359$) was found between Fairness and conservatism. MFT theorists claim that conservatives have a broader morality than liberals because they utilize all the “Moral Foundations” roughly equally. However, the fact that the negative correlation between Fairness and conservatism is substantially larger than zero suggests that conservatives are endorsing it substantially less. This disputes MFT’s claim that conservatives utilize the five foundations more equally. This also supports the trade-off logic underlying SVT (Schwartz, et al., 2012). However, the reliabilities of the MFT scales (Harm/Care, $\alpha = .564$, Fairness/Reciprocity, $\alpha = .511$, Authority/Respect, $\alpha = .595$, Ingroup/Loyalty, $\alpha = .621$, and Purity/Sanctity, $\alpha = .764$) are low, calling into question the coherence of these constructs. Overall, the MF4 scales performed better. First, the MF4 scales showed better

reliabilities (Obedience, $\alpha = .802$, Status, $\alpha = .709$, Universalism, $\alpha = .755$, and Self-Direction, $\alpha = .777$).

Second, as predicted in Hypothesis 1b, the pattern of relationships among the MF4 measures fit the tradeoff pattern expected for, with Obedience and Status correlating positively, Obedience and Self-Direction correlating negatively, Self-Direction and Universalism correlating positively, and Status and Universalism correlating negatively. Third, as predicted in Hypothesis 1c, each scale within the MF4 correlates with self-reported conservatism. This suggests that MFT may not have identified the only relevant moral differences between liberals and conservatives and that the MFQ may be measuring moralization, rather than functionally discrete “foundations.”

Hypothesis 2 predicted that the MF4 and MFQ would account for about equal amounts of variance in self-reported ideology. As shown in Table 2, this hypothesis was supported. While the MFQ accounted for 45% of the variance, the MF4 accounted for 43%. In both cases, only two of the predictors reach significance (i.e., Fairness and Purity for MFQ, Universalism and Obedience for MF4). However, we note that the F value is higher for the MF4, because it requires fewer degrees of freedom. Given the importance MFT gives to parsimony (Graham et al., 2011), this difference is important. Our analyses here suggest that MF4’s four factor theory explains almost as much variance as the MFQ with a smaller number of factors. Additionally, the success of our alternative set of scales calls into question MFT’s presumption of having discovered “foundational” differences and suggests instead that a range of moral values can be moralized differently between liberals and conservatives. Our result also undermines MFT in finding Fairness the best predictor of conservatism. This negative relationship undermines the MFT assertion that liberals and conservatives endorse the “individualizing” foundations roughly equally (Graham, Haidt, & Nosek, 2009). The only reason this set of predictors can account for 45% of the variance is due to Fairness, a

predictor that MFT suggests should be near zero.

To better understand the predictive utility of each set of scales, we also conducted three stepwise hierarchical regressions predicting in turn self-reported conservative, social-issue conservatism and economic-issue conservatism. As we predicted in Hypothesis 3a, some of the MF4 scales emerged as better predictors of self-reported conservatism relative to the MFQ scales. The MF4 scales of Obedience and Universalism appear to be potent predictors for self-reported conservatism, emerging as the best two predictors before the MFQ's Fairness and Harm. This suggests that MFT underspecifies the exact moral differences between liberals and conservatives. This also suggests that describing liberal morality as "individualizing" may not be accurate given the predictive value of Universalism. We note in passing that Harm likely performed differently (loading positively) given that two of the original Harm items were dropped to improve the scale's reliability.

The results also supported Hypothesis 3b, which predicted MF4 scales would emerge as predictors of social-issue conservatism. Once again, MF4's scales of Obedience and Universalism emerged and accounted for more variance than MFT's Loyalty and Fairness. We do note, however, that even after Obedience is entered, MFQ's Loyalty emerges as the third best predictor of social conservatism. This suggests that the Loyalty scale captures something relevant to conservatives that our Obedience scale fails to address.

As hypothesized in Hypothesis 2c, MF4 scales accounted for variance unexplained by MFT scales in issue-based economic conservatism. MFT's Fairness is important, but so are MF4's Self-Direction and Universalism. No "binding" factors emerged as significant. This suggests that neither "binding" nor obedience concerns drive economic conservatism, but that rejecting fairness, self-direction, and universalism do. The fact that no positive predictor emerged as a predictor of economic conservatism also suggests that conservative morality here is narrower rather than *broader* relative to liberal morality.

Additionally, only Universalism and Fairness were significant predictors across all three operationalizations of conservatism. The fact that these were always negative predictors calls into question the idea that conservatives have a broader morality than liberals.

Overall, our results offer a strong corrective to MFT's claim to explain ideological differences. Our ability to translate SVT constructs into "morality" scales based on the two MFQ formats suggests that MFT has not discovered the root causes of liberal-conservative differences. By showing that other values can be moralized in the same fashion as the MFQ scales suggests that the MFQ might instead be detecting differences in moralizations rather than the key "foundations" of morality. Our results also suggest that MFT is incomplete as a model of the moral differences between liberals and conservatives. Obedience and Universalism (reversed) appear to be potent (arguably *better*) predictors of conservatism.

More takeaways from this study include the general pattern of multiple scales acting as negative predictors for conservatism, such as Universalism, Self-Direction, etc. This suggests that MFT is wrong in its claim that conservatives have a broader morality. Instead, it suggests conservatism entails the rejection of moral concerns. Our findings also provide additional support for previous critics of MFT as a model of ideological differences (Federico, Weber, Ergun, & Hunt, 2013; Sinn, n.d.; Sinn & Hayes, 2016). More specifically, these studies discuss MFT missing the following critical factor in liberal motives: Universalism (Sinn & Hayes, 2016).

We should note, however, that we found little evidence in the stepwise directions for a role of the MF4 Status scale in predicting conservatism. This might suggest that the moralization of status is less important than other concerns. Alternatively, it could be that a better set of items, perhaps more focused on power, could produce a scale that would perform better. Additionally, Status may too closely reflect an opposing set of values relative to Universalism such that its predictive power is overwhelmed by that of Universalism.

LIMITATIONS

Our results would be stronger if replicated in a more diverse sample. A large part of our sample came from those who had just taken a general sociology course. This course explores topics such as poverty, power, inequality and other topics that could impact the scope and nature of moral reasoning. Our study also used issue-based measures that were based on a relatively small set of items. A broader set, or separate set, of items might reveal different results. Finally, experimental work is needed to better understand the causal nature of the relationships our data suggests. One cannot assume that what our findings suggest as truth until it is future explored. This could be seen in the example of seeing if there are experiences (such as taking a sociology course, as previously stated) that might increase the levels of universalism over time.

FUTURE DIRECTIONS

For future studies, the idea of replicating this study in a different type of sample would be good to confirm if our findings are generalizable to populations other than college students. Alongside this, one could also do an exploratory factor analysis with all the items within the MF4 and MFT. This would possibly let us see if we can simplify down the nine scales. It could be that some of the current factors could be combined (e.g., Obedience, Purity, and Authority might load on one factor).

REFERENCES

- Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. *Advances in Experimental Social Psychology*, 33, 41–114. doi: 10.1016/S0065-2601(01)80004-6
- Duckitt, J., & Sibley, C. G. (2010). Personality, ideology, prejudice, and politics: A dual-process motivational model. *Journal of Personality*, 78, 1861–1894. doi: 10.1111/j.1467-6494.2010.00672.x
- Everett, J. A. C. (2013). The 12 Item Social and Economic Conservatism Scale (SECS). *PLOS ONE*, 8(12), e82131. doi: 10.1371/journal.pone.0082131
- Federico, C. M., Weber, C. R., Ergun, D., & Hunt, C. (2013). Mapping the connections between politics and morality: The multiple sociopolitical orientations involved in moral intuition. *Political Psychology*, 34(4), 589–610. doi: 10.1111/pops.12006
- Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. *Advances in Experimental Social Psychology*, 47, 55-130. doi: 10.1016/B978-0-12-407236-7.00002-4
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96(5), 1029-1046. doi: 10.1037/a0015141
- Graham, J., Haidt, J., Nosek, B. A., Iyer, R., Spassena, K., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101(2), 366-385. doi: 10.1037/a0021847
- Haidt, J. (2008). Morality. *Perspectives on Psychological Science*, 3, 65–72. doi: 10.1111/j.1745-6916.2008.00063.x
- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20, 98–116. doi: 10.1007/s11211-007-0034-z
- Janoff-Bulman, R., & Carnes, N. C. (2013). Surveying the moral landscape: Moral motives and group-based moralities. *Personality and Social Psychology Review*, 17, 219–236. doi: 10.1177/1088868313480274
- Kugler, M., Jost, J. T., & Noorbaloochi, S. (2014). Another look at moral foundations theory: Do authoritarianism and social dominance orientation explain liberal-conservative differences in “moral” intuitions? *Social Justice Research*, 27, 413–431. doi: 10.1007/s11211-014-0223-5
- Schein, C., & Gray, K. (2015). The unifying moral dyad: Liberals and conservatives share the same harm-based moral

- template. *Personality and Social Psychology Bulletin*, 41, 1147–1163. doi: 10.1177/0146167215591501
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1–65. doi: 10.1016/S0065-2601(0)60281-6
- Schwartz, S. H., Caprara, G. V., Vecchione, M., Bain, P., Bianchi, G., Caprara, M. G., . . . Zaleski, Z. (2014). Basic personal values underlie and give coherence to political values: A cross national study in 15 countries. *Political Behavior*, 36, 899-930. doi: 10.1007/s11109-013-9255-z
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Bejerlein, C., . . . Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663-688. doi: 10.1037/a0029393
- Sinn, J. S. (2016). *Foundations or key books? Replacing moral foundations theory as an explanation for ideological differences*. Manuscript submitted for publication.
- Sinn, J. S., & Hayes, M. W. (2016). Replacing the moral foundations: An evolutionary-coalitional theory of liberal-conservative differences. *Political Psychology*. Advance online publication. doi: 10.1111/pops.12361

Promoting a President: Tone in Presidential Candidate Correspondence via Twitter

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ABSTRACT

The purpose of this research is to provide insight into the changes of integrated marketing communications in a political environment and the impact of different tones in a presidential campaign. Using the Twitter correspondence of the Republican and Democratic nominees, a content analysis was used to discover positive tones, negative tones, and themes during the 2016 presidential election. Data was collected from the end of the primary elections to election day in November 2016. This research also builds on previous studies focused on the growing impact of social media in political communications. The findings from this study include: (1) Hillary Clinton tweeted at Donald Trump more frequently than he tweeted at her. (2) Hillary Clinton had mostly neutral twitter correspondence towards Donald Trump, who in return used a more negative tone towards her. (3) The theme of Clinton's tweets were in reference to the character and qualifications of Donald Trump, while the majority of Trump's tweets toward Clinton referenced her character. (4) The majority of the candidates' tweets that reference each other's character and qualifications were negative.

REVIEW OF THE LITERATURE

Political Communication Strategy

Nowadays it is impossible not to incorporate any type of marketing strategy into the campaign for the White House. Politics is heavily influenced by marketing and products from corporate America that are used to influence voters. It is crucial to rely on effective marketing not only to successfully win an election, but also to effectively lead the United States (Newman 2010,1981; Sabato 1981; Nimmo & Rivers 1981; Altschuler 1982; Greenfield 1982; Mauser 1983; Goldenberg & Traugott 1984; Alexander 1984; Graber 1984a; Nieburg 1984; Polsby & Wildavsky 1984; Diamond & Bates 1984; Newman & Sheth 1985a, 1985b, 1986; Luntz, 1988; Jamieson 1992; Wring 1999; and Butler & Collins 1999; Perloff 1999). Therefore, in the context of politics, politicians are marketers trying to communicate and influence the voters, who are the consumers. Politicians work hard in order to meet the expectations of voters and influence the voter's decision in their direction before election day. It is crucial to understand the role of the voters in campaign strategy and how they

are influenced in order to market effectively (Newman, 1988).

A reoccurring theme in research on political communications and campaigns is various attempts to model the changing campaign practices across time. Most authors have concluded with three phases of election campaigns. Norris (2000) as well as Plasser and Plasser (2002), have constructed the three phases: Premodern, Modern and Postmodern. A previous approach by Farrell (1996) is the Premodern, Television revolution and Telecommunications revolution stages. Between the two approaches, Farrell and Webb (2000) labeled the phases Stage 1, Stage 2 and Stage 3. Although the names and descriptions may differ slightly, the concept is still very similar across all three platforms (Strömbäck and Kiouisis, 2014).

Strömbäck and Kiouisis (2014) have organized the three stages (see Table 2), along with partial modifications adapted from Plasser and Plasser (2002). The table provides a solid representation of the phases and trends identified by other scholars as well (Farrell 1996; Farrell and Webb 2000; Negrine 2008; Norris 2000; Strömbäck 2007).

Tab. 2: Typology of changing campaign practices.

	Stage 1 ("Premodern")	Stage 2 ("Modern")	Stage 3 ("Postmodern")
Mode of political communication system	Party-dominated	Television-centered	Multiple channels and multi-media
Dominant style of political communication	Messages along party lines	Sound bites, image and impression management	Narrow-casted, targeted micro-messages
Dominant media	Partisan press, posters, newspaper adverts, radio broadcasts	Television broadcasts through main evening news	Television narrow-casting, targeted direct mail and email-campaigns
Dominant advertising media	Print advertisements, posters, leaflets, radio speeches and mass rallies	Nationwide television advertisements, colorful posters and magazine adverts, mass direct mailings	Targeted television advertisements, e-mail campaigns and tele-marketing, web-based advertisements
Campaign coordination	Party leaders and leading party staff	Party campaign managers and external media, advertising and survey experts	Special party campaign units and more specialized political consultants
Dominant campaign paradigm	Party-logic	Media logic	Marketing logic
Campaign preparation	Short-term, ad-hoc	Longer-term campaign	Permanent campaign
Campaign expenditures	Low	Increasing	Spiraling up

Source: Adapted from Strömbäck and Kiouisis (2014)

As political campaigns continuously adapt to changes in their environment, they adapt to changes in societal structures, communication technologies, and to changes in the political attitudes and behaviors of voters. They adapt either for one of two reasons; either they feel pressure to adapt or because they see strategic advantages in adapting. Both reasons are relevant for an obtaining an understanding of why and how election communication strategies have changed over time (Strömbäck and Kiouisis, 2014).

Social Media and the Most-modern Era

In the past few years alone, social media has grown rapidly (Wigand et al. 2010; McAfee 2006). For example, Facebook has gained the membership of more than 800 million people worldwide while Twitter has obtained over 200 million accounts (Stieglitz and Dang-Xuan, 2012; Facebook, 2011; HuffPost Tech, 2011). This shift towards the adoption of social media applications has changed the physics of information diffusion and introduced a new era of communication. The growing importance in communication through social media has

sparked change in the relevance of traditional media outlets that were once reserved for the social elite such as, actors, politicians, corporations, and journalists (Stieglitz and Dang-Xuan, 2013; Chadwick 2006). This circumstance is currently being observed across the different perspectives of various disciplines such as sociology, information communication studies, information systems, political science, and linguistics, making it a common goal to gain a better understanding of communication within social media (Stieglitz and Dang-Xuan, 2013).

The tremendous growth of social media within Twitter and Facebook alone has recently made its way into the political environment. Social media is now being used as a weighted communication outlet by both citizens and political institutions. It is practically essential to the success of a political campaign to actively participate in the political communication within social media (Stieglitz and Dang-Xuan, 2013). Social media has now become the medium used to build community support for candidates running election campaigns for political positions, as well as gain an understanding of public opinion on policy (Stieglitz and Dang-Xuan, 2013; Zeng et al. 2010). The most prominent example can be seen within the election campaign of Barack Obama, who was able to effectively utilize social media within his 2008 campaign for president (Stieglitz and Dang-Xuan, 2013; Wattal et al. 2010). Social media networks have also increased political participation and discussion among citizens since it is an ideal platform to not only spread information but also gain political opinions (Stieglitz and Dang-Xuan, 2013; Zeng et al. 2010; Kavanaugh et al. 2011; Paris and Wan 2011; Stieglitz et al. 2012).

Recently, previous studies have specifically focused on social networking sites such as Facebook and have analyzed their use by politicians; it has been found that the number of Facebook supporters can be a valid indication of election success (Stieglitz and Dang-Xuan, 2013; Williams and Gulati, 2007, 2009). Like Twitter, Facebook can also be seen as a legitimate location for discussion of political issues (Kushin and Kitchener, 2009). However, in contrast, it has been concluded that

while social networking sites are recognized by the youth as a news source, the types of news gathered probably do little to inform. Also, in spite of the credit websites like Facebook hold for building political interest and participation among youth, it has been discovered that users are no more motivated to become involved in politics than users involved in other media platforms (Baumgartner and Morris 2010; Vitak et al., 2011). It remains unclear whether voter's political involvement on social networking sites such as Facebook contributes significantly to the overall decision in the form of votes. Although social networks contribute to civic engagement, interpersonal discussion ultimately brings both civic participation as well as political activity (Robertson et al., 2010; Zhang et al., 2010).

Overall, social media bridges the connection between social networks, personal information channels, and the mass media. Social media data in the form of user-generated content continues to offer many new opportunities and challenges to both producers and consumers of information. Despite the vast quantity of data available, the actual challenge is to be able to analyze the large volumes of user-generated content and create links between users in order to gain insight into the processing of information, opinions and sentiments as well as upcoming issues and trends (Stieglitz and Dang-Xuan, 2013; Leskovec 2011; Agrawal et al. 2011; Nagarajan et al. 2011).

Research Questions

Within every presidential campaign, there is a strategy set in place to effectively market the candidate towards voters. Since the beginning of presidential campaigning, the effective utilization of evolving technology has led to each president's success. During the 2016 presidential election, each candidate has made use of Twitter, a social media outlet, as a means of communication with the voters and each other over the course of the entire campaign. These new behaviors and strategies within political campaigns have marked a new era of political communication.

The goal is to examine the tone and theme of then-presidential nominees Hillary Clinton and Donald Trump. Both candidates at

the time of their campaign implemented the strategy of marketing towards their intended audience through social media. Through extensive background research and analysis of previous research, the following questions were proposed:

- **RQ1: What was the tone and theme of each candidate's correspondence on Twitter?**
- **RQ2: How did the overall tone and theme of each candidate's correspondence compare and contrast?**

During his 2016 presidential campaign, Republican nominee Donald Trump used Twitter in a significant way in order to communicate with voters and other famous political figures including his opponent and Democratic nominee, Hillary Clinton. Clinton also utilized Twitter to communicate with voters and promote herself as a potential President. It is because of the growing impact of Twitter and the lack of research involving this medium that it was used as a prominent and beneficial area to analyze the tone and theme of each candidate.

METHOD

Data

Results were gathered through a content analysis of the Twitter correspondence between Republican and Democrat nominees Donald Trump and Hillary Clinton. Both candidates were chosen for their most recent campaign in the 2016 election and their frequent use of the medium Twitter. The tweets analyzed were those between the dates of June 14th and November 9th, which marked the beginning and end of the primary election. This was also a period of time when both candidates were no longer in competition within their own political party.

The tweets during this time period were narrowed down by selecting only the tweets that mentioned the other candidate. In order for a tweet to be analyzed, it needed to contain the twitter name of the opposing candidate or the opposing candidates first and last name together or independently. Also, the tweet needed to be referring to the opposing candidate. An online

archive developed by Brendan Brown allowed for the opportunity to separate the tweets of both candidates in accordance with the specific constraints. The constraints allowed for an analysis of how each candidate was portraying each other and removed others that may have been mentioned during the time period. It is also important to mention that any external media such as photos, gifs, or links to other websites were not included, only the words of each tweet were included in the coding and analysis.

Coding

The instrument for the content analysis was developed using the approach of two main authors which guided the construction of the codebook for this study. Marianne Eisemann (2012) proposed a standard for calculating tone and sediment within traditional media that presented a reliable approach to transfer over to the analysis of tweets. Eisemann mentions a latent content analysis, which was used in this study to determine the tone. In this study, a latent analysis determines tone through an overall determination of exactly what each candidate was saying, as opposed to only looking at individual words (known as a manifest analysis).

Procedures on a qualitative content analysis approach were described in detail by Phillip Mayring (2000). Mayring's article describes a systematic and rule-guided approach to a qualitative content analysis while preserving some of the strengths from a quantitative content analysis. Due to the lack of previous studies involving an analysis of tone and theme within tweets, the combination of both Mayring's description of a qualitative approach to a quantitative analysis and Eisemann's procedures created a pathway for approaching this study in a reliable way.

Codebook

The codebook was used to identify the multiple parts of the questions at issue, which included tone and theme. In order to determine the tone of each tweet, a coding agenda was constructed to identify the constraints of each term and to keep consistency when assigning each term. From there, each qualified tweet was entered into an Excel workbook as a separate

piece of data along with the date each tweet was constructed by the candidate. The tone was determined using a coding agenda that defined the terms positive, neutral and negative. When coded, tweets that were deemed negative were given a 1, neutral tweets were recorded as 2 and positive tweets were recorded as 0. When coding for the theme, each tweet that related to the character of the opposing candidate was given a 1. Tweets relating to the qualifications of

an opposing candidate were coded as 2. If the tweet did not fit into the category of character or qualifications, it was recorded as a 0. A coding guide for tone and theme, along with their definitions, an example of tweets in each category from each candidate, rules for coding, and corresponding number related to each category are represented in Figures 1 and 2 below.

Figure 1: Coding Agenda for Tone

TO NE	DEFINITION	EXAM PLES	CODING RULES	INPUT
Negative	<p>Content leaves the reader less likely to support the other presidential candidate.</p> <p>Content includes complaints, expresses disagreement and uses words of rejection.</p> <p>Criticism is deconstructive (i.e. sarcasm).</p>	<p>“Donald Trump has a problem looking at someone different from himself and actually seeing them.”</p> <p>“Crooked Hillary Clinton has destroyed jobs and manufacturing in Pennsylvania. Against steelworkers and miners. Husband signed NAFTA.”</p>	<p>Content contains no “positive” tone aspects.</p> <p>Content contains aspects that point to “negative” tone.</p> <p>If content is a statement of fact code as “neutral” tone.</p>	1
Neutral	<p>Content is impartial and contains no sentiment at all.</p> <p>Reports the facts without any additional commentary.</p> <p>Typically, in the form of a statement of affirmation or a question.</p>	<p>“It’s time for Trump to answer serious questions about his ties to Russia.”</p> <p>“Hillary Clinton is the only candidate on stage who voted for the Iraq War. #Debates2016 #MAGA”</p>	<p>Content contains no positive or negative aspects.</p> <p>Content is just facts regardless of what the fact is.</p>	2
Positive	<p>Content as a whole leaves the reader more likely to support the other presidential candidate.</p> <p>Content contains words of affirmation or agreement with other candidate</p> <p>Content is constructive in intention.</p>	<p>“Donald Trump wants to compare his last 30 years with Hillary’s. Let’s do that.”</p> <p>“If you like Donald Trump, you’re going to love his choice for vice president.”</p>	<p>Content contains aspects that point to “positive” tone.</p> <p>No aspects of the content point to “negative” tone.</p> <p>If content has no positive or negative aspects record as “neutral”</p>	3

Figure 2: Coding Agenda for Theme

THEME	DEFINITION	EXAMPLE	CODING RULES	INPUT
Other	Content does not fit into any of the defined themes.	<p>“It’s time for Trump to answer serious questions about his ties to Russia.”</p> <p>“Donald Trump wants to compare his last 30 years with Hillary’s. Let’s do that.”</p>	Content must not fit into any other themes.	0
Character	Content is related to the attributes, morals, and traits of a candidate.	<p>“Donald Trump told lie after lie last night because it’s all he has to offer the American people.”</p> <p>It doesn’t matter that.”</p> <p>“Crooked Hillary has experience, look at all of the bad decisions she has made. Bernie said she has bad judgment!”</p>	Content of tweet must fit within and relate clearly to the definition.	1
Qualifications	Content is related to the candidate’s eligibility and suitability to serve as president.	<p>“A vote for Clinton-Kaine is a vote for TPP, NAFTA, high taxes, radical regulation, and massive influx of refugees.”</p> <p>“Donald Trump’s speech last night took it to a whole new level. He offered a lot of anger and fear and resentment—but no solutions.”</p>	Content of tweet must fit within and relate clearly to the definition.	2

Intercoder Reliability

In order to establish reliability, the data used was coded by two trained coders using a pre-developed codebook. In order to determine the themes for the codebook, 60% of the data was coded by one primary coder who kept a list of reoccurring themes. The top two themes were used in the codebook. Once the codebook was completed with a coding agenda to identify tone and theme, 20% of the data was given to a second coder to test for 80% agreement. When the first attempt at intercoder reliability was unsuccessful, each coder was retrained and another 20% of data was distributed. Once in agreement above 80%, the second coder continued to code the remaining 30% of uncoded data. Data that was not in agreement after the first reliability check was agreed on by both coders together to utilize the opportunity to improve the accuracy of the coder’s second approach towards reliability. Data that was not in agreement after the second approach at reliability was thrown out.

Analytic Strategy

Once the coding was complete, the data was analyzed for any typos or misspellings, as any mistakes would create an inaccuracy when running the analysis. Once reviewed for human error, the data was counted and entered into SPSS to conduct Pearson’s chi-square test in

order to understand the relationship between the tone (negative, neutral, or positive) and theme (character, qualifications, or other) of each candidate separately. A follow-up chi-square test is conducted in order to represent the correlation between the tone and theme of the tweets from each candidate.

RESULTS

In total, 653 tweets were collected and analyzed. Figure 3 displays the statistics of the chi-square test for the tone in relation to each candidate. The results show that out of the total 381 tweets posted by Hillary Clinton, 40.7% were coded as negative, 57.5% were coded as neutral, leaving 1.8% coded as positive. Out of the 272 tweets posted by Donald Trump 80.1% was coded as negative, 18.8% was coded as neutral, leaving 1.1% coded as positive. The results comparing each candidate show that Trump’s tweets were mostly negative (80.1%) compared to Clinton’s tweets, which were mostly neutral (57.5%). Positive tweets did not account for more than 2% of the total tweets from each candidate.

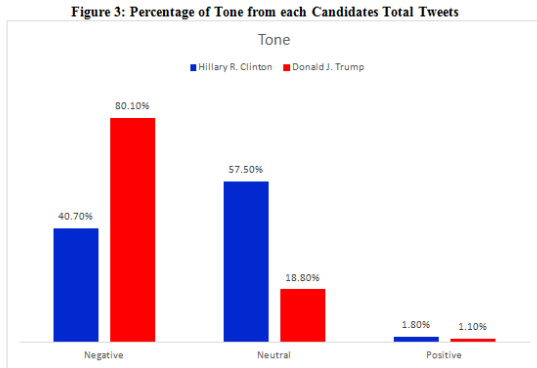
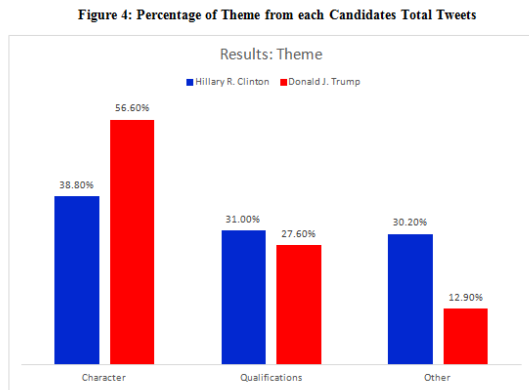


Figure 4 displays theme as it relates to each candidate's reference of the theme categories. The results comparing each candidate correspondence show that Trump referenced Hillary's character (56.6%) more than her qualifications (27.6%), while Hillary also referenced Trump's character (38.8) slightly more (7.8%) than his qualifications (31%).



Tables 1 and 2 display the statistical data from a follow-up Pearson's chi-square test that measures the interaction between the tone (negative, neutral, or positive) of the tweets of each candidate in relation to the corresponding theme (character, qualifications, or other). In order to locate the source of the interaction comparing both of the chi-square tests revealed that the interaction resulted from differences in the proportion of negative tweets on character vs. qualifications themes. Both candidates had significantly fewer negative tweets about "other" themes than "character" and "qualifications" themes; 7% of "other" tweets were negative for Clinton and 20% were

negative for Trump. For Clinton, "character" and "qualifications" were equally negative; 55.4% of the "character" tweets and 55.1% of the "qualifications" tweets were negative. In contrast, Trump's tweets about "character" were significantly more negative for character themes than for qualification themes; 95.7% of the "character" tweets and 74.7% of the "qualification" tweets were negative.

Table 1: Negative vs. Neutral/Positive * Theme Interaction

	N	Negative			Neutral/Positive		
		Other	Character	Qualifications	Other	Character	Qualifications
Hillary Clinton	381	7.0%	55.4%	55.1%	93.0%	44.6%	44.9%
Donald Trump	272	20.0%	95.7%	74.7%	80.0%	4.3%	25.3%

Table 2: Significance and Effect Size of Tone and Theme

	N	Chi-Square Test			Symmetric Measures	
		Chi-Square Value	df	Asymptotic Significance (2-sided)	Cramer's V Value	Approximate Significance
Hillary Clinton	381	77.641 ^b	2	.000	.451	.000
Donald Trump	272	105.554 ^b	2	.000	.623	.000

Pearson's Chi-Square Test shows a significant difference for both candidates. Clinton shows a medium effect size ($0.3 \leq V < .5$) while Trump shows a large effect size ($V \geq .5$).

DISCUSSION

This study aimed to present tone in presidential candidate correspondence before the 2016 general election. There has been a progression of social media making an impact on the perspective of voters since the 2008 election in which President Barack Obama secured the presidency through his effective utilization of Facebook (Stieglitz and Dang-Xuan, 2013; Williams and Gulati, 2007, 2009). Since then, Twitter has also been used as a source of information by social media users and has had a substantial impact on the perspective of voters (Stieglitz and Dang-Xuan, 2013; Williams and Gulati, 2007, 2009).

After the primary elections, using the correspondence between Republican nominee Donald J. Trump and Democrat nominee Hillary R. Clinton in the months leading to election day, the first question frames the tone of communication between the two candidates. Results following the initial research question show that both candidates produced more negative tweets over positive tweets. However,

when compared to each other, Trump produced more negative tweets (80.1%) than Clinton (40.7%). Results for neutral tweets showed that Clinton produced more neutral tweets (57.5%) than Trump (18.8%). Both candidates produced positive tweets below 2%. Overall, results from the initial research question suggest that the tone of Trump's presidential campaign was mostly negative via his twitter correspondence toward Clinton.

The second research question aimed to discover the theme of correspondence between the two candidates and gain insight into what was being critiqued or mentioned. Results show that the majority of Trump's tweets towards Clinton directed readers toward her character (totaling at 56.6% of his overall tweets). Similar results show for Clinton, as 38.8% of her tweets toward Trump were about his character. Clinton's tweets that directed readers towards Trump's qualifications to serve as president were close to the number of her tweets on his "character," but were still leading over Trump at 31.0%. Overall, an analysis of the results from the second research question shows that while Clinton also mentioned the character of Trump more often than his qualifications, they were more evenly distributed among the three categories (character, qualifications, and other). Trump's correspondence toward Clinton focused significantly more on her character more than anything else.

In conclusion, this study has shown that while the tone of Trump's twitter correspondence toward Clinton was more negative than Clinton's correspondence toward Trump, both nominees produced more negative content than positive/neutral content. The majority of the tweets produced by both nominees were themed as "character;" however, Clinton produced more qualification themed tweets toward Trump than Trump produced toward Clinton.

LIMITATIONS & FUTURE STUDIES

This study is limited to the tweets of the republican and democratic nominees after the primary elections leading into the night before the general election results. The tweets used for this study were generated through a third party

online database and only included tweets which mentioned the other nominee directly. Tweets that directed towards the other candidate through the use of anything beyond their name or twitter handle were not included in this study.

In order to gain a better understanding of the tone of each candidate's campaign correspondence, the use of other names that clearly direct the reader towards the other nominee should be included (i.e. crooked Hillary). Adding additional themes would also be beneficial to gaining an understanding of what each candidate was communicating towards the other. Other suggestions for future studies would be to use only tweets that are a fact and not based on false allegations or promoted for the sake of negative correspondence towards the other candidate or expand the time period of the correspondence. While this study sets a basic foundation and provides insight, future research is necessary to gain a better understanding.

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REFERENCES

Agrawal D, Budak C, El Abbadi A (2011) Information diffusion in social networks: observing and influencing

- societal interests. In: Proceedings of VLDB'11
- Alexander, Herbert E. (1984). *Financing Politics: Money, Elections, and Political Reform*. Washington, DC: Congressional Quarterly Press.
- Altshuler, Bruce E. (1982). *Keeping a Finger on the Public Pulse: Private Polling and Presidential Elections*. Westport, CT: Greenwood Press.
- Baumgartner JC, Morris JS (2010) Myfacetube politics: social networking web sites and political engagement of young adults. *Soc Sci Comp Rev* 28:24–44
- Butler, Patrick and Neil Collins. (1999). A conceptual framework for political marketing. In B. I. Newman (Ed.), *Handbook of political marketing*. 55–72. Thousand Oaks, California: Sage.
- Chadwick A (2006) *Internet politics: states, citizens, and new communications technologies*. Oxford University Press, New York
- Diamond, Edwin, & Bates, Stephen (1984). *The Spot: The Rise of Political Advertising on Television*. Cambridge, MA: MIT Press.
- Farrell H, Drezner D (2008) The power and politics of blogs. *Public Choice* 134(1):15–30
- Farrell, David M. 1996. Campaign strategies and tactics. In: Lawrence LeDuc, Richard G. Niemi and Pippa Norris (eds.), *Comparing Democracies. Elections and Voting in Global Perspective*, 160–183. Thousand Oaks, CA: Sage.
- Farrell, David M. and Paul Webb. 2000. Political parties as campaign organizations. In: Russell. J. Dalton and Martin P. Wattenberg (eds.), *Parties Without Partisans. Political Change in Advanced Industrial Democracies*, 102–128. New York: Oxford University Press.
- Graber, Doris A., Ed. (1984a). *Media Power in Politics*. Washington, DC: Congressional Quarterly Press.
- Nieburg, H. L. (1984). *Public Opinion: Tracking and Targeting*. New York: Praeger.
- Greenfield, Jeff (1982). *The Real Campaign: How the Media Missed the Story of the 1980 Campaign*. New York: Summit Books.
- HuffPost Tech (2011) Twitter: we now have over 200 million accounts (update) http://www.huffingtonpost.com/2011/04/28/twitter-number-of-users_n_855177.html
- Jamieson, Kathleen H. (1992). *Dirty Politics: Deception, distraction, and democracy*. New York: Oxford University Press
- Kavanaugh A, Fox EA, Sheetz S, Yang S, Li LT, Whalen T, Shoemaker D, Natsev P, Xie L (2011) Social media use by government: from the routine to the critical. In: Proceedings of the 12th Annual International Digital Government Research Conference: Digital Government Innovation in Challenging Times, College Park, Maryland, 12–15 June, 2011
- Kushin M, Kitchener K (2009) Getting political on social network sites: Exploring online political discourse on Facebook. *First Monday* 14(11)
- Leskovec J (2011) Social media analytics: tracking, modeling and predicting the flow of information through networks. In: Proceedings of WWW (Companion Volume) 2011, pp 277–278
- Luntz, Frank (1988). *Candidates, consultants, and campaigns: The style and substance of American Electioneering*. Oxford, UK: Blackwell.
- Mausser, Gary A. (1983). *Political Marketing: An Approach to Campaign Strategy*. New York: Praeger.
- McAfee A (2006) Enterprise 2.0: the dawn of emergent collaboration. *MIT Sloan Management Rev* 47(3):20–28
- Means for modifying behavior. *Journal of Personality and Social Psychology*, 31, 430–441, cited in R. E. Petty and J. T. Cacioppo. (1986). *Communication and persuasion: Central and peripheral routes to attitude change* (p. 7). New York: Springer-Verlag.
- Nagarajan M, Sheth A, Velmurugan S (2011) Citizen sensor data mining, social media analytics and development centric web applications. In: Proceedings of the

- 20th international conference companion on world wide web (WWW'11), pp 289–290
- Negrine, Ralph and Stylianos Papathanassopoulos. 1996. The 'Americanization' of political communication: A critique. *Harvard International Journal of Press/Politics* 1: 45–62.
- Newman, B. L. (2010). A Review in Political Marketing: Lessons from Recent Presidential Elections. DePaul University http://yaffecenter.org/downloads/Complete_List_of_Working_Papers/NEWMAN.pdf.
- Newman, Bruce I. (1994). *The Marketing of the President: Political Marketing as Campaign Strategy*. Thousand Oaks, California: Sage Publications.
- Newman, Bruce I. (1999b). *The Mass Marketing of Politics: Democracy in an Age of Manufactured Images*. Thousand Oaks, California: Sage Publications.
- Newman, Bruce I., & Sheth, Jagdish N. (1985a). A Model of Primary Voter Behavior. *Journal of Consumer Research*, 12, 178–187.
- Newman, Bruce I., & Sheth, Jagdish N. (1985b). *Political Marketing: Readings and Annotated Bibliography*. Chicago: American Marketing Association.
- Newman, Bruce I., & Sheth, Jagdish N. (1987). *A Theory of Political Choice Behavior*. New York: Praeger.
- Nimmo, Dan, & Rivers, William L., Eds. (1981). *Watching American Politics: Articles and Commentaries About Citizens, Politicians, and the News Media*. New York: Longman.
- Norris, P. (2000). *A virtuous circle: Political communications in postindustrial societies*. Cambridge University Press.
- Paris C, Wan S (2011) Listening to the community: social media monitoring tasks for improving government services. *Proc Ext Abstr CHI ACM 2011:2095–2100*
- Perloff, Richard M. (1999). Elite, popular, and merchandised politics: Historical origins of presidential campaign marketing. In B. I. Newman (Ed.), *Handbook of political marketing*. 19-40. Thousand Oaks, California: Sage.
- Plasser, Fritz and Gunda Plasser. 2002. *Global Political Campaigning. A Worldwide Analysis of Campaign Professionals and Their Practices*. Westport, CT: Praeger.
- Polsby, Nelson W., & Wildavsky, Aaron (1984). *Presidential Elections: Strategies of American Electoral Politics*. New York: Scribner.
- Robertson SP, Vatrappu RK, Medina R (2010) Off the wall political discourse: Facebook use in the 2008 U.S. Presidential election. *Information Polity* 15:11–31
- Sabato, Larry 1. (1981). *The Rise of Political Consultants: New Ways of Winning Elections*. New York: Basic Books.
- Stieglitz S, Dang-Xuan L, Brockmann T (2012) Usage of social media for political communication in Germany. In: *Proceedings of PACIS 2012*, forthcoming
- Stieglitz, S., & Dang-Xuan, L. (2013). Social media and political communication: a social media analytics framework. *Social Network Analysis and Mining*, 3(4), 1277-1291.
- Strömbäck, J., & Kiousis, S. (2014). Strategic political communication in election campaigns. *Political communication*, 18, 109.
- Strömbäck, Jesper and Spiro Kiousis. 2011a. Political public relations. Defining and mapping an emergent field. In: Jesper Strömbäck and Spiro Kiousis (eds.), *Political Public Relations. Principles and Applications*, 1–32. New York: Routledge.
- Vitak J, Zube P, Sfmock A, Caleb T, Ellison N, Lampe C (2011) It's complicated: Facebook users' political participation in the 2008 election. *Cyberpsychol Behav Soc Netw* 14(3):107–114
- Wattal S, Schuff D, Mandviwalla M, Williams C (2010) Web 2.0 and politics: the 2008 U.S. presidential election and an e-

- politics research agenda. *MIS Q* 34(4):669–688
- Wattal S, Schuff D, Mandviwalla M, Williams C (2010) Web 2.0 and politics: the 2008 U.S. presidential election and an e-politics research agenda. *MIS Q* 34(4):669–688
- Wigand RT, Wood JD, Mande DM (2010) Taming the social network jungle: from web 2.0 to social media. In: Proceedings of the Americas Conference on Information Systems, Paper 416
- Williams C, Gulati G (2007) Social networks in political campaigns: Facebook and the 2006 midterm elections. Annual Meeting of the American Political Science Association
- Williams C, Gulati G (2009) Facebook grows up: an empirical assessment of its role in the 2008 congressional elections. Annual Meeting of the Midwest Political Science Association
- Wring, Dominic (1999). The marketing colonization of political campaigning. In B.I. Newman (Ed.), *Handbook of political marketing*. 41-54. Thousand Oaks, California: Sage.
- Zeng D, Chen H, Lusch R, Li S (2010) Social media analytics and intelligence. *IEEE Intell Syst* 25(6):13–16
- Zhang W, Johnson TJ, Seltzer T, Bichard S (2010) The revolution will be networked: the influence of social networking sites on political attitudes and behavior. *Soc Sci Comput Rev* 28:75–92

Access to Nutrition Education in Public Health Care: Pediatric Weight Management

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ABSTRACT

The prevalence of childhood obesity has doubled over past two decades; one in four children is now obese. Obesity is often first identified in pediatric care and weight management counseling and is primarily the burden of the physician. Dietitians have specific training and expertise to counsel and educate patients to support dietary behavior changes; however, literature regarding the incorporation or outcomes of their services to combat pediatric obesity in a primary care setting is limited or non-existent. This raises the question of what pediatric health care professionals are doing to combat this dilemma. While there is ample literature regarding nutritional interventions and recommendations to address weight, there is little to no information on how pediatricians communicate these practices, how they are applied at home, or on the nature of the inclusion of dietitians in this practice. This research seeks to evaluate the inclusion and the process of incorporating such services into primary care - a necessary step to address this issue. The objective of this study was to conduct a cross study that assesses the strategies used to combat weight counseling in primary care. Furthermore, this study is aimed to summarize the evidence that explains parental perception of weight management counseling in primary health care.

REVIEW OF THE LITERATURE

Weight Counseling Provided in Primary Care

Body Mass Index is defined as the ration of weight in kilograms to the square of height in meters by the American Academy of Pediatrics (AAP). This form of measuring adiposity is a surrogate to excessive weight that is based on commonly available data, height and weight (Prevention of Pediatric Overweight and Obesity). An individual with a BMI at or above the 95th percentile is considered obese; in addition, the relevance of obesity is increasing at an alarming rate in the United States, including a doubling prevalence in children, specifically over the past two decades (Prevention of Pediatric Overweight and Obesity). Currently 15.3% of children between the ages of six and eleven years old are above the 95th percentile (CDC). The probability of childhood obesity persisting on to adulthood is estimated to increase from approximately 20% at four years of age to approximately 80% by adolescence, in turn creating a generation of young people to be the first to live shorter lives than their parents (Po'e). This datum is closely tied to the fact that American children are less active and currently

hold the average record for the highest amount of screen time (Glason). Obesity is heavily associated with significantly damaging health problems in the pediatric age group like that of hypercholesterolemia, dyslipidemia, hypertension, and abnormal lipid profiles. These trends pose an unprecedented threat in terms of children's health (Giding,) as well as present and future health care costs (Freedman). All of these disturbances are seen at an increased rate in obese individuals and have become more common in the population of today's youth, which currently affects one in four children in today's pediatric population (Ogde).

Counseling Provided in Primary Care

Previous studies have indicated that attitudes of health care professionals towards obesity and techniques for managing weight are negative and that knowledge and skills in managing obesity are seldom adequate (Story). Training opportunities for health care professionals are often limited and restrict the appropriate application of counseling for obese patients. A study conducted on the basis of a national needs assessment evaluated the skill

level and training of identification and the treatment of child obesity amongst health care professionals (Story). The respondents expressed high interest in additional training on obesity management of children, especially in the area of behavior management strategies and parenting techniques (Story). Similarly to many subjects in the field of pediatrics, child obesity is heavily dependent of a preventative style of practice. The anticipatory guidelines that pediatricians are asked to provide often fall short of meeting the call for strengthening the role of obesity prevention. In 2012, a group of medical doctors conducted a study to evaluate the awareness of expert committee recommendations on obesity amongst health care professionals in varying regions of the United States (Rhodes). This study exemplified the large variation of approaches taken by medical professionals pertaining to weight management and child obesity. These results sway very little from the current reality of clinical obesity in the primary care; there are currently several approaches that physicians take towards weight counseling, some may include toolkits that include BMI charts and nutrients and activity focused assessments (Perrin). Furthermore, this inconsistency in practices towards remedying the dilemma of an overweight youth suggests that both the education and attitudes of primary caregivers is not as structured as other fields of medicine that share relevance and ties to the subject of nutrition (Bourgeois). By surveying parents of children in the obese population and physicians on their understanding of how to approach child obesity, it is clear that the need for prevention is much higher than the practices that provide it (Cheng).

Parents

In pediatric care, parents are often encouraged to take a role of leadership in their child's health, based on the Department of Pediatrics study in which trends show that parental intervention greatly improves the status of a child's health, both in youth and followed through adulthood (Holt.) Interviews with parents revealed that families often desire to increase their amount of time spent engaging with pediatricians. In addition, strong themes of

discomfort emerged when parents were asked about their attitudes towards open discussion about their children's obesity. As a result of these positions in pediatric care, parents' receptivity is swayed on both the subjects of effective strategies to combat obesity and a developed understanding of their health care providers understanding of appropriate counseling.

Dieticians in Primary Care

Nutrition services play a large role in prevention, which is a driving force behind the practice of pediatric medicine. However, 74% of dietitians serve their time directly to clinical activity, 19% in administration, 5% in personal education and activities and 2% in other related programs (Kates). The topic of shared care includes collaboration between nutritionist and family physicians, which is aimed towards lowering the rates of child obesity. A 2005 study shows that shared care within primary care is more effective in lowering BMI and is more conducive to the lifestyle and style of learning for patients and their parents (Crustolo). There is currently a low rate of dietitians working in primary care; however, with a greater need to lower rates of child obesity, these statics are apt to change.

Summary and Gaps

The rates of pediatric obesity are at an alarming rate, reporting one in every four children with a BMI above the 95th percentile. The objective of this study was to develop a deeper understanding of how the practice of primary care gives further influenced these statistics, aside from the facts of genetics and chronic diseases. Barriers and limitations for an appropriate practice of weight management and counseling include an insufficient education on the part of the physician and ill communication and perception on the part of the parents of patients.

There is a lack of preventive procedures to combat child obesity at the outraged levels it has reached today; therefore, many questions on why these procedures aren't being faced are left unanswered. Many studies include critiques by parents of patients, but also leave little room for self evaluations by physicians.

METHODS

Study design included a semi-structured interview guide that was designed specifically for this project. Participants included medical providers (n=2) who provided feedback regarding the 3-month pilot program in which registered dietitians were placed onsite in pediatric clinics in order to provide their services in the same location that the pediatricians were seeing and assisting patients. Interviews were audio-recorded and transcribed verbatim and analyzed using content analysis. In this research, a qualitative study was administered in which a semi-structured interview was conducted. This interview was specifically tailored to explain the successes and failures of a three month long trial in which nutritionists were placed in pediatric care offices. To gather this information, medical providers (n=5) were contacted via email and invited to participate in the interview. Once IRB approval was obtained by Winthrop University, the collection of data began. Prior to conducting interviews, there was a thorough explanation of the process and written consent was obtained. On an assented basis, interviews were conducted onsite at the clinic during clinical hours that were most convenient for the provider (this usually took place during the providers' lunch hour.) Each interview was recorded and followed by a verbatim transcription. The transcriptions were then analyzed for pressing themes including barriers, limitations and benefits of including the onsite dietitian. These significant themes were broken down into subheading and placed into charts to organize them by relevance.

RESULTS

The provision of nutrition specific education and counseling services on site was reported by the providers to be beneficial and helped overcome barriers to referring patients to nutrition and education services outside of the clinic. A wide range of barriers perceived to impact weight management and lifestyle changes (e.g. lack of motivation, lack of resources, lack of safe areas for play, etc.) were also reported. As reflected by the physicians, it

was also helpful from the staff perspective to include dietitians in pediatric clinics since onsite referrals saved time, money, and efforts towards schedule more appointments. Physicians felt that more of their time was appropriately allocated to aspects of health outside of nutrition, when the RD was able to provide nutrition education and counseling.

DISCUSSION

The inclusion of nutrition education and counseling on site at the pediatric clinic was perceived as beneficial by medical providers. Future studies should further examine the incorporation and/or referral to nutrition services for pediatric patients and examine family and patient perceptions as well as the impact on behavioral and clinical outcomes. In addition, the nursing and administrative staff are a third party whose input would be valuable, seeing how they spend a great deal of time discussing common barriers including scheduling and limitations set by socio economic status.

REFERENCE LIST

- Barlow SE, Dietz WH, Klish WJ, Trowbridge FL. Medical Evaluation of Overweight Children and Adolescents: Reports from Pediatricians, Pediatric Nurse Practitioners, and Registered Dietitians. . Official Journal of the American Academy of Pediatrics . 2002;110, 222-8.
- Bolling C, Crosby L, Boles R, Stark L. How Pediatricians Can Improve Diet and Activity for Overweight Preschoolers: A Qualitative Study of Parental Attitudes. Academic Pediatrics. 2009;9(3):172-178.
- Bourgeois N, Brauer P, Simpson JR, Kim S, Haines J. Interventions for prevention of childhood obesity in primary care: a qualitative study. CMAJ Open. 2016;4(2).
- Cheng, T.L., & DeWitt, T.G., & Savageau, J.A., & O'Connorr, K.G. (1999) Determinants of counseling in primary care pediatric practice: physician attitudes about time, money, and health

- issues. *Arch Pediatr Adolesc Med*, 153, 629-35.
- Goff SL, Holboe ES, Concato J. Pediatricians and Physical Activity Counseling: How Does Residency Prepare Them for This Task? *Teaching and Learning in Medicine*. 2010;22(2):107-111.
- Holt NL, Neely KC, Newton AS, et al. Families Perceptions of and Experiences Related to a Pediatric Weight Management Intervention: A Qualitative Study. *Journal of Nutrition Education and Behavior*. 2015;47(5).
- O'Brien SH, Holubkov R, Reis EC. Identification, Evaluation, and Management of Obesity in an Academic Primary Care Center. *Pediatrics*. 2004;114(2.)
- Perrin, E.M., & Jacobson & Vann, J.C., Benjamin, J.T., & Skinner, A.C., & Wegner, S., & Ammerman, A.S. (2010) Use of a pediatrician toolkit to address parental perception of children's weight status, nutrition, and activity behaviors. *Acad Pediatr*, 10(4): 274-81.
- Po'E EK, Gesell SB, Caples TL, Escarfuller J, Barkin SL. Pediatric Obesity Community Programs: Barriers & Facilitators Toward Sustainability. *Journal of Community Health*. 2010;35(4):348-354.
- Prevention of Pediatric Overweight and Obesity . *Official Journal of the American Academy of Pediatrics*. 2003:112-424.
- Reilly JJ, Kelly J. Long-term impact on overweight and obesity in childhood and adolescence. *International Journal of Obesity*. 2011:891-898.

A Comparison of Arrested and Not Arrested Individuals Using Facebook

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ABSTRACT

Social networking sites, like Facebook, have had an enormous impact on how people form relationships and the type of behavior that is shared with the public. The Social Bond Theory, created by Travis Hirschi (1969), states that individuals who have weak bonds to conventional society are more likely to commit acts of deviance than those who have strong bonds to conventional society. Going further with regards to Social Bond Theory, Hirschi (1960) along with Sampson and Laub (1990) and Salvatore and Taniguchi (2012) believed that strong bonds to the specific institutions of conformity to the norm of society, religion, work, education, activity not considered deviant, nation, military, family, and marriage are what deter an individual from committing deviant behavior. Alternatively, the Differential Association Theory, created by Edwin Sutherland (1947), states that individuals learn techniques, motivations, and attitudes towards deviant behavior from their peers. Both theories were tested against one another through examination of post and picture content of individuals who had and had not been arrested. Participants in this study were between the ages of 18-30, and had either been arrested in Rock Hill, SC within the year 2016 ($n = 40$) or had graduated from a high school in Rock Hill, SC ($n = 38$). Posts and pictures were examined and coded as: cannot be determined, conventional, unconventional, both, or moderate. Further, conventional posts and pictures were coded as: conformity to the norm of society, religion, work, education, activity not considered deviant, nation, military, family, and marriage. Results revealed that individuals who were arrested posted more unconventional posts than individuals who had not been arrested, while individuals who had not been arrested posted more conventional posts than individuals who had been arrested. Findings also indicate that the arrested group posted slightly more posts about marriage and family as compared to the not arrested group, suggesting that age plays a role in the importance of specific institutions. Overall, Social Bond Theory was better supported in this study through both posts and pictures collectively.

Keywords: Social Bond Theory, Differential Association Theory, Facebook, deviance, conventional

The use of the Internet, and specifically social networking sites, has increased tremendously within the past decade. Internet penetration, the percentage in which one region of a population uses the Internet, has reached 89.0% in North America alone (World Internet Users and 2017 Population Stats, 2017; Surfing and Site Guide: Internet and World Stats, 2017). As of June 30, 2016, 1,679,433,530 people worldwide have utilized Facebook (World Internet Users and 2017 Population Stats, 2017). Looking solely at North America, 223,081,200 people interact and have profiles

on this social network site (World Internet Users and 2017 Population Stats, 2017). Much of the literature pertaining to social networking sites has focused primarily on the subjects of cyber deviance, gang offender usage, and general interactions of individuals on social networking sites. The aforementioned examples of topics that the current literature focuses on in connection with the social networking site demonstrates how narrowly focused this field has been when it comes to the types of deviance examined. A further example of this narrowness is through the studies that have currently used

Facebook. Previous studies have focused on the appropriateness of profile photographs, topics of discussion, and interactions of individuals based on race (Fernandes, Guircanu, Bowers, & Neely, 2010; Laudone, 2010; Hum et al., 2011).

With increased access to the Internet and social networking sites, views on acceptable mediums to display deviance have changed drastically from what they were in the past. Looking back at the “Stop Snitchin” doctrine, this code of silence allowed deviance and crime to exist without fear of punishment (Smiley, 2015). Smiley (2015) notes that individuals who engaged in deviant behavior at one point in time adopted the “Stop Snitchin” campaign where contact with law enforcement was discouraged via rap lyrics. Speaking on the topic of not snitching, a man named Cam’ron stated that snitching would hurt his livelihood, and that he was raised not to tell on others; a philosophy that others were not brought up on (Smiley, 2015). Evidence of a shift in public awareness of deviance can be viewed through the evolution of rap culture and how it uses social media.

Due to the increased use of the Internet and social networking sites overall, the presentation and public awareness of deviant behavior has thrived (Smiley, 2015). With social media becoming increasingly popular over time, it became fertile ground for the doctrine “YOLO,” you only live once (Smiley, 2015). Hand in hand with the “YOLO” doctrine, the urge for individuals to engage in self-promotion flourished (Smiley, 2015). By having pictures, posts, and videos available for consumption online 24/7, the Internet and social networking sites have allowed a venue for criminals to display their power, authority, and status to others in their community (Smiley, 2015). An example of self-promotion of deviant behavior through the “YOLO” doctrine is when rapper Twan Gotti rapped in explicit detail about a cold case which eventually led to his arrest for murder (Smiley, 2015). In essence, Gotti displayed his awareness that his actions were deviant through his lyrics that boasted significantly about the crime he committed (Smiley, 2015). Twan Gotti’s arrest and fate was due to the increase of public awareness of

deviance through social media in combination with his desire to promote himself through his lyrics.

The push for power, status, and prestige online led to a code of silence that enabled people to reclaim a sense of control of their life from society, and especially law enforcement (Smiley, 2015). This enhanced sense of control of one’s life allowed one to feel as though they were not below society and law enforcement, but more on a similar level (Smiley, 2015). Alternatively, “YOLO” encouraged individuals who engage in deviant behavior to taunt law enforcement through displays of their deviant exploits (Smiley, 2015). This taunting nature of engagement in criminal acts through the use of social networking sites further shifted the balance of power and prestige back into the hands of the deviant individuals (Smiley, 2015). The back and forth battle for who has power and the meaning of one’s status further exemplifies an individual’s place in society.

Travis Hirschi, the creator of Social Bond Theory, believed that individuals who have tight bonds to conventional society, like family and school, are less likely to engage in deviance (Hirschi, 1969). Consequently, it was believed that individuals who have weak bonds to conventional society are more likely to engage in deviance (Hirschi, 1969). Stemming from Travis Hirschi’s traditional elements of social bond, Sampson and Laub (1990) argued that bonds to work and family specifically determine whether or not an individual pursues a life of crime and deviance. They contend that higher education, vocational training, work, and marriage act as institutions of social control in which young adults are supposed to stay away from deviant behavior (Sampson & Laub, 1990). The bonds to higher education, vocational training, work, and marriage by themselves do not decrease the probability that an individual will engage in deviant behavior (Sampson & Laub, 1990). Sampson and Laub (1990) state that the quality or strength of bonds to those institutions is what leads to the decrease in probability that the individual will engage in deviant behavior.

Similarly to Sampson and Laub, Salvatore and Taniguchi (2012) found that

changes in social bonds created by marriage, employment, military, and religion alter offending behavior. A study conducted by King and his colleagues (2007) found that marriage reduces offending regarding individuals who are male. With the knowledge from previous studies and correlation analyses, Salvatore and Taniguchi (2012) noted that specific demographics of individuals, like being male, not being married, not having children, and serving in the military were all characteristics of people who scored significantly higher on the crime outcome measure. This study demonstrates that certain bonds, strong or weak ones, to certain institutions, family and/or work, matter when viewing the likelihood of an individual to offend.

Differential Association Theory states that an individual learns the attitudes, techniques, and motivations of deviant behavior through interactions with others (Maratea & Kavanaugh, 2012). The idea that interpersonal interactions with other individuals can have a profound effect on one's deviant identity or lack of one is central to the Differential Association Theory (Maratea & Kavanaugh, 2012). An individual's surroundings and how they assimilate to their environment caused deviant behavior to occur in conjunction with their prospective peers (Gaylord & Galliher, 1990, p. 112). The influence that interpersonal relationships have on an individual can be seen through identity formation and overall behavior (Maratea & Kavanaugh, 2012). Maratea and Kavanaugh (2012) believe that labeling causes the internalization of one's deviant identity, and that, as a result of internalizing a label, the individual then fails to assimilate into mainstream society. This new identity that is embraced by the individual is often encouraged by deviant peers who have formed an interpersonal relationship with that particular person (Maratea & Kavanaugh, 2012). With the acquisition of a deviant identity, an individual interacts with other people who share similar identities to their own, thus reinforcing the main principles of differential association.

Utilizing the theoretical frame work of Differential Association Theory, Hochstetler, Copes, and DeLisi (2002) examined how a

person's interactions with their friends could induce general, group, and solo deviance. Researchers predicted that the relationship between friends' attitudes toward deviant behavior would mediate that individual's own attitude toward said behavior (Hochstetler, Copes, & DeLisi, 2002). This study found that both friends' attitudes and behavior determined the likelihood that an individual would offend (Hochstetler, Copes, & DeLisi, 2002). Results of this study also found that friends' attitudes and behaviors were significant even when individuals committed a crime alone (Hochstetler, Copes, & DeLisi, 2002). This study reinforced Differential Association Theory by highlighting that crime is learned and engaged upon through the influence of others (Hochstetler, Copes, & DeLisi, 2002). Overall, the influence of friends on one's likelihood to commit crime, whether direct or indirect, demonstrates how powerful interactions with those close to us truly are.

HYPOTHESES

- **Hypothesis 1:** According to Differential Association Theory, arrested individuals will post more unconventional posts and pictures than not arrested individuals, while there will be no difference in the posting of conventional posts and pictures.
- **Hypothesis 2:** According to Social Bond Theory, not arrested individuals will post more conventional posts and pictures than arrested individuals, while there will be no difference in the posting of unconventional posts and pictures.

METHODS

Participants

A total of 78 participants, individuals who had or had not been arrested, were recruited. Participants were either arrested in Rock Hill, SC or demonstrated that they lived in Rock Hill.

The sample of participants who had been arrested in 2016 ($n = 40$) were recruited from data obtained from the Rock Hill Police

Department. A friend request was then sent to prospective participants if their profile was not public. If the friend request was accepted, an invitation to participate in the study was sent, which included a link to an Informed Consent form. According to the South Carolina Incident Based Reporting System training manual, Group A offenses are offenses in which law enforcement must report both incident and arrest, while Group B offenses need only the arrest to be recorded (*South Carolina Incident Based Reporting System Training Manual*, 2014). Examples of Group A type offenses within the arrested group were: possession of methamphetamine, financial transaction card fraud, and domestic violence in the second degree. Examples of Group B type offenses within the arrested group were: public disorderly conduct, driving under suspension, and minor under the influence. Twenty-four out of the forty arrested individuals committed Group A type of offenses, while the remaining sixteen arrested individuals committed Group B type of offenses.

A sample of participants who had not been arrested in 2016 ($n = 6$) were recruited from Rock Hill High Schools' pages on Facebook. The remainder of the sample of participants who had not been arrested in 2016 ($n = 32$) were obtained by using a random name generator (Random Name Generator, 2017). Once a name was generated, the researcher input that name into Facebook's search bar. Friend requests were again sent to prospective participants if their profile was not already public.

If a prospective participant was the same race, gender, and lived in the same city of an arrested participant, then that individual was selected to be a control in an effort to match both groups evenly. Basic demographic information was also recorded, and is shown in tables 1-1 and 1-2 in the next column.

Arrested Individuals			
	Male	Female	Total
White	9	8	17
Black	17	4	21
Hispanic	1	0	1
Unknown	1	0	1
Total	28	12	40

Not Arrested Individuals			
	Male	Female	Total
White	9	8	17
Black	17	4	21
Hispanic	0	0	0
Unknown	0	0	0
Total	26	12	38

Tables 1-1 and 1-2 denote demographic information regarding participants' race and sex.

Procedures

The coding unit of analysis for this study was each Facebook user's last 10 posts and pictures that were posted prior to arrest. After the researcher received consent, up to 10 of the individual's posts and pictures before the date of arrest were coded. Although some individuals did not have 10 posts or pictures, their profile was still used, and remaining cells for coding were left blank. The five categories that posts and pictures could fall under were: conventional, unconventional, moderate, both, and cannot be determined. In order to be coded as conventional, a post or picture had to exhibit strong ties to marriage/family, military/nation, religion, activity not considered deviant, conformity to the norm of society, humanity, education, and work. For example, if an individual posted a picture of a wedding, then that picture would be coded as marriage/family. If an individual wrote a post about joining the army, then that post would be coded as military/nation. Posts expressing gratitude toward a higher being were coded as religion. A picture featuring someone at a restaurant was coded as an activity not considered deviant. People plainly smiling or posing in front of a camera were coded as conformity to the norm of society. Posts and pictures featuring one's love and care for animals was coded as humanity. Posting about being in school and obtaining a higher education was coded as education. Individuals who posted about being

at their job were coded as having ties to work. Posts and pictures that had more than one element of conventional society present within their post were coded according to which element of conventional society occurred the most, or which element of society was present first. A picture or post was labeled as unconventional if the picture or post content demonstrated opposition to any elements of strong social bonds to society. For example, posting a picture that featured individuals throwing up gang signs would be coded as unconventional. Posts and pictures were coded as cannot be determined if the post or picture did not demonstrate conventional elements of society or unconventional elements of society. For instance, if a participant posted “LMS,” then the coder coded that post as cannot be determined because the post demonstrates neither strong nor weak ties to conventional society. Researchers coded posts and pictures as moderate if the post or picture demonstrated some tie to a conventional element, but that tie was weak such as an individual posting that they hate school. A picture or post was coded as both if it showed both elements of conventional society and unconventional society concurrently. For example, if an individual posted about spending time with family, but also getting into a fight and being arrested that same day, then that post would be coded as both.

Coding was completed by one undergraduate student and by one professor at Winthrop University. The professor was blind to the arrest status of the participants. Disagreement with regards to coding was resolved through discussion between the two coders.

Two researchers coded the posts and pictures based on whether they reflected conventional (mainstream) or unconventional (alternative) social connections. Social bond theory states that individuals who have weak bonds to conventional society are more likely to engage in deviant behavior (Hirschi, 1969). Coding pictures and posts based on conventional social connections showed support for the Social Bond Theory. Differential Association Theory states that an

individual learns the attitudes, techniques, and motivations of deviant behavior through interactions with others (Sutherland, 1947). Posts and pictures coded for unconventional social connections showed support for Differential Association Theory. The pictures and posts were classified according to Hirschi’s (1969), Sampson and Laub’s (1990), and Salvatore and Taniguchi’s (2012) categorical elements of social bonds to conventional society. The previous research of Sampson and Laub (1990), and Salvatore and Taniguchi (2012) have shown that specific institutions like family, marriage, work, higher education, and religion have a stronger effect on the likelihood of not committing deviant act than other institutions, so we examined them.

RESULTS

Conventionality of posts and pictures were examined using chi-square analysis. The number of likes received for posts and pictures were examined using ANOVA. Pictures were also analyzed for the number of subjects featured in them.

Posts

Arrested and not arrested participants differed in the conventionality of posts, $\chi^2(4, N = 690) = 22.72, p = .001$. As shown in Table 2-1, the not arrested group had a significantly larger proportion of conventional posts (61.7%) than the arrested group (38.3%), which supported the Social Bond Theory. In contrast, the arrested group had a significantly larger proportion of unconventional posts (63.1%) than the not arrested group (36.9%), showing support for Differential Association Theory (refer to Table 2-1).

The effect was driven by the type of conventional posts, $\chi^2(7, N = 301) = 12.74, p = .08$. Arrested individuals posted marginally more posts about family and marriage ($N = 21$) than not arrested individuals ($N = 13$), as seen in Table 2-2. Referring to Table 2-2, there was no significant difference between arrested individuals and not arrested individuals for the remaining post categories.

There was a significant difference with arrest status and post content likes, $\chi^2(4, N = 690) = 3.09, p = 0.15$ (refer to Table 2-3). Table

2-3 shows that the arrested group ($M = 9.00$) had significantly less likes for conventional posts than the not arrested group ($M = 12.43$), providing evidence for Differential Association Theory. Additionally, the arrested group ($M = 8.44$) had significantly less likes for posts labeled as both than the not arrested group ($M = 17.80$) as shown in Table 2-3.

Pictures

As with posts, we also examined the conventionality of pictures. There was no significant difference for picture category when examining arrest status, $\chi^2(9, N = 617) = 14.10, p = .12$ (see Table 2-2). Conformity to the norm of society was the most common category in which the pictures of arrested individuals ($N = 204$) and not arrested individuals ($N = 200$) were coded as in Table 2-2. The least common category of pictures posted by arrested individuals ($N = 1$) and not arrested individuals ($N = 1$) was work, as seen in Table 2-2. Concurrently, the nation category was also the least common category of which arrested ($N = 1$) and not arrested ($N = 1$) individuals posted pictures about (refer to Table 2-2).

Arrested individuals and not arrested individuals differed significantly with regards to the number of people featured in a picture, $\chi^2(3, N = 703) = 24.81, p < .001$, showing support for Social Bond Theory. Arrested individuals had significantly fewer group photos ($N = 33$) than not arrested individuals ($N = 83$) as shown in Table 2-4.

Table 2-1
Relationship between Arrest Status and Conventionality of Posts and Pictures.

Conventionality	Posts		Pictures	
	Arrested	Not Arrested	Arrested	Not Arrested
Conventional	36.8%(114)*	48.4%(184)*	83.6%(291)	93.5%(332)
Unconventional	17.1%(53)*	8.2%(31)*	8.0%(19.3)	3.1%(11)
Moderate	3.9%(12)	2.6%(10)	0.6%(2)	0.0%(0)
Both	8.1%(25)	3.9%(15)	1.7%(6)	0.0%(0)
Cannot Determine	34.2%(106)	36.8%(140)	6.0%(21)	3.4%(12)

* $p < .05$.

Table 2-2
Relationship between Arrest Status and Types of Conventional Posts and Pictures.

Categories of Conventionality	Posts		Pictures	
	Arrested	Not Arrested	Arrested	Not Arrested
Work	5.2%(6)	8.1%(15)	0.3%(1)	0.3%(1)
Education	2.6%(3)	6.5%(12)	0.0%(0)	2.5%(8)
Humanity	5.2%(6)	6.5%(12)	2.4%(7)	2.2%(7)
Conformity to the norm	27.6%(32)	22.7%(42)	69.6%(204)	61.7%(200)
Nation & Military	3.4%(4)	4.3%(8)	1.0%(3)	1.8%(6)
Family & Marriage	18.1%(21)*	7.0%(13)*	11.9%(35)	10.8%(35)
Activity not considered deviant	31.0%(36)	35.7%(66)	14.0%(41)	19.8%(64)
Religion	6.9%(8)	9.2%(18)	0.7%(2)	0.9%(3)

* $p < .10$.

Table 2-3
Relationship between Arrest Status, Post Content Likes, and Conventionality of Posts.

Conventionality	Post Content Likes	
	Arrested	Not Arrested
Conventional	9.00	12.43
Unconventional	7.91	5.55
Moderate	16.08*	9.30*
Both	8.44*	17.80*
Cannot Determine	9.09	6.84

* $p < .05$.

Table 2-4
Relationship between Arrest Status and Number of People in a Posted Picture.

Number of People	Pictures	
	Arrested	Not Arrested
No People	8.9%(31)	6.8%(24)
One Person	57.2%(199)	49.0%(174)
Couple	24.4%(85)	20.8%(74)
Group	9.5%(33)*	23.4%(83)*

* Significant $p \leq .05$.

DISCUSSION

Overall— what was found

The present study examined the differences in Facebook posts and pictures of individuals who had and had not been arrested in Rock Hill, SC during the year 2016. Our results show that the difference in conventionality of posts supported both Social

Bond Theory and Differential Association Theory.

There was no difference in conventionality of pictures posted by arrested and not arrested individuals, but there was a difference in the number of people featured in pictures posted with arrested individuals having fewer group photos than not arrested individuals. These results might indicate that not arrested individuals spend time with others building strong bonds through conventional activities, which supports Social Bond Theory; as a result of building strong bonds, not arrested individuals may feel more comfortable showing their involvement in those activities online. Alternatively, arrested individuals posting less group photos might mean that this group of individuals may not have strong bonds to conventional society, and thus do not engage in group activities that reflect such on Facebook.

DAT

Arrested individuals posting more unconventional posts than not arrested individuals supported Differential Association Theory because arrested individuals tended to post about ties or interactions with other like-situated people doing unconventional things (Sutherland & Cressy, 1947).

SBT

Not arrested individuals posting more conventional posts than arrested individuals demonstrates that Social Bond Theory was present throughout Facebook posts because the strong ties to conventional society were posted about, and Social Bond Theory states that strong ties to elements of conventional society predict less deviant behavior (Hirschi, 1969).

Although not arrested individuals posted significantly more conventional posts than arrested individuals as a whole, arrested individuals posted more about having strong ties to the conventional elements of family and marriage, which debunks Social Bond Theory. In order to understand reasons why the arrested group posted more about family and marriage, the ages of this group were looked into, and compared with national statistics. According to the Population Reference Bureau, the average age for women and men to become married is 27.3 and 28.8 respectively (Population

Reference Bureau). Additionally, the Centers for Disease Control (CDC) cites the average age for having one's first born child is 26.3 (Matthews & Hamilton, 2016). The average age of the overall arrested sample was 24.9, while the average age of arrested individuals posting about marriage and family was 27.3. Since the age of the sample with regards to talking about family and marriage fits relatively in line with when the national average for both of these events occur, it is probable that the arrested group posting more on these topics reflects more about the age of the sample, as opposed to possible ties to conventional society.

Limitations

While the study was able to fulfill its major objectives, some limitations did occur. For instance, the size of the sample limited the researchers' abilities to clearly tell if the quality of bonds to specific conventional factors like marriage and family or employment and education predict deviant behavior, much like Social Bond Theory says it does. An additional limitation to this study was that the ages of the arrested individuals and the not arrested individuals were not able to be compared because demographic information about the not arrested individuals came strictly from Facebook. Without the ages of individuals in the arrested group, there was no way to compare both groups when examining conventional elements in society.

Conclusion

The methodology utilized in this study adds to the literature because Facebook, like other social networking sites, is a forum where people can post pictures and ideas for the world to see, that demonstrates not only their thoughts, but their character as well. By examining posts and pictures individuals upload, researchers are able to distinguish the strength of bonds (strong or weak) to types of institutions (work, higher education, family) that an individual has, and use that information to inform policies in relation to individuals who are arrested.

In conclusion, the current study shows that arrest status is related to the conventionality of posts and pictures that one chooses to upload to Facebook, and that pictures especially

indicate the types of bonds one has to society. However, the categorical element marriage and family was posted more about by the arrested group, indicating that age plays a factor in what institutions people deem more important at certain times in their life. The current study points to the need for more research on what prevents individuals from committing deviant acts, and how that research can be used to benefit at-risk populations. Interventions that focus on strengthening bonds to conventional society benefit not only those who get arrested, but their family and community as well.

REFERENCES

- Bohn, A., Butcha, C., Hornik, K., & Mair, P. (2014). Making friends and communicating on facebook: Implications for the access to social capital. *Social Networks*, *37*, 29-41. doi: 10.1016/j.socnet.2013.11.003
- Bost, N.S. (2010). *State wards, long-term care, and delinquent acts: An analysis of social bond factors*. El Paso: LFB Scholarly Publishing LLC.
- Chen, R. (2013). Member use of social networking sites- An empirical examination. *Decision Support Systems*, *54*, 1219-1227. doi: 10.1016/j.dss.2012.10.028
- Elliot, D.S., Ageton, S.S., & Canter, R.J. (1979). An integrated theoretical perspective on delinquent behavior. *Journal of Research In Crime & Delinquency*, *16(1)*, 3-27.
- Gaylord, M. S., & Galliher, J. F. (1990). *The criminology of Edwin Sutherland*. New Brunswick, NJ: Transaction Publishers.
- Hirschi, T. (1969). *Causes of Delinquency*. Berkley, CA: University of California Press.
- Hochstetler, A., Copes, H., & DeLisi, M. (2002). Differential association in group and solo offending. *Journal of Criminal Justice*, *30*, 559-566.
- Hum, N. J., Chamberlin, P. E., Hambricht, B. L., Portwood, A. C., Schat, A. C., & Bevan, J. L. (2011). A picture is worth a thousand words: A content analysis of facebook profile photographs. *Computers in Human Behavior*, *27*, 1828-1833. doi: 10.1016/j.chb.2011.04.003
- Lilly, J. R., Cullen, F. T., & Ball, R. A. (1989). *Criminological theory: Context and consequences*. Newbury Park, CA: Sage Publications.
- Lin, K.-Y., & Lu, H.-P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, *27*, 1152-1161. doi:10.1016/j.chb.2010.12.009
- Maratea, R. J., & Kavanaugh, P. R. (2012). Deviant identity in online contexts: New directives in the study of a classic concept. *Sociology Compass*, *6*, 102-112. doi: 10.1111/j.1751-9020.2011.00438.x
- Matthews, T. J., & Hamilton, B. E. (2016). Mean age of mothers on the rise: United States, 2000-2014. *NCHS Data Brief*, 1-8.
- Median Age at First Marriage for Women*. (2017, September 30). Retrieved from Population Reference Bureau: <http://www.prb.org/DataFinder/Topic/Rankings.aspx?ind=133>
- McKenna, K. Y., & Bargh, J. A. (1999). Causes and consequences of social interaction on the internet: A conceptual framework. *Media Psychology*, *1*, 249-269. doi: 10.1207/s1532785xme0103_4
- Pyrooz, D. C., Decker, S. H., & Moule Jr., R. K. (2015). Criminal and routine activities in online settings: Gangs, offenders, and the internet. *Justice Quarterly*, *32*, 471-499. doi: 10.1080/07418825.2013.778326
- Random Name Generator*. (2017, July 18). Retrieved from Behind the Name: <https://www.behindthename.com/random/>
- Salvatore, C., & Taniguchi, T. A. (2012). Do social bonds matter for emerging adults?. *Deviant Behavior*, *33*, 738-756. doi: 10.1080/01639625.2012.679888
- Sampson, R. J., & Laub, J. H. (1990). Crime and deviance over the life course: The salience of adult social bonds. *American Sociological Review*, *55*, 609-627.
- Smiley, C. J. (2015). From silence to propagation: Understanding the relationship between "Stop Snitchin"

- and "YOLO". *Deviant Behavior*, 36(1), 1-16. doi: 10.1080/01639625.2014.883888
- South Carolina Incident Based Reporting System Training Manual*. (2014). General format. Retrieved from http://www.sled.sc.gov/documents/CrimeReporting/SCIBRS/SCIBRS_Manual.pdf
- Surfing and Site Guide: Internet and World Stats*. Retrieved May 11, 2017 from Internet world stats:Usage and population statistics: <http://www.internetworldstats.com/surfing.htm>
- Sutherland, Edwin H. & Cressey, Donald R. (1947). *Principles of Criminology*. 4th ed. Philadelphia: J. B. Lippincott.
- Tittle, C. R., Burke, M. J., & Jackson, E. F. (1986). Modeling Sutherland's theory of differential association: Toward an empirical clarification. *Social Forces*, 65, 405-432. doi: 10.2307/2578680
- World Internet Users and 2017 Population Stats*. Retrieved May 11, 2017 from Internet world stats: <http://www.internetworldstats.com/stats.htm>

All Talk, But No Action: A Reexamination of Education in South Carolina's *Corridor of Shame*

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ABSTRACT

South Carolina's "Corridor of Shame" is an area of rural and poverty-stricken communities that stretch along Interstate 95. This area has received large amounts of media attention since the release of a documentary, entitled *Corridor of Shame – The Neglect of South Carolina's Rural Schools*. In addition, the area attracted more attention during a visit from former President Barack Obama, then a U.S. Senator and Democratic Presidential Candidate, to J.V. Martin Junior High School in Dillon, South Carolina. Many of the schools in the "Corridor of Shame" do not have the resources they need to provide their students with a well-rounded educational experience. In the twenty-first century, there are schools, such as J.V. Martin, that have to use coal in order to heat their building and pad their doors whenever there is rain in order to keep the school as dry as possible. In 2014, the Supreme Court of the State of South Carolina ruled that a "minimally adequate" education was not ensured for these school districts. However, no major legislative action has been taken to equal the educational playing field. The purpose of this research project is to analyze whether or not changes were made that had positive effects on the overall quality of education. Through collection of data from 2008 to 2015, statistical software Stata IC 10 is used to manipulate variables and check for overall education quality. By looking at different variables (e.g. poverty index, absolute rating, teacher salaries), available data shows that a "minimally adequate" education has still not been provided for all students and has contributed to the continuous economic instability in the "Corridor of Shame."

LITERATURE REVIEW & BACKGROUND INFORMATION

According to the *National Education Association*, rural communities have continuously struggled in different areas since the colonization of the United States of America. That characteristic is still prevalent today, especially in regard to education. These communities rely on their school systems in various ways, such as for employment and recreational and social usage of facilities and other resources. However, many of these rural schools lack the funding to provide the minimum resources needed for an adequate educational experience. In South Carolina, one term used to describe the high concentration of these communities is called the "Corridor of Shame." Ferillo and Associates, Inc. describes the "Corridor of Shame" as rural and poverty-stricken areas that stretch along Interstate 95. This area of seventeen counties consists of a racially diverse population, the state's richest

county (Beaufort) and a rapidly growing county (Dorchester), but it also contains some of the state's poorest counties with negative population and income growth rates (as shown in Table 1 on the next page).

Table 1

COUNTIES	Population Growth Rate	Population with Income Below Poverty
<i>Bamberg</i>	-4.02%	5.1%
<i>Beaufort</i>	34.15%	-0.1%
<i>Calhoun</i>	-0.07%	2.8%
<i>Clarendon</i>	7.60%	-2.4%
<i>Colleton</i>	1.64%	0.5%
<i>Darlington</i>	1.91%	-1.7%
<i>Dillon</i>	4.36%	5.0%
<i>Dorchester</i>	41.64%	1.9%
<i>Florence</i>	8.85%	-1.4%
<i>Hampton</i>	-1.38%	-0.1%
<i>Jasper</i>	19.82%	-2.7%
<i>Lee</i>	-4.47%	1.2%
<i>Marion</i>	-6.78%	-5.1%
<i>Marlboro</i>	0.40%	-4.95
<i>Orangeburg</i>	1.00%	-2.7%
<i>Sunter</i>	2.69%	-1.3%
<i>Williamsburg</i>	-7.51%	1.4%

Source: South Carolina Revenue and Fiscal Affairs Office (in collaboration with the U.S. Census)

These school districts in particular struggle with funding issues due to the lack of a sufficient tax base, lack of local government support and decreases in funding from the State of South Carolina (2006). The “Corridor of Shame” has been documented in a film, a lawsuit, various reports, and has even received national attention, but some of these same issues still exist and continue to plague these rural communities in South Carolina.

In 1993, thirty-nine school districts¹ filed a lawsuit in Lee County, *Abbeville County School District, et al. v. The State of South Carolina, et al.*, citing that the state had not provided “an equal educational opportunity” (The State). Not all of the school districts that were originally in this case are a part of the official “Corridor of Shame;” however, they all share a common struggle – poverty and inadequate educational opportunities. This court case was ironic because it was being heard in Clarendon County, the same county as the *Briggs v. Elliott* case (which was only decades before). In *Briggs*

v. Elliott, the petitioners looked at the discriminatory practices aimed at African American students. The court ruled against the petitioners and ordered the schools to be equal, but still allowed the schools to remain separate. Despite the verdict, this case was appealed & was ultimately used in the case *Brown v. Board of Education*, which helped the U.S. Supreme Court rule that “separate but equal schools” were illegal. For twenty-one years, the *Abbeville v. the State of South Carolina* case was heard multiple times throughout different levels of the judicial system. *The State* (2014) informs us that the case returned to the circuit court in 1999 for arguments and the number of plaintiff districts was reduced from thirty-nine to eight². The 2005 decision ruled that although the State did not meet its early childhood obligation, it did meet its obligation to provide an adequate education for K-12 education. The school districts appealed the decision, as well as the State who cross-appealed. A decision in favor of the school districts came in 2014. The South Carolina Supreme Court ruled 3-2 that the State of South Carolina did not do its part in making sure that the rural and poverty-stricken school districts were able to provide a “minimally adequate” education for students.

Before the South Carolina Supreme Court gave the final verdict in 2014, Bud Ferillo produced a documentary on the “Corridor of Shame” (2005). Ferillo visited several areas of the corridor and other rural areas in order to tell the stories of the challenges that these schools and communities faced. The poor conditions of various facilities were depicted, including J.V. Martin Junior High School in Dillon, South Carolina. This school dated back to 1896, and it was still being fueled by coal in 2005! President Barack Obama even visited the school while he was running for office in 2007 (Richard 2016). Many facilities shown in the documentary did not have a system that provided heating or air conditioning. They also had old school buses that were having issues, fire alarms that did not sound off and almost unbearable conditions when it rained due to poor ventilation and

¹ This is the initial number of school districts. Due to consolidations, that number is now 36.

² Allendale, Dillon 4 (previously Dillon 2), Florence 4, Hampton 2, Jasper, Lee, Marion 7 and Orangeburg.

unpadded doors, which allowed small creatures to crawl into the schools. The cost to maintain these facilities is high, so in some communities there is not enough funding to build new facilities. The lack of substantial funds and overall sluggish communities make it difficult to attract high quality teachers to these areas as well. Data from the South Carolina State Report Cards indicate that school districts with higher salaries are better suited to attract teachers with advanced degrees.

Education is not the only area where these rural and impoverished communities struggle. Toby, et al. (2009) reports that with limited opportunities in regard to employment and entertainment as well as failing infrastructure, complicated tax and finance laws and social disparities, it is not surprising that the “Corridor of Shame” continues to lag behind other counties in South Carolina. The Great Recession, which lasted from late 2007 until mid-2009, hurt areas within the corridor even harder because they were already struggling, and the economic crisis just made matters worse. With an unemployed labor force, people are not able to pay as much in taxes, which lowers the property tax base and funding that the school districts receive. RTI International made several suggestions on how to improve the “Corridor of Shame;” however, many of their suggestions were not fully implanted due to the economic downturn.

For decades, a plethora of school districts argued that they were not properly funded by the State of South Carolina in order to provide an adequate educational experience. Due to the Great Recession, education funding was reduced, and it has not been fully restored to its previous amount. Overall funding and how to properly spend funds seem to be the main issue; but how exactly is education funded in South Carolina? The basis of funding stems from the 1977 South Carolina Education Finance Act. This act established a funding partnership between the state and local school districts, defined minimum standards and programs for students, included a statewide minimum salary that would be adjusted for inflation and required the submission of annual reports, just to name a few (McDaniel 1984).

Funding was calculated based on a complicated set of formulas that determined which designations would provide the funds for education. The principal funding sources were property taxes on owner-occupied residences. However, in 2006, South Carolina adopted Act 388, which placed a cap on property taxes and exempted the property tax for schools on owner-occupied homes. This shifted the tax burden to business property and vacation and rental homes and also came alongside an increase in the state sales tax (Smith 2015). It was supposed to raise more money to fund schools due to predictions that the sales tax would be able to compensate for the change, but this never came to fruition due to the lack of stability in the sales tax base relative to the property tax base. Due to all of this, the “Corridor of Shame” counties have continued to struggle with inadequate funding.

Despite the setbacks, there are school districts that have taken things into their own hands in order to make change happen. Kamenetz (2016) visited a small town in the corridor county of Orangeburg called North. She met a young man named Robert Gordon who unofficially acts as a “student principal.” He assists students, teachers and staff in dealing with various instances such as resolving fights, helping prepare for college, fixing technological issues and making copies of worksheets, just to name a few. Gordon is a leader among his peers who is always willing to lend a helping hand and act as a peacemaker. He even was able to set up a visit from U.S. Senator Tim Scott (2016). A former Dillon student, Ty’Sheoma Bethea wrote a letter to the White House that brought national attention to the issues. She was invited to President Obama’s State of the Union Address (Johnson 2014). In 2012, the old J.V. Martin Junior High School in Dillon was closed, and the new Dillon Middle School opened. This was made possible by a federal grant and a low-interest loan from the U.S. Department of Agriculture (McKalip 2012).

Johnson (2014) also writes that students in Jasper County benefit from the support of surrounding communities. A local church from Hilton Head reached out to help after seeing the documentary on the “Corridor of Shame.”

Hilton Head Presbyterian Church helped collect books to fill the empty shelves in the library at Ridgeland Elementary School. In addition, church volunteers traveled to the school for one-on-one tutoring sessions with students. The local United Way has implemented a reading program to help improve the reading levels of third graders and kindergarten students. Jasper County replaced two schools, Ridgeland Elementary and West Hardeeville Elementary, in 2007.

So, what do the experts say? Capra (2009) looked at the effect of poverty on education. In many impoverished schools, there is a lot of time that is spent on preparing for standardized tests and not enough time spent on challenging students (whether through creative measures or advanced courses). Many of these students are a part of households where no one has earned a college degree. This causes these students to lack information on the college experience and its importance. Teacher quality is an important piece of student achievement, but in many poverty-stricken areas, it is difficult to keep good teachers around for long periods. Many teachers are not prepared to deal with students in poverty. A relationship has to be cultivated inside and outside of the classroom because students are dealing with issues bigger than what they need to know for standardized tests. In addition, for some teachers, dealing with poverty is a culture shock because they may not have dealt with it in their personal lives and/or they may not have received enough exposure to it during their teacher education training. It is important that poverty is recognized for what it is and that there are educational programs that are set up to address poverty and academic achievement.

Kelly-Jackson and Jackson (2011) examined students in rural communities with predominantly minority populations to see why these students continue to not score well on the science portion of standardized tests. They focused on Ms. Sammie's sixth grade science class that was located in the "Corridor of Shame." Looking into culturally relevant science instruction for African American students, Kelly-Jackson and Jackson were able to use those findings to see how Sammie's beliefs

aligned with culturally relevant theories supporting her teaching practice. In order for students to understand and have a liking towards science, they have to feel a connection to it. "Research suggests that challenges in science learning increase for students whose cultures do not have the same views and ways of knowing science." Students' prior knowledge and experiences will have the greatest impact on learning. Of course, students will have different backgrounds, so it is important to make the subject relevant to them. Instead of looking just at equity and diversity issues in regard to culture and language, attention needs to be placed on teaching in a culturally diverse science classroom. The study showed that Sammie was clear about her purpose as a science teacher and always made sure that she was being a model teacher by engaging in diversity conversations with her students, having different types of literature available and encouraging students to be critical thinkers and learners. When dealing with students from rural communities, Sammie has this philosophy of teaching:

Developing a curriculum around student interests fosters intrinsic motivation and stimulates the passion to learn. Given the opportunity for input, students generate ideas and set goals that make for much richer activities than I could have created or imagined myself. When students have ownership in the curriculum, they are motivated to work hard and master the skills necessary to reach their goals. Having students engage in the construction of knowledge shows them that they are scientists (Kelly-Jackson and Jackson 411).

Lacour and Tissington (2011) write that, "some families and communities, particularly in poverty-stricken areas, do not value or understand formal education." Many of these families receive government assistance, such as welfare, which has shown to cause a plethora of other issues such as disciplinary problems, lower academic achievement and material deprivation. These issues, along with others, may hinder the educational process when students enter school. All of this stems from poverty, which has a

great effect on the resources that are available to impoverished students. These students are placed at a disadvantage and in turn have to work much harder in order to reach their full potential.

The State of South Carolina was given the charge to revamp public education in order to make sure that all children, including those in rural and poverty-stricken areas, receive an adequate education, but what exactly has been done? I will improve on the information that is already available regarding the “Corridor of Shame” and the effects from the South Carolina Supreme Court’s decision. I will be looking into that and seeing whether or not the State has made any changes that would affect different indicators such as test scores, poverty index, graduation rates and teacher retention, just to name a few. I will be looking at the State Department of Education Report Cards from 2008 to 2015 for various school districts and documenting the changes over the years. In addition, I will be collecting information on unemployment rates from the U.S. Bureau of Labor Statistics and per capita personal income from the U.S. Bureau of Economic Analysis. My analysis will focus on counties that have one school district, instead of looking at each individual school district, so that there is consistency. The Great Recession was in full effect at the beginning of the timeframe that I am looking, so I will look to see if there have are any abnormalities, especially since a lot of funding was cut by the General Assembly. This would have affected all of South Carolina’s public schools, hurting the “Corridor of Shame” schools even more. Absolute ratings, test scores and other variables that school districts are judged by will not change until there is a change in how education is perceived and structured and, how we deal with poverty and how we address economic disparities.

METHODS

This research project started by only looking at the seventeen counties that are officially a part of the “Corridor of Shame.” They consist of the following: Bamberg, Beaufort, Calhoun, Clarendon, Colleton, Darlington, Dillon, Dorchester, Florence,

Hampton, Jasper, Marion, Marlboro, Lee, Orangeburg, Sumter and Williamsburg. Several of these counties have multiple school districts, which makes it more difficult to collect good data when using economic and county demographic sources. Therefore, the analysis focuses only on the 10 “Corridor of Shame” counties that have school districts that are coterminous with county lines. These counties are as follows: Beaufort, Calhoun, Colleton, Darlington, Jasper, Lee, Marion, Marlboro, Sumter and Williamsburg. In order to broaden the analysis and to compare “Corridor of Shame” districts with those in other parts of South Carolina, we decided to include all other school districts in the state that are coterminous with county lines; this gave us a sample of 31 school districts (Refer to Appendix, Figure 1). Data were utilized from 2008 until 2015 for the thirty-one school districts. Data were collected from the South Carolina Department of Education, the U.S. Bureau of Labor Statistics, the U.S. Bureau of Economic Analysis and the South Carolina Revenue and Fiscal Affairs Office (Refer to Appendix, Table 3).

There were ten variables used in this project. The three dependent variables are: Percentage of students eligible for LIFE Scholarships, Absolute Rating and Graduation Rate. The seven independent variables are: Unemployment rate, Per capita income, Poverty index, Percentage of students with disabilities (other than speech), Percentage of teachers with advanced degrees, Dollars spent per student and Average teacher salary. These ten variables were chosen due to their connections to and affect on quality of education. Most of the variables were collected at the school district level. Variables Unemployment rate and Per capita income were at the county level. Unemployment rate represents the measure of persons who are not employed but are actively searching for employment. Per capita income is the average income earned per person in a given area. Poverty index assess three elements of deprivation in an area/school district – longevity, knowledge and a decent standard of living. Absolute Rating is the value of a school’s level of performance on measures of research-based factors associated with student success.

LIFE Scholarship, formally known as the Legislative Incentive for Future Excellence, is a merit-based scholarship program administered by the financial aid offices in South Carolina’s higher education institution (up to \$5,000 – not to exceed cost-of-attendance). Since the data collected only included counties with single school districts, consistency should not be an issue. Between 2008 and 2015, two of the counties did not have consolidated school districts for the entire duration. Sumter County school districts consolidated in July 2011 and Marion County School districts consolidated in July 2012. When collecting data for these counties prior to their consolidations, I used a weighted average of all of the former school districts to ensure there was fair representation for all of the enrolled students. I used the following percentages to get the variable counts:

- Sumter 2 (51%) + Sumter 17 (49%) = Sumter County (100%)
- Marion 1 (52%) + Marion 2 (34%) + Marion 7 (14%) = Marion County (100%)

For the variable absolute rating, I converted the letter coding, which is used by the State Department of Education, into numerical form so that it would be consistent with the rest of the qualitative data collected. Here is the system I used:

- Excellent (E) – 5
- Good (G) – 4
- Average (A) – 3

- Below Average (B) – 2
- At Risk (U) – 1

There will be usage of a dummy variable (COS) in order to distinguish between the counties that are a part of the “Corridor of Shame” (1) and the counties that are not a part of it (0).

Although most of the data for the variables was readily available, we were still not able to find all of the information needed from the South Carolina State Department of Education. Freedom of Information Request has been filed and we are hoping to receive the remaining data that is needed. It is interesting that the 2012 ‘Percent of students with disabilities’ data is not available online, but it is for 2013 and 2014. After collecting data in Microsoft Excel, the file was uploaded and used in Stata IC 10, which is a statistical software commonly used in social science research. A fixed effects panel data model was used to evaluate and control for the independent and dependent variables. This model was used because longitudinal data was collected for multiple counties/school districts over multiple years and it is a good way to show relationships amongst variables. In Stata, we were able to control for each independent variable in order to see whether the three dependent variables would differ between school districts within the “Corridor of Shame” and school districts that are not a part of the “Corridor of Shame.”

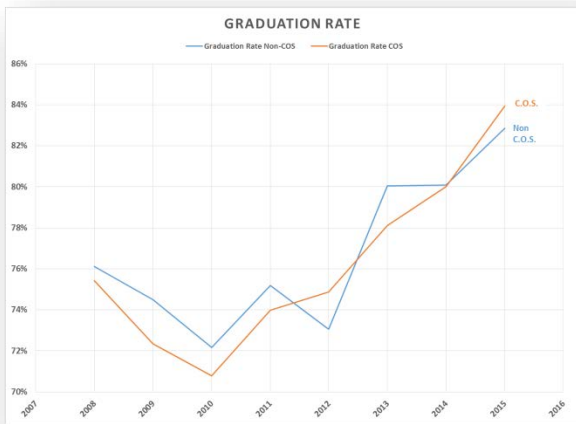
RESULTS

Table 2

	Percentage of students eligible for LIFE Scholarships	Absolute Rating	Graduation Rate
Unemployment Rate	-0.1414 (I)	-0.0189 (I)	-0.8052 (1%)
Per Capita Income	.0004 (I)	.0002 (1%)	.0003 (10%)
Poverty Index	-0.0620 (I)	.0706 (1%)	-0.2135 (5%)
Percentage of Students with disabilities (other than speech)	-0.2549 (I)	.0233 (I)	.1828 (I)
Percentage of teachers with advanced degrees	-0.1123 (I)	.0421 (5%)	-0.1526 (I)
Dollars spent per student	-0.0003 (I)	-0.0002 (5%)	-0.0010 (10%)
Average teacher salary	.0012 (5%)	.0001 (10%)	.0005 (I)
<i><u>R-Squared</u></i>	<i>0.1192</i>	<i>0.2970</i>	<i>0.0787</i>

In Table 2, the independent variables are listed vertically and were held constant in order to test for differences. The dependent variables, listed horizontally, were examined to show if there would be a difference in performance between school districts within and schools outside of the “Corridor of Shame.” Each statistic shows the effect that constant independent variables have on dependent variables and the difference between both groups of school districts. For example, if *unemployment rate* was equal or constant for both “Corridor of Shame” and non-“Corridor of Shame” school districts, non-“Corridor of Shame” school districts would have *graduation rates* that are 0.0852 percentage points lower than “Corridor of Shame” schools, all else equal. Based on the t-static and p-value collected in Stata, this is significant at the 1 percent level; data that are insignificant have (I) beside them. This is surprising because “Corridor of Shame” schools would be expected to have lower graduation rates due to the lack of resources. However, there must be factors that explain this significance (as indicated in Graph 2 below).

Graph 2



According to the data collected, the only independent variable that showed significance when it came to the dependent variable, *percentage of students eligible for LIFE Scholarships*, is *average teacher salary*, which is significant at the 5 percent level. This lack of significance is not surprising given the fact that

students only have to meet any two of the three criteria in order to be eligible for the South Carolina LIFE Scholarship and the recent changes that were made to the South Carolina Uniform Grading Scale, moving from a seven-point scale to the standard ten-point scale. The r-squared shows that *absolute rating* makes up for 29.7 percent of variation within the independent variables. With significance for most of the independent variables, the State’s rating system is a determinant in assessing overall quality of education. The results show that “Corridor of Shame” school districts showed significantly absolute ratings, all else equal (Refer to the Appendix for more information on variable specific changes).

DISCUSSION & CONCLUSIONS

This research project shows that the State of South Carolina has not implemented legislative action that has yielded visible improvements in overall education quality. When independent variables such as unemployment rate and poverty index are controlled for both groups of school districts, there are still disparities between them which shows that there has to be more than what the statistics are showing. One theory is that some areas do not value education as much as other areas, so resources will not affect their overall quality of education. For example, if an area is dominated by generations of high school dropouts, it will take a miraculous situation to “break the cycle” of high school dropouts; spending more money per student is not enough. Another interesting find was the fact that graduation rates for “Corridor of Shame” school districts are actually exceeding graduation rates of non-“Corridor of Shame” school districts. It is interesting that school districts with ‘Below Average’ absolute ratings have graduation rates higher than 85 percent. Why is this? This could be caused by the “No Child Left Behind Syndrome.” Teachers in certain “Corridor of Shame” school districts could be passing students to the next grade level in order to not have to work with them again or find ways to help them “get by.” These results show that more has to be done in order to provide an adequate educational experience for

all students. If the state has not been able to show that they are consistently putting students at the forefront, what exactly will cause this to change? It will take more than just equal access to resources to change educational disparities in South Carolina. There must be a change in the culture of education in the state, which is something that cannot be easily implemented. If there are generational viewpoints on education and communities are not willing to change the way they do education, it will take a great amount of effort to create change. If the State of South Carolina is responsible for providing students with a minimally adequate education, the constituents have to partner with state leadership in order to do so. By holding policymakers accountable, education equality and adequacy will not be a priority for them. By learning from our history and past mistakes, a quality education could be afforded to each student in the state of South Carolina.

REFERENCE LIST

- 2008-2015 South Carolina State Report Cards. (2017). Retrieved May 12, 2017, from <http://ed.sc.gov/data/report-cards/state-report-cards/2016/>
- Capra, T. (2009). Poverty and its Impact on Education: Today and Tomorrow. *The National Education Association Higher Education Journal*, Thought & Action, 75-81. Retrieved May 23, 2017, from <http://www.nea.org/assets/docs/HE/TA09PovertyCapra.pdf>
- Click, C., & Hinshaw, D. (2014, November 12). "SC Supreme Court finds for poor districts in 20-year-old school equity suit." Retrieved May 18, 2017, from <http://www.thestate.com/news/politics-government/article13911206.html>
- Ferillo, B. (Director). (2005). *Corridor of Shame - The Neglect of South Carolina's Rural Schools* [Motion picture on DVD]. United States of America: Ferillo & Associates, Inc.
- Ferillo & Associates, Inc. (2006). *Corridor of Shame*. Retrieved May 9, 2017, from <http://www.corridorofshame.com/index.php>
- Kamenetz, A. (2016, May 31). "One Student Tries To Help Others Escape A 'Corridor Of Shame'." Retrieved May 15, 2017, from <http://www.npr.org/sections/ed/2016/05/31/473240474/corridor-of-shame>
- Kelly-Jackson, C. P., & Jackson, T. O. (2011). Meeting Their Fullest Potential: The Beliefs and Teaching of a Culturally Relevant Science Teacher. *Creative Education*, 02(04), 408-413. Retrieved May 16, 2017, from <http://file.scirp.org/Html/7982.html>
- Johnson, K. (2017, August 15). "Class Action - Counties in South Carolina take insufficient school funding into their own hands." Retrieved May 13, 2017, from <http://projects.aljazeera.com/2014/south-carolina-schools/class-action.html>
- Johnson, K. (2014, August 13). "We Are Not Quitters - Student's Letter Brings Shame and Change." Retrieved May 13, 2017, from <http://projects.aljazeera.com/2014/south-carolina-schools/shame-and-change.html>
- Lacour, M., & Tissington, L. D. (2011). The effects of poverty on academic achievement. *Academic Journals*, 6 (7), educational research and reviews, 522-527. Retrieved May 23, 2017, from http://www.academicjournals.org/article/article1379765941_Lacour%20and%20Tissington.pdf
- McDaniel, T. R. (1984). *Public Education in South Carolina: Historical, Political, and Legal Perspectives*. Spartanburg, SC: The Bookstore, Converse College.
- McKalip, D. (2012, September 12). "Grand Opening of Dillon's New Middle School." Retrieved May 11, 2017, from <https://obamawhitehouse.archives.gov/blog/2012/09/12/grand-opening-dillon-s-new-middle-school>
- National Education Association. (n.d.). "Rural Schools." Retrieved May 19, 2017, from <http://www.nea.org/home/16358.htm>
- Richard, A. (2016, August 11). "The rural school district Obama fought to save."

The Hechinger Report: Teachers College at Columbia University. Retrieved May 10, 2017, from <http://hechingerreport.org/the-rural-school-district-obama-fought-to-save/>

Smith, T. (2015, March 02). Act 388 still a sore issue with business community. Retrieved May 17, 2017, from <https://www.scchamber.net/media-center/article/act-388-still-sore-issue-business-community>

Toby, M., & Sara, L., Francis Marion University, South Carolina State University (2009). *Creating Greater Opportunity in South Carolina's I-95 Corridor: A Human Needs Assessment* (pp. 1 - 189, Rep.). Research Triangle Park, NC: RTI International.

7. Charleston
8. Cherokee
9. Chester
10. Chesterfield
11. Colleton
12. Darlington
13. Edgefield
14. Fairfield
15. Georgetown
16. Greenville
17. Horry
18. Jasper
19. Kershaw
20. Lancaster
21. Lee
22. Marion
23. Marlboro
24. McCormick
25. Newberry
26. Oconee
27. Pickens
28. Saluda
29. Sumter
30. Union
31. Williamsburg

APPENDIX A

Figure 1: Here are the thirty-one (31) school districts that were used.

1. Abbeville
2. Aiken
3. Allendale
4. Beaufort
5. Berkeley
6. Calhoun

APPENDIX B

Here is the summary of statistics for the variables used over the 2008- 2015 period. The data are not complete due to unavailable information for 2012 Percentage of students with disabilities and 2015 for Variables 4 – 10.

Variable	Mean	Min	Max
1) Unemployment Rate	10.42%	4.9%	21.2%
2) Per Capita Income	30,895.07	\$22,416.00	\$50,838.00
3) Poverty Index	78.83	54.71	98.49
4) Absolute Rating	3 – Average	1 – At Risk	5 - Excellent
5) Graduation Rate	75.91%	54.5%	93.4%
6) Percentage of students with disabilities (other than speech)	10.78%	4.4%	17%
7) Percentage of students eligible for LIFE Scholarships	33.67%	3.1%	69.2%
8) Percentage of teachers with advanced degrees	58.53%	41.1%	70.9%
9) Average teacher salary	\$45,973.93	\$38,199.00	\$52,929.00
10) Dollars spent per student	\$9,516.71	\$7,257.00	\$14,400.00

APPENDIX C

Here is information on variable specific changes over the time period 2008 to 2015.

Poverty Index		
Year	Non-COS	COS
2008	71.78%	86.17%
2009	72.97%	86.50%
2010	74.54%	87.22%
2011	75.26%	87.67%
2012	76.31%	88.04%
2013	76.79%	88.62%
2014	77.64%	89.34%
2015	73.12%	84.83%

Margin of Difference: 14.39% to 11.71% (decrease)

LIFE Scholarship		
Year	Non-COS	COS
2008	32.01%	27.22%
2009	34.76%	29.68%
2010	36.19%	29.51%
2011	36.79%	27.30%
2012	37.75%	25.31%
2013	37.42%	30.52%
2014	37.71%	30.60%
2015	40.25%	32.17%

Margin of Difference: INC & then DEC.

Absolute Rating		
Year	Non-COS	COS
2008	2.43	1.75
2009	2.14	1.5
2010	3	2.51
2011	3.21	2.53
2012	3.71	2.86
2013	4.1	3.2
2014	4.14	3.3
2015		

Margin of Difference: DEC, & INC. (inconsistent)

% Disability		
Year	Non-COS	COS
2008	10.46%	11.31%
2009	10.45%	10.44%
2010	10.50%	10.55%
2011	7.48%	7.21%
2012	10.01%	10.23%
2013	12.54%	13.26%
2014	12.64%	13.27%
2015	12.55%	12.90%

Margin of Difference: DEC, & INC. (inconsistent)

Per Capita Income		
Year	Non-COS	COS
2008	\$ 29,748.90	\$ 28,844.80
2009	\$ 29,151.29	\$ 27,815.40
2010	\$ 30,239.38	\$ 28,964.90
2011	\$ 31,090.67	\$ 28,131.50
2012	\$ 32,209.48	\$ 38,945.60
2013	\$ 32,452.48	\$ 29,556.50
2014	\$ 33,616.81	\$ 30,180.70
2015	\$ 35,009.95	\$ 31,368.60

Margin of Difference: INC, & DEC. (inconsistent)

Graduation Rate		
Year	Non-COS	COS
2008	76.12%	75.42%
2009	74.50%	72.35%
2010	72.17%	70.78%
2011	75.19%	73.99%
2012	73.05%	74.87%
2013	80.04%	78.12%
2014	80.09%	80.01%
2015	82.85%	83.94%

Margin of Difference: INC, & DEC. (inconsistent)

% Teachers with Advanced Degrees		
Year	Non-COS	COS
2008	54.60%	54.35%
2009	56.98%	55.06%
2010	58.07%	55.88%
2011	60.37%	57.57%
2012	61.49%	59.00%
2013	61.55%	58.57%
2014	61.40%	59.25%
2015	59.88%	58.46%

Margin of Difference: INC, & DEC. (inconsistent)

Average Teacher Salary		
Year	Non-COS	COS
2008	\$ 44,783.62	\$ 43,954.77
2009	\$ 46,395.16	\$ 45,548.07
2010	\$ 46,241.58	\$ 44,767.09
2011	\$ 46,212.03	\$ 44,477.62
2012	\$ 46,338.14	\$ 44,871.87
2013	\$ 47,478.81	\$ 45,601.80
2014	\$ 47,594.38	\$ 45,821.30
2015	\$ 47,511.95	\$ 45,813.10

Margin of Difference: INC, & DEC. (inconsistent)

Dollars Spent Per Student		
Year	Non-COS	COS
2008	\$ 8,927.00	\$ 9,076.94
2009	\$ 9,314.43	\$ 10,281.41
2010	\$ 9,424.28	\$ 10,441.20
2011	\$ 9,178.70	\$ 10,162.68
2012	\$ 9,107.14	\$ 10,087.86
2013	\$ 9,313.05	\$ 9,814.30
2014	\$ 9,677.52	\$ 10,269.70
2015	\$ 9,884.81	\$ 10,341.30

Margin of Difference: INC, & then DEC.

Scholars' Research Published Elsewhere

Some Scholars do not have work included here because they are working with their Mentors to publish their work in a peer-reviewed professional journal. Those Scholars and Mentors are listed below. Additionally, Maddie Diaz, Autumn Leggins, and Jesslyn Park completed Honor's theses and presented at conferences this year.

Brittany McCarver (C of C)

Mentor: Dr. Andy Doyle, History

Brittany's paper, *A People-Oriented Company: The Springs Cotton Mills and Welfare Work, 1887-1959* received the Margaret Watson Award from the Confederation of SC Local Historical Societies at the 2018 Landmark Conference. The CSCLHS retains the right to publish this paper.

Jessica Stevens

Mentor: Dr. Zachary Abernathy,
Mathematics

Quviah Streater

Mentor: Dr. Sarah Reiland, Psychology

Thank you

Scholars

Your commitment to excellence and persistence through multiple challenges are inspiring. The work presented here is the culmination of a long revise and submit process. Thank you for your diligence throughout that long process. The high quality of your research reflects well on you, your faculty mentor, and the program.

Mentors

Each faculty mentor sacrifices time that could be spent on his/her own scholarship to help grow the next generation of researchers. Our students and program could not be successful without your expertise and dedication. Thank you for the opportunity to partner with you to support these outstanding students. My gratitude to you, and for you, is boundless. The work you do with each Scholar is the most important aspect of our program.

Ms. Stephanie Bartlett

Since 2012, Ms. Bartlett's leadership in the writing components of our program has been critical to the success students have enjoyed in their research products, graduate admissions offers, and graduate fellowship awards. She has supported the Scholars and Director through the preparation and documentation of the Scholars' high quality research. Serving as Editor of this *Bulletin* is only one aspect of her work. Our written products would not be as impressive without your conscientious reviews and guidance. Thank you, Stephanie, for your exceptional service to Winthrop's McNair Program.

Dr. Matthew Hayes

As the McNair Stats and Methods Coach, you ensure Winthrop McNair research products are high quality. Thank you, Dr. Hayes, for meeting with the Scholars (and sometimes Mentors and staff) before, during, and after the McNair summer research internship to help them design their research projects and plan for analyses; walk them through the process of running, interpreting, and understanding their statistical analyses; and prepare them to disseminate their work at conferences and in writing.

Mrs. Barb Yeager & Ms. Ashley Watson

Our McNair program benefits every day from the creativity of Mrs. Yeager. Her development of the artwork on this *Bulletin* is one more example. Similarly, we are grateful to our G.A., Ms. Watson, for her daily support of the Scholars' research and graduate admissions pursuits. Thank you, Barb and Ashley, for all you do for our students and the Director.