# Table of Contents

**Introduction**  
Evaluation of the Feasibility of Utilizing Wave Energy Conversion to Support the Power Requirements of the Island of Puerto Rico  
*Robert Emmett Bagwell III*  
3

**Automate or Not to Automate**  
Hung Q. Nguyen and Aike O. Okolo  
19

**Diversity Awareness Initiatives in 3 Western Pennsylvania School Districts**  
*Robert Kartychak, Jason Olexa and Laura Ward*  
28

**The Impact of Community Engaged Racialized Conversations on Educational Planning for African American Students**  
*Trisha M. Gadson*  
54

**Addiction and the Empty Self: Towards Alternative Approaches to Treatment**  
*Ashley Bobak*  
75

**Stories from the Yam: Centering Black Women Sexual Assault Survivors in Higher Education**  
*Leatra B. Tate*  
88

**Freedom Dreams: Cultural Work as Resistance in the Hill District of Pittsburgh**  
*Kendra J. Ross*  
107

**Utilization of Artificial Intelligence & Smart Supply Chain Management in the Offline/Online E-commerce Marketplace**  
*Pratiksha Dixit*  
120

**Opportunities and Barriers to Female Leadership in Secondary Education: A Qualitative Analysis**  
*Stephanie White*  
133

**Death Experiences as Mortality Salience priming, personality traits, and Schizotypal Personalities**  
*William Harper, Brent Robbins and Ming Yuan*  
151

**Global Economic Inequality: Forces at work, and Policies to Reverse the Problem**  
*Ana Cecilia Houser, Stephen Schuchert and Zachary Snowden*  
171

**Renewable Energy Solutions for a Town in Need**  
*Lawrence J. Keenan III*  
184

**Medical National Council**  
*Thiago Siervo and Archish Maharaja*  
195

**Negotiating Religio-Cultural Barriers in Psychotherapy with Female Arab-Muslim Survivors of Sexual Violence: A Literature Review**  
*Carleigh Ann Mallah*  
202
Introduction

On behalf of the Graduate Council Committee, we are honored to share the proceedings of the 1st Annual Graduate Student Conference, which will take place at Point Park University on April 14th, 2018. Point Park University’s graduate programs aim to produce graduates with advanced professional skills and theoretical knowledge who can function as leaders and ethical professionals in diverse fields. Among the key skills graduate students are expected to achieve are the ability to communicate ideas and research findings both in writing and in speech and the ability to critically evaluate, analyze and synthesize current research and theory into a dynamic framework. The purpose of this multi-disciplinary Graduate Student Conference is to highlight the ability of Point Park University’s graduate students to meaningfully integrate the theoretical with the practical to advance their chosen professions.

In this one-day event, students, faculty, and staff will be provided with the opportunity to connect, learn from one another, and gain access to valuable networking resources to guide their personal and professional development. Students from over 20 graduate (master’s and doctorate degree) programs were invited to submit proposals showcasing their knowledge and research skills that address the conference theme, “Advancing Professions and Serving Community”. After a blind peer-reviewed process, twelve papers and ten posters were accepted for presentation, from the Rowland School of Business and the School of Arts and Sciences. Student participants are pursuing degrees in Environmental Studies, Health Care Administration and Management, Clinical-Community Psychology, and Community Engagement. Ultimately, all of the papers included have a broader relevance to Point Park University’s values of promoting academic excellence and facilitating civic engagement. As is showcased in the diversity of presentation topics, spanning from global economic inequality, to renewable energy solutions; from substance addiction and mental health concerns, to sexual violence and issues in higher education; Point Park graduate students are passionate about engaging in scholarly pursuits that ultimately will improve the well-being of individuals and communities in the City of Pittsburgh and beyond, and we are excited to offer a forum for this important work to be shared.

Conference Committee:
Archish Maharaja, PhD
Brent Robbins, PhD
Yaser M. Roshan, PhD
Sarah Schulz, PhD
Evaluation of the Feasibility of Utilizing Wave Energy Conversion to Support the Power Requirements of the Island of Puerto Rico

Robert Emmett Bagwell III
Graduate Student, Engineering Management, Point Park University

Abstract

With the 2017 hurricanes that have demolished most of the island of Puerto Rico, this paper proposes a solution to minimize the power outages on the northern part of the island where most of the population is located. Utilizing conversion technology, the island can harvest energy by using the ocean waves. The paper investigates the business case of using the technology integrated into the power grid of Puerto Rico to make it less vulnerable to powerful storms and to sustain its resiliency and reliability.

Keywords

Wave Energy Converters, Internal Rate of Return, Return on Investment, Payback Period, Environmental Protection Agency, Capacity Factor, Puerto Rico Electric Power Authority

1 Introduction

Puerto Rico is very likely to feel the affect from a tropical storm or hurricane that develops in the Atlantic Ocean off the coast of Africa. This is a fact that the citizens of the island have accepted over the years. The problem occurred in 2017 when a category five hurricane named Maria swept through the island with winds over 165 mph that left the fragile power grid a mangled mess with the citizens without electricity.

The literature that was reviewed were from many different sources. Some of the information was from research papers, while other information was found on a manufacture’s web site that builds wave energy converters for commercial deployment and published scholarly papers. After reviewing the all the information that was connected to solving the issue a possible solution was developed.

The placement of a wave energy converter farm would aid the island with electrical power. During emergency situations the wave energy converter farm can be used to power nearby emergency buildings. The solution that was developed would increase the resiliency and reliability of Puerto Rico’s power grid, reduce the dependency of fossil fuel, and contribute in meeting renewable energy goals.

The discussion will start out with Wave Energy Converters (WEC) that will provide information on the location, types and modes of operation. The next section will describe the features of the wave and how the power of the wave is calculated. Then the environmental affects that a WEC power plant might cause. The next topic will start to focus on Puerto Rico and its regulations, power consumptions, why it was chosen, possible location for WEC
deployment and financial analyses of a WEC power plant. Last is the conclusion that will describe the best WEC type, location and contributing factors to

2 Wave Energy Converters

There are many different types of WEC with over 1000 patented methods in Japan, North America and Europe that convert wave energy into electrical power. Regardless of the unique variation in the design of a WEC, they are generally categorized by location and type.

2.1 Location

The shoreline WEC have the biggest advantage because they are easy to maintain, are the closest to the utility network and the waves are diminished as they travel through the shallower water which reduces the probability of the WEC being damaged in extreme conditions. Due to being close to the shore does have disadvantages. The range of the tide can also be in issue. The Shoreline WECs are site-specific that considers of the shoreline geometry, geology and the preservation of the coastal scenery. Therefore, the shoreline WEC technology cannot be constructed for mass production.

A nearshore WEC is defined as mechanisms that is in relatively shallow water. There are is a lack of agreement of what depth is considered “shallow” water. The suggested depth of ‘shallow’ water is less than one-quarter wavelength. Within the ‘shallow’ water limits the WEC is often attached to the sea floor which provides a stationary base for an oscillating body can work. The disadvantage, as the wave travels closer to the shore the more energy is lost which leads to lower wave power.

With offshore WEC devices that are considered to be in deep water. Again, there are different definitions of what is defined as deep water. Depending on the author of the paper, ‘tens of meters’¹, with ‘greater than 40 meters’², or ‘a depth exceeding one-third of the wave length’³. The offshore WEC does have a clear advantage by sitting in deeper water because it will be able to yield larger amounts of energy due to the higher energy that it stored in the deep-water waves. With the greater wave height and energy stored in the wave comes the need for the WEC to be able to survive the more extreme conditions that adds additional cost to building the device. The offshore WEC maintenance and construction costs are the disadvantages⁴.

2.2 Types

Even though there are many different patented WEC technology, they are broken down into three major types of classifications:
2.2.1 Attenuator

The attenuators function by riding the waves. They are aligned parallel to the direction the wave traveling. The Pelamis which was developed by Ocean Power Delivery is one example of an attenuator. Figure 1 demonstrates is a single Pelamis Wave Power.

2.2.2 Point absorber

The detentions of a point absorber device are much smaller relative to the incident wave length. This instrument can be submerged below the surface of the water and depend on the difference of water pressure to operate or it can be a type of floating assembly that bobs up and down on the water surface. The Powerbuoy made by Ocean Power Technology (OPT) is the most common type of WEC shown in Figure 2.

2.2.3 Terminator

The name terminator was used because these types of WEC physically intercepts and terminates the wave. With the terminator devices, their position must be parallel to the wave front or perpendicular to the direction of the traveling wave, depending on the point of view. One example of a terminator type WEC is the Salter’s Duck and it was developed at the University of Edinburgh, as shown in Figure 3.
2.3 Modes of operation

The previous categories have sub category which classifies the WEC in the way the unit operates.

2.3.1 Submerged pressure differential

The submerged pressure differential is a device that has two main parts: a sea bed fixed air-filled cylindrical chamber with a moveable upper cylinder. This type of device relies on the pressure difference between the trough and the crest. This type of WEC being attached to the seafloor they are often near shore apparatus. Also, because they are fully submerged they are not exposed to the extreme slamming forces that floating devices receive, and they are less of a visual impact. However, the maintenance of these types of WEC can be troublesome. The Archimedes Wave Swing shown in Figure 4 is an example of a submerged pressure differential WEC.

![Figure 4 Archimedes wave swing (AWS) Farm](image)

2.3.2 Oscillating wave surge converter

The oscillating wave surge converter works like a terminator. It is comprised of a hinged deflector which is at a 90-degree angle to the wave direction. At this angle the velocity of the wave is absorbed which moves the hinged deflector back and forth. This type of device is a near shore because the top of the deflector is above the surface of the water allowing it so to capture the most energy. An example of this device is called an Aquamarine Power Oyster and is constructed as demonstrated in Figure 5.

![Figure 5 Oscillating Wave Surge Converter, Aquamarine Power Oyster](image)
2.3.3 **Oscillating Water Column**

While approaching the Oscillating Water Column (OWC) the wave enters a chamber through an opening that is below the waterline. This act compresses the air in the chamber and forces it out through a turbine. During the decompression of the chamber air flows back through the turbine refilling the chamber. To remove the need to rectify the air flow a low-pressure Wells turbine is used most often in this application. One of the advantages of the OWC concept is its simplicity and robustness\(^2\). The construction of one is shown in Figure 6.

![Figure 6 Oscillating water column](image)

3 **Power of the Wave**

The concept the energy from waves can be used to perform useful work such as generation electricity. Having a strong knowledge of the theory and physics of how ocean wave work will have an advantage in the business sector. The information that is gathered will help improve energy efficiency, new innovations and a wise business investment.

3.1 **Wave Anatomy**

When young a kid throws a rock into the water so that it would produce a wave. The wave is a phenomenon that happens all the time. Through in nature waves can take on very different forms, they will all have the same basic properties\(^6\). These parameters are shown in Figure 7 and are:

- **Wavelength**: the distance from one wave crest to the next
- **Peak or Crest**: the wave’s highest point
- **Trough**: the wave’s lowest point
- **Height**: the difference between the crest and trough
- **Period**: time it takes for one wave to pass a fixed point
- **Frequency**: the number of waves per second that passes a fixed point
Velocity: the speed of the waves that pass a fixed point
Steepness: the height to width ratio

3.2 Wave Power Formula

The general consensus, the larger the wave the more power it possesses. There are other factors that determine the power of a wave such as the wave speed, wavelength, and water density. The Wave Power Formula refers to the wave energy flux, or the transport rate of wave energy. When the water depth is larger than half the wavelength the Wave Power Formula, equation 1, can be used.

\[ P = \frac{\rho g^2}{64\pi} H_{mo}^2 T \approx (0.5 \frac{KW}{m^3.s})H_{mo}^2 T \]  

(1)

The wave energy flux per unit of wave-crest length is represented by ‘P’. The ‘H_{mo}’ is the height of the wave, ‘T’ is the wave period, the water density ‘\rho’ and lastly the acceleration of gravity is ‘g’. The wave power is proportional to the wave period and to the square of the wave height. If the wave height is given in meters and the wave period in seconds, then the wave power will have units of kilowatts (kW) per meter of wave front length. Shown in table 1, that the larger waves produce more power."
4 Ecological Risks

The most common environmental impacts of renewable energy technologies include: alteration of benthic habitats and sediment transport, deaths and changes in behavior of the fish and mammals because of the noise and electromagnetic fields; interference with spawning and migration paths of fish, and release of toxic chemicals because of accidental spills. As with other renewable energy forms, wave energy converters do not emit greenhouse gases to the environment. The various wave energy converters do however still pose potential hazards to the environment. Turbine blades are dangerous for the fish and other marine animals that attempt to swim through them. Other concerns for the environment include the artificial reef effect and underwater noise.

However, placing of foreign objects on the floors of the ocean has been known to attract marine life as well. The artificial reef helps provide a safe haven for the fish and marine animals in the area. These safe havens can provide excellent breeding grounds and supporting the marine environment. The area immediately surrounding the wave park is also a no wake zone with fishing and trolling prohibited and will also assist with the artificial reefing in the area.

5 Regulations

The commonwealth of Puerto Rico is subject to the United States Federal laws and policies because it is a U.S. controlled territory. The Environmental Protection Agency (EPA) does have jurisdiction over the island. With the aging power plants not meeting the clean air act and the island needing more diversity in the power producing by adding additional renewable energy technology.

The EPA does oversee the United States and its controlled territories, but each state does have its own regulations, requirements and policies that govern renewable technology and Puerto Rico is no different. It does have an Environmental Public Policy Act number 416 of September 22nd, 2004 which is the newest amended version of the original Act number 9 of June 18th, 1970.
Within this Environmental Public Policy Act has a statement that a national digitized environmental information system is hereby established. Then objective of this System is to gather, organize, and make available to the public, through electronic media, technical, educational, and scientific information, in existence or to be generated, about subjects relative to the environment and the natural resources, of both renewable and nonrenewable resources. The issue with finding additional information is the language barrier.

6 Puerto Rico Energy Portfolio

Puerto Rico is heavily dependent on the import of fossil fuels to generate electric for the citizens of the island like many of the Caribbean islands. The cost of the electricity is vulnerable to the fluctuations with the global price of the fossil fuel. The rising cost of the fossil fuels is putting a burden on the Puerto Rican Government and not to mention the already out of date power plants that cannot pass the green house reduction targets that were set but the U.S. Environmental Protection Agency.

6.1 Energy Production

The electricity that is produced in Puerto Rico mainly uses fossil fuel. The island has four main power plants, two in the north and two in the south as shown in Figure 8. There are other smaller power plants throughout the island. The burning of oil is the most common fossil fuel used which accounts for 47.4%, Natural Gas 33.2%, Coal 16.2% and renewable at 3.2%. The renewable energy has grown some but still account for less than 5% of the energy produced.

How Puerto Rico Generated Electricity in 2014

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil</td>
<td>47.4%</td>
</tr>
<tr>
<td>Natural gas</td>
<td>33.2%</td>
</tr>
<tr>
<td>Coal</td>
<td>16.2%</td>
</tr>
<tr>
<td>Other</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Puerto Rico’s Main Power Plants

![Puerto Rico’s generated electricity and main power plants](Figure 8)

The cost to produce the power needed for a year is above one billion USD. Table 2 is a cost break down of the fuel cost only. This does not include the delivery for fuel, maintenance of
the power plants or other costs. This one fact can help explain why the Puerto Rico Electric Power Authority (PREPA) reports being bankrupt. The PREPA is the sole distributor of the electricity and generates 66% of the electricity while the other 34% is produced through independent power producers.

Table 2 Estimated cost of electric production

<table>
<thead>
<tr>
<th>Consumption (2015 est.)</th>
<th>Fuel Type</th>
<th>Minus Motor</th>
<th>Minus Jet</th>
<th>Minus Residual</th>
<th>Net for Electric Generation</th>
<th>Nasdaq 1/12/18 trade</th>
<th>Estimated cost per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline bbl/day Oil</td>
<td>59k</td>
<td>2.7k</td>
<td>52k</td>
<td>413.3 bbl/day</td>
<td>$59.00 - $60.00 bbl</td>
<td>$889,395,500</td>
<td>$904,470,000</td>
</tr>
<tr>
<td>Natural Gas cu ft</td>
<td>55 billion</td>
<td>2.50</td>
<td>$2.60</td>
<td>thousand cu ft</td>
<td>$137,500,000</td>
<td>$257,500,000</td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td>1,963k short tons</td>
<td>$31.83</td>
<td>$42.58</td>
<td>short tons</td>
<td>$62,482,290</td>
<td>$83,584,540</td>
<td></td>
</tr>
<tr>
<td>Total cost</td>
<td>1,089,377,790</td>
<td>$1,345,554,540</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The renewable energy projects that are in operation on the island to date include 120 MW of wind, 22.1 MW of solar photovoltaics, and 21 hydroelectric generating units mainly sited on reservoirs and irrigation lakes that total 100 MW. The renewable energy projects that are planned or under construction as of the fiscal year 2013 add up to an additional 1,660.8 MW. The additional projects include 10 wind projects, 47 solar photovoltaic projects, and seven biomass projects.

6.2 Energy Consumption

The power consumption of Puerto Rico’s is estimated as 20.3 billion kWh in 2015. In the Caribbean region where Puerto Rico is located, the average rate for electricity is USD $0.33/kWh. The island’s cost of electricity is between USD $0.20/kWh - $0.25/kWh which is shown in figure 9 and 10.

In 2010, Act 82 was passed by the Energy Policy Office. This required that Puerto Rico energy supply needs to be more diversified and establishing a Renewable Portfolio Standard (RPS) requiring 20% of the electricity sales from renewable energy by 2035.

7 Location Selection for the WEC Installation

Puerto Rico was chosen because of hurricane Marie that caused wide spread disruption of the power grid. There are several maps that were studied which helped narrow down which part of the cost line would be most suitable for the deployment of the WEC power plant. The existing power plants, hospitals, power consumption, and population were also factors when determining the location area.
7.1 Population Density

Figure 9, represents the population density of Puerto Rico that was conducted by Census Tract. The map shows that most of the population is in the northeast part of the island. This would be an area to look at because the power that is generated from the WEC would impact the most people.

![Population Density by Census Tract](image)

*Figure 9 Population density of Puerto Rico*

7.2 Power Plants and Consumption

There are four main power plants that are shown in Figure 8. Two of them in the south which are Costa Sur 990MW and Aguirre 1420MW. The northern part of the island has Palo Seco 602MW and San Juan 800 MW, both are relatively close to each other. This is also the area where the population density is the greatest.

The consumption of power is also important factor. There are several areas that will consume over 90 million kilowatts-hours, most of them are located on the coast line as shown in Figure 10. Further study using Figure 10, i.e. map of power usage throughout the island, shows that there is a cluster of counties that will consume over 90 million kilowatts-hours which happens to be the location of the two northern main power plants and population density.
7.3 Wave and Depth Maps

At this point we have a good idea that the San Juan which is the red dot the black dot is a possible deployment location. This is also approximately (13 miles) half way between San Juan and the eastern tip of the island located on each of the miniature maps as shown in Figure 11. Each of the miniature maps conclude that the San Juan area will have wave height of 0.5 meters to 1.0 meters. The far eastern part of the island has a better potential for the deployment of the WEC because the wave height is much greater, but it is approximately 25 miles from San Juan.

Figure 11 Puerto Rico wave maps from www.surfline.com
The recommended depth that the near shore WEC should be deployed is 40 meters to 1000 meters but can be as close as 25 meters as shown in Figure 12\textsuperscript{13}. Figure 13 will indicate that the WEC will be located approximately between 1 to 9 miles from the coast line. The WEC can be deployed at depths that are larger than 1000 meters, but the additional engineering, materials, and maintenance will not make it economically or commercially feasible at this early stage of the technology.

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>ELECTRICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height: 14.3 m</td>
<td>Continuous Average Power based on 8.4 kWh/Day (typical) (Annual Average: Site Dependent)</td>
</tr>
<tr>
<td>Draft: 10.8 m</td>
<td>Payload Peak Power: up to 3 kW peak power to load; 7.5 kW (custom)</td>
</tr>
<tr>
<td>Spar Diameter 1.0 m, Float Diameter: 2.7 m</td>
<td>Nominal Battery Capacity (ESS): 50 kWh (approx.); Modular and Scalable to 100, 150 kWh (approx.)</td>
</tr>
<tr>
<td>Weight: 10,280 kg</td>
<td>Zero wave day capacity: 100 W load for 2 weeks (50 kWh ESS)</td>
</tr>
<tr>
<td>MOORING</td>
<td>DC Output: 24 V and 300 V (standard) 5 V to 600 V (custom)</td>
</tr>
<tr>
<td>Type: Single point or 3 point</td>
<td>AC Output: 100 V to 480 V, 50/60 Hz</td>
</tr>
<tr>
<td>Point: Anchor or shackles</td>
<td>Power Generation Sea States: 1 - 5</td>
</tr>
<tr>
<td>Min Depth: 25 m</td>
<td>* Other mooring designs available for deeper deployments</td>
</tr>
</tbody>
</table>

*Figure 12 Powerbuoy Spec\textsuperscript{13}*

*Figure 13 Water depth of Northeastern Puerto Rico from http://fishing-app.gpsnauticalcharts.com*

8 Financial Analysis

With the information provided by National Renewable Energy Laboratory (NREL) that is listed in Table 4\textsuperscript{14} and using the cost of electricity listed in Table 3 and a range of capacity factors that are known for WEC, a cash flow was able to be generated as shown in Table 5. The cash flow is based on a 50MW WEC power plant. The internal rate of return (IRR) stays the same on every size of power plant. The capacity factor is the driving force. When the capacity factor percentage increases, the power plant produces more electricity to sell which will change
the cash flow. Shown in tables 7, 8, and 9 are the IRR, ROI, and payback period, respectively. This also includes different interest rates that a bank may charge for a construction loan. With the current rates of electricity being $0.20 to $0.25, the IRR, ROI and payback period are acceptable figures for a project life span of 20 years.

Table 4 WEC cost

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Cost ($/kW)</th>
<th>Fixed O&amp;M ($/kW-p)</th>
<th>Construction Schedule (Months)</th>
<th>POR (%)</th>
<th>FOR (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5,240</td>
<td>474</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2020</td>
<td>6,960</td>
<td>557</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2025</td>
<td>5,700</td>
<td>292</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2030</td>
<td>4,730</td>
<td>243</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2035</td>
<td>3,950</td>
<td>203</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2040</td>
<td>3,420</td>
<td>175</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2045</td>
<td>4,000</td>
<td>208</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2050</td>
<td>5,330</td>
<td>273</td>
<td>24</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 5 Constants for a 50MW WEC power plant

<table>
<thead>
<tr>
<th>Constants</th>
<th>Total Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Plant Size (kW)</td>
<td>50000</td>
</tr>
<tr>
<td>Cost of Electric/kwh</td>
<td>$0.25</td>
</tr>
<tr>
<td>Capacity Factor</td>
<td>0.90</td>
</tr>
<tr>
<td>Cost/kw installed</td>
<td>$6,960.00</td>
</tr>
<tr>
<td>Inflation Rate of cost of electricity</td>
<td>0.02</td>
</tr>
<tr>
<td>Annual interest rate</td>
<td>4.00%</td>
</tr>
<tr>
<td>Compounding periods per year</td>
<td>12</td>
</tr>
<tr>
<td>Effective Interest rate</td>
<td>4.07%</td>
</tr>
<tr>
<td>Length of Bank loan in years</td>
<td>Total over 20 years</td>
</tr>
<tr>
<td>Bank Loan payment per year</td>
<td>($25,774,870.83)</td>
</tr>
<tr>
<td>Total over 20 years</td>
<td>($515,497,416.66)</td>
</tr>
</tbody>
</table>

Table 6 Sample cash flow for a 50MW WEC power plant using Table 5 Constraints

<table>
<thead>
<tr>
<th>Year</th>
<th>D&amp;M/kw</th>
<th>O&amp;M/kw</th>
<th>Annual Cost</th>
<th>Annual Revenue</th>
<th>Net Revenue</th>
<th>Cumulative Loan Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2020</td>
<td>-357</td>
<td>(43,624,871)</td>
<td>67,014,000</td>
<td>23,389,129</td>
<td>(25,774,871)</td>
</tr>
<tr>
<td>2</td>
<td>2021</td>
<td>-344</td>
<td>(42,974,871)</td>
<td>68,354,280</td>
<td>25,379,409</td>
<td>(51,549,742)</td>
</tr>
<tr>
<td>3</td>
<td>2022</td>
<td>-331</td>
<td>(42,324,871)</td>
<td>69,721,366</td>
<td>27,396,495</td>
<td>(77,324,612)</td>
</tr>
<tr>
<td>4</td>
<td>2023</td>
<td>-318</td>
<td>(41,674,871)</td>
<td>71,115,793</td>
<td>29,440,922</td>
<td>(103,099,483)</td>
</tr>
<tr>
<td>5</td>
<td>2024</td>
<td>-305</td>
<td>(41,024,871)</td>
<td>72,538,109</td>
<td>31,513,238</td>
<td>(128,874,354)</td>
</tr>
<tr>
<td>6</td>
<td>2025</td>
<td>-292</td>
<td>(40,374,871)</td>
<td>73,988,871</td>
<td>33,614,000</td>
<td>(154,649,225)</td>
</tr>
<tr>
<td>7</td>
<td>2026</td>
<td>-282.2</td>
<td>(39,884,871)</td>
<td>75,468,648</td>
<td>35,583,778</td>
<td>(180,424,096)</td>
</tr>
<tr>
<td>8</td>
<td>2027</td>
<td>-272.4</td>
<td>(39,394,871)</td>
<td>76,978,021</td>
<td>37,583,150</td>
<td>(206,198,967)</td>
</tr>
<tr>
<td>9</td>
<td>2028</td>
<td>-262.6</td>
<td>(38,904,871)</td>
<td>78,517,582</td>
<td>39,612,711</td>
<td>(231,973,837)</td>
</tr>
<tr>
<td>10</td>
<td>2029</td>
<td>-252.8</td>
<td>(38,414,871)</td>
<td>80,087,933</td>
<td>41,673,063</td>
<td>(257,748,708)</td>
</tr>
<tr>
<td>11</td>
<td>2030</td>
<td>-243</td>
<td>(37,924,871)</td>
<td>81,689,692</td>
<td>43,764,821</td>
<td>(283,523,579)</td>
</tr>
<tr>
<td>12</td>
<td>2031</td>
<td>-235</td>
<td>(37,434,871)</td>
<td>83,323,486</td>
<td>45,798,615</td>
<td>(309,298,450)</td>
</tr>
<tr>
<td>13</td>
<td>2032</td>
<td>-227</td>
<td>(37,124,871)</td>
<td>84,989,956</td>
<td>47,865,085</td>
<td>(335,073,321)</td>
</tr>
<tr>
<td>14</td>
<td>2033</td>
<td>-219</td>
<td>(36,724,871)</td>
<td>86,689,755</td>
<td>49,964,884</td>
<td>(360,848,192)</td>
</tr>
<tr>
<td>15</td>
<td>2034</td>
<td>-211</td>
<td>(36,324,871)</td>
<td>88,423,550</td>
<td>52,098,679</td>
<td>(386,623,062)</td>
</tr>
<tr>
<td>16</td>
<td>2035</td>
<td>-203</td>
<td>(35,924,871)</td>
<td>90,192,021</td>
<td>54,267,150</td>
<td>(412,397,933)</td>
</tr>
<tr>
<td>17</td>
<td>2036</td>
<td>-194.4</td>
<td>(35,494,871)</td>
<td>91,955,861</td>
<td>56,500,990</td>
<td>(438,172,804)</td>
</tr>
<tr>
<td>18</td>
<td>2037</td>
<td>-191.8</td>
<td>(35,364,871)</td>
<td>93,835,778</td>
<td>58,470,908</td>
<td>(463,947,675)</td>
</tr>
<tr>
<td>19</td>
<td>2038</td>
<td>-186.2</td>
<td>(35,084,871)</td>
<td>95,712,494</td>
<td>60,627,623</td>
<td>(489,722,546)</td>
</tr>
<tr>
<td>20</td>
<td>2039</td>
<td>-180.6</td>
<td>(34,804,871)</td>
<td>97,626,744</td>
<td>62,821,873</td>
<td>(515,497,417)</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>(770,897,417)</td>
<td>1,628,263,940</td>
<td>857,366,523</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 IRR for a 50MW WEC power plant

<table>
<thead>
<tr>
<th>Capacity Factor (CP)</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.40</td>
<td>-5.6%</td>
<td>-11.0%</td>
<td>-17.0%</td>
<td>-4.0%</td>
<td>-0.1%</td>
<td>-4.2%</td>
<td>14.3%</td>
<td>8.2%</td>
<td>3.6%</td>
</tr>
<tr>
<td>0.50</td>
<td>1.8%</td>
<td>-2.2%</td>
<td>-6.7%</td>
<td>14.3%</td>
<td>8.2%</td>
<td>3.6%</td>
<td>33.8%</td>
<td>22.7%</td>
<td>14.3%</td>
</tr>
<tr>
<td>0.60</td>
<td>8.7%</td>
<td>4.0%</td>
<td>-0.1%</td>
<td>29.4%</td>
<td>19.3%</td>
<td>11.8%</td>
<td>57.3%</td>
<td>42.4%</td>
<td>29.8%</td>
</tr>
</tbody>
</table>
Table 8 ROI Period for a 50MW WEC power plant

<table>
<thead>
<tr>
<th>Capacity Factor (CP)</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
<th>4%</th>
<th>6%</th>
<th>8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.40</td>
<td>-15.5%</td>
<td>-25.2%</td>
<td>-33.6%</td>
<td>12.6%</td>
<td>-0.2%</td>
<td>-11.4%</td>
<td>40.8%</td>
<td>24.7%</td>
<td>10.7%</td>
</tr>
<tr>
<td>0.50</td>
<td>-10.2%</td>
<td>-6.5%</td>
<td>-16.9%</td>
<td>40.8%</td>
<td>24.7%</td>
<td>10.7%</td>
<td>76.0%</td>
<td>55.9%</td>
<td>38.4%</td>
</tr>
<tr>
<td>0.60</td>
<td>26.7%</td>
<td>12.2%</td>
<td>-0.3%</td>
<td>69.0%</td>
<td>49.6%</td>
<td>32.9%</td>
<td>111.2%</td>
<td>87.1%</td>
<td>66.1%</td>
</tr>
</tbody>
</table>

Table 9 Payback Period for a 50MW WEC power plant

<table>
<thead>
<tr>
<th>Capacity Factor (CP)</th>
<th>Cost of Electric at $0.15</th>
<th>Cost of Electric at $0.20</th>
<th>Cost of Electric at $0.25</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.40</td>
<td>18.4</td>
<td>13.3</td>
<td>10.3</td>
</tr>
<tr>
<td>0.50</td>
<td>14.3</td>
<td>10.2</td>
<td>7.9</td>
</tr>
<tr>
<td>0.60</td>
<td>11.5</td>
<td>8.3</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Figure 14 IRR for a 50MW WEC power plant with raising capacity factor when cost of electricity is $0.15 per kWh

Figure 15 IRR for a 50MW WEC power plant with raising capacity factor when cost of electricity is $0.2 per kWh
9 Conclusion

The financial cost-benefit analysis of such a project demonstrates that Puerto Rico is a prime candidate for the deployment of WEC technology. Figure 11, shows that the direction of the waves does change depending on many factors. The deployment of the Powerbuoy by Ocean Power Technologies would be the best fit because it can produce power no matter which direction the waves are traveling, and they are also durable enough to withstand hurricanes\textsuperscript{13}. With the financial problems that the PREPA is experiencing the deployment of WEC technology does have many positive factors. It reduces the carbon emissions and fossil fuel dependency, increases the percentage of renewable energy, provides higher paying jobs, and produces revenue while cutting costs.

San Juan was the ideal area to deploy the WEC technology at first because of the large power usage, population and emergency buildings. Due to the lack of waves the deployment area was moved to the far east off the cost of Fajardo were the wave height is significantly increased for the WEC technology. Furthermore, Fajardo does use 64-89 million kilowatt hours which is the 2\textsuperscript{nd} largest amount and has two hospitals that are close to the coastline that can utilize the power during emergencies. The red dots shown in Figure 17 are rough locations of hospitals and the two recommended locations of WEC technology deployment.

Figure 16 IRR for a 50MW WEC power plant with raising capacity factor when cost of electricity is $0.25 per kWh

Figure 17 Recommended deployment areas for the WEC power plant
References


Biography of Author

Robert Emmett Bagwell III

Robert is a graduate student in the Master of Science program in Engineering Management at Point Park University. He also has an Associate Degree in Electronic Engineering Technology from ITT Technical Institute in Pittsburgh, PA, and a Bachelor of Science Degree in Electrical Engineering Technology from Point Park University, Pittsburgh, PA. Robert has more than 10 years of work experience in related fields and is also a member of the National Vocational-Technical Honors Society.
Automate or Not to Automate

Hung Q. Nguyen and Aike O. Okolo
Point Park University

Abstract

This paper analyzes the manufacturing and production capacity constraints facing the Quoc Hoa Mechanical Company Limited (QuocHoa). QuocHoa is a reputable and recognizable brand in the industrial manufacturing market in Vietnam. QuocHoa has been awarded a contract to manufacture equipment for the production lines for the Hao Canh Sanitary Wares Company Limited (HaoCanh) plants, also in Vietnam. To successfully execute the contract, QuocHoa has to resolve internal operational constraints. QuocHoa has to provide additional training to its existing workforce to elevate the quality of its products. Within a limited time horizon, QuocHoa also needs to recruit and train additional employees to support the new contract. To this end, QuocHoa is evaluating two options as a means to overcome its existing capacity constraints to support the new contract. The options include recruiting and training additional employees, or investing in new automating equipment. Each option has strengths and weaknesses. The authors are of the opinion that QuocHoa should invest in new automating equipment rather than recruiting and training additional employees. This paper evaluates the option of investing in new Computer Numerical Control (CNC) Plasma Cutting machines versus recruiting and training additional employees.

Keywords: Computer Numerical Control (CNC) Plasma Cutting machines; automation; program management; capital investment; manufacturing infrastructure.

1 Introduction

Quoc Hoa Mechanical Company, Limited (QuocHoa) was established in September 1992 with the initial name of Thai Binh Paper Company, Limited. In 2000, the company changed its name to QuocHoa Mechanical Company, Limited. The company specializes in manufacturing automation machines used in the printing, paper, and porcelain as well as building materials industries. QuocHoa customers are industrial manufacturers located in Vietnam and Southeast Asia. QuocHoa is the first Vietnamese company to receive the Vietnam Science and Technology Innovation Award (VIFOTEC) in recognition of its success in designing and manufacturing printers using flexography and offset technology. Prior to 2003, no Vietnamese mechanical factory had successfully manufactured printers with flexography and offset technology capabilities. These printers were imported into Vietnam at very high prices. Hence, the success by QuocHoa in designing and manufacturing printers using flexography and offset technology was revolutionary for the paper industry in Vietnam.

The strategy of QuocHoa is to produce machines that are usually imported into Vietnam. The machines manufactured by QuocHoa cost less than half the price of comparable machines imported from China, Japan, Europe, and the United States. The features and quality of domestically-produced machines are equal to those of imported machines. The warranty policy of domestically-produced machines is more suitable for businesses in Vietnam. Service personnel do not have to travel long distances to honor warranty requirements, and QuocHoa does not need to
spend additional resources to retain domestic service facilities. As a domestic Vietnamese company, QuocHoa is familiar with Vietnamese cultural idiosyncrasies. Hence machines manufactured by QuocHoa are very popular in Vietnam. QuocHoa is the leading machine manufacturer in the paper and porcelain industries in Vietnam.

2 New contract and challenges

In September 2016, QuocHoa received a substantial contract from the Hao Canh Sanitary Wares Company Limited (HaoCanh). HaoCanh is one of the biggest sanitary wares companies in Vietnam. HaoCanh produces and trades in sanitary wares, fine art ceramics, showers, and accessories for sanitary ware products. HaoCanh also produces ceramic tiles and chemicals for ceramic enamel. HaoCanh products are used in large construction projects in Vietnam and foreign countries. Foreign customers of HaoCanh are concentrated in Myanmar, Cambodia, Nigeria, and Laos. Currently, HaoCanh is opening more plants and needs to install new machines for those plants. After researching the market, HaoCanh decided to purchase machines from QuocHoa instead of importing. According to the contract between HaoCanh and QuocHoa, QuocHoa must install fifty new product systems for HaoCanh’s Plant Number 1 in 2017. The contract presented challenges to QuocHoa since HaoCanh required new machines that QuocHoa had not previously developed, fabricated, or manufactured.

The contract required new types of machines that QuocHoa had not previously produced. HaoCanh intends to fit out ten new manufacturing facilities and retained QuocHoa to produce the machines for the production system for one facility. If the first facility operates efficiently, then both parties will execute a new contract for QuocHoa to produce the same system for the other nine facilities. In that case, QuocHoa will have to produce assembly parts in large quantities.

2.1 Production facility

The first challenge that QuocHoa encountered was the existing size of QuocHoa’s production facility. QuocHoa’s existing products are either small or medium-sized machines. The new contract required new types of machines that are much larger than machines previously produced by QuocHoa. Some of the new machines are bigger than QuocHoa’s existing production and manufacturing facility. Since QuocHoa does not maintain a large cash reserve, the company would need external funding to expand the size of its existing production and manufacturing facility. In the interim, QuocHoa negotiated with HaoCanh for QuocHoa to produce equipment components at the QuocHoa factory, which will then be shipped and assembled at HaoCanh factories. This is a departure from industrial manufacturing practices in Vietnam. QuocHoa customers prefer to inspect and test finished products at QuocHoa facilities prior to shipping to the customer’s location.

The interim agreement between QuocHoa and HaoCanh helped QuocHoa solve the problem of inadequate production capacity. QuocHoa however must guarantee the quality of the machinery components. The machinery components must satisfy high precision requirements to avoid errors during assembly and testing. Even though QuocHoa existing production equipment are outdated, the equipment could still produce high precision components for the HaoCanh facilities. To produce high precision components for the HaoCanh facilities, QuocHoa would have to deploy its most experienced and high-skilled personnel, as well as implementing a rigorous quality control regime. Implementing a needed rigorous quality control regime would add to QuocHoa’s
expenses, since each component would need to be inspected and certified to be satisfactory prior to shipping to a HoaCanh facility for final assembly.

2.2 Production schedule

The second challenge was time. According to the contract between HaoCanh and QuocHoa, QuocHoa must install fifty new product systems for HaoCanh’s Plant Number 1 in calendar year 2017. This was a daunting task since QuocHoa would have one year and a half to design, test, and fabricate the needed equipment. HaoCanh’s competitors import machines from countries such as China, Italy, and other European countries. In order to take advantage of existing market opportunities, HaoCanh must install new production systems as soon as possible. HaoCanh is able to purchase foreign equipment and begin manufacturing operations in one third the time for QuocHoa to manufacture, install, test, and activate domestically-produced equipment. Foreign produced equipment however cost about four times domestically-produced equipment. QuocHoa is able to offer favorable warranty and installation terms since QuocHoa is located within the country which eliminates long travel times for warranty maintenance personnel. QuocHoa’s personnel understand the Vietnamese culture and speak the language as well. After a detailed analysis of available options, HaoCanh made a decision to place an order with QuocHoa.

The interim agreement between QuocHoa and HaoCanh stipulated that if QuocHoa was unable to meet the mutually agreed upon production schedule, then HaoCanh would rescind the purchase orders and buy foreign-manufactured and imported machines. The interim agreement required QuocHoa to produce components at QuocHoa’s facilities and then ship to HoaCanh’s location for assembly and activation. Even though the components require high precision to produce, the manufacturing process does not require complicated high technology. The initial production activity is crucial and significant in that the cutting process, which is the first stage in the manufacturing process, is done manually. Technicians manually cut large steel plates into specified shapes. In order to achieve the required high quality and precision, the manual cutting process is done at a slow and deliberate pace.

2.3 Raw material cost

During the manufacturing process, cutting of steel plate components consumes a large amount of time. Initial cutting of steel plate components is done manually without use of precision-guided machinery. Large quantities of materials are wasted since the initial cutting of the steel plates cuts the plates much larger than is required for the fabrication process. Initial cutting is followed by detailed cutting done by more experienced personnel to achieve the required precision. Multiple cutting is inefficient and utilizes large quantities of Oxygen for the cutting torches, and large amounts of electricity. Inexperienced personnel do not calibrate the cutting equipment correctly for optimum use of Oxygen and electricity. Inexperienced personnel use the same amount of Oxygen and electricity for cutting either thick or thin steel plates.

2.4 Workforce constraints

QuocHoa, as with many other Vietnamese industrial manufacturers faces high turnover of skilled employees. Skilled and experienced technical workers change jobs frequently over prospects of better compensation. Although the new contract promises to bring a huge amount of profit and
more contracts in the future for the company, QuocHoa faces a significant employee retention dilemma. Skilled workers in Vietnam often leave domestic firms after a few years to seek employment with subsidiaries of foreign companies.

New workers hired at QuocHoa are usually medium-skilled and earn about 7,000,000VND per month, which is higher than the average Vietnamese wage of 5,000,000VND per month. After one year of employment, on average, a skilled worker could earn 10,000,000VND per month at QuocHoa. QuocHoa however is not able to match salaries paid by subsidiaries of foreign companies. The result is that after working for a few years with QuocHoa and acquiring some experience, skilled workers would leave QuocHoa to work for subsidiaries of foreign companies. Subsidiaries of foreign companies are able to pay as much as twice what domestic companies pay. This is possible since foreign manufactured equipment cost as much as three times domestic manufactured equipment. After a year of training and working at QuocHoa, workers gain experience and valuable technical skills. These workers with valuable skills and who do not require additional extensive technical training then become attractive to subsidiaries of foreign companies. To avoid losing trained and experienced workers, many domestic Vietnamese companies execute retention contracts with new employees. The contracts require that all employees who are trained while working for a company must stay and work for that company for a specified period of time before leaving to work for another organization. The retention period varies from three to five years. If an individual elects to leave prior to fulfilling the retention clause, then the individual must refund all training expenses incurred for the individual’s training. Enforcement of the retention contract clause however has not been effective in Vietnam. After receiving training from current employers, Vietnamese workers resort to sabotage or work slowdown to facilitate their dismissal. On dismissal, the experienced workers are able to find work easily with subsidiaries of foreign companies, and at substantially higher salaries than with their erstwhile organizations.

3 Alternatives analysis

To implement the contract with HoaCanh as stipulated, QuocHoa must resolve the following issues. The first issue revolves around retention of QuocHoa’s skilled and experienced workers, and the second issue is on how to address its capacity and quality control shortfalls.

To retain its most skilled and experienced workers, QuocHoa would need to adjust its salary structure to become competitive with subsidiaries of foreign companies. QuocHoa may not be able to pay comparable wages as subsidiaries of foreign companies unless it can, (i) acquire more contracts, (ii) raise the price of its products, and (iii) optimize its production processes.

There are two possible options available to QuocHoa for addressing its capacity and quality control shortfalls. The first option is for QuocHoa to hire more skilled workers. The second option is for QuocHoa to invest in new equipment while retaining its existing skilled workforce. QuocHoa should either hire additional experienced workers or invest in machinery to improve the quality and precision level of the metal cutting operation. Either option could be immediately funded through external infusion of cash by either borrowing from financial institutions or accepting an equity partner.
3.1 Recruit new workers

Inexperienced new workers usually require at least one year of intensive training to become proficient in QuocHoa’s operations. QuocHoa’s agreed deliverable schedule with HoaCanh could not accommodate training of new inexperienced workers. QuocHoa could save time by hiring skilled workers. Hiring of skilled and experienced workers means higher labor cost for QuocHoa. On average, two current cutting workers can cut 30 plates of steel per day. The contract with HoaCanh required cutting 100 plates of steel per day. To satisfy the delivery schedule with HoaCanh, QuocHoa must hire four more experienced workers at a rate of 10,000,000VND per month per skilled worker. If QuocHoa hires four more experienced workers, QuocHoa’s labor cost will increase by 40,000,000VND per month. QuocHoa will also spend 10,000,000VND to purchase equipment for use by the new workers.

3.2 Invest in new equipment

To enhance productivity and improve product quality, QuocHoa should invest in Computer Numerical Control machines, such as Computer Numerical Control Plasma Cutting machines (CNC Plasma Cutting machines). Cutting, which is significant and the initial activity in the production process is currently the most time-consuming production activity in QuocHoa. For the other stages of the production process, QuocHoa might be able to meet the requirements of the new contract with its existing number of workers and equipment. Improving the efficiency of the cutting process will improve productivity of the entire manufacturing process. Due to cash flow constraints, QuocHoa could only invest in the purchase of CNC plasma cutting machines without hiring additional experienced workers. QuocHoa would also delay purchase of a multi-function CNC machine due to the exorbitant cost of about 20,000,000,000 VND per unit.

Currently, there are three main types of Computer Numerical Control Plasma Cutting machines (CNC plasma cutting machines) available in Vietnam. The first are the newly imported machines. These machines, when imported to Vietnam, have an average price of 1,000,000,000VND. The second are previously-owned machines imported to Vietnam. These cost an average of 600,000,000VND. The third are machines fabricated and assembled in Vietnam. These are the least expensive. The average price of a machine fabricated and assembled in Vietnam is 300,000,000 VND. Of the CNC plasma cutting machines, QuocHoa should buy the CNC machines assembled in Vietnam.

Computer Numerical Control Plasma Cutting machines (CNC plasma cutting machines) assembled in Vietnam have the lowest initial capital cost. QuocHoa would save on initial capital expenditure. Computer Numerical Control Plasma Cutting machines assembled in Vietnam still meet exacting global quality standards. New or previously-owned imported machines can meet extremely high global quality standards, but the new contract and QuocHoa requirements do not require use of integrated advanced functions. Finally, machines that are fabricated and assembled in Vietnam are easier to maintain and repair if necessary. Vietnamese companies face many difficulties in terms of warranty when they buy imported machines because of proximity, language barriers, as well as lack of spare parts. Therefore CNC plasma cutting machines fabricated and assembled in Vietnam are the most logical for QuocHoa.
4.0 Automate or Not to Automate

In order to solve its capacity constraints, QuocHoa should invest in equipment upgrades rather than hire more experienced workers. Computer Numerical Control cutting machines offer many benefits, not only in enhanced product quality but also, in improved delivery schedule.

4.1 Automation

Computer Numerical Control (CNC) Plasma Cutting machines improve process automation and enhance productivity. With the dynamic development in the areas of computer science and applications, CNC machines are becoming smarter and can handle more complex operations. Operators for CNC machines just need to load computer software and basic operating parameters, and then the CNC machines will automatically run continuously to produce final products. Workers rarely need to interfere with operations of the machine if assembled properly. Hence, QuocHoa can divert human resources to other productive activities. Currently at QuocHoa, ten workers are needed to cut one hundred steel plates per day (an 8-hour workday). A CNC plasma cutting machine can cut one hundred steel plates in three hours. When calibrated to run on automatic mode, a worker does not need to closely monitor the operations of a CNC plasma cutting machine. All that is needed is periodic inspection and confirmation that the equipment is operating accurately and adequately. With training on operation of a CNC plasma cutting machine, QuocHoa would be able to increase productivity without the need to hire additional personnel. QuocHoa will also be able to accurately determine production schedules based on the output of the CNC plasma cutting machines. As a result, QuocHoa will have a better and predictable schedule and operation plan to fit the new contract with HaoCanh. This will provide a competitive advantage since QuocHoa has to compete with foreign suppliers not only in product quality but also in product delivery schedules.

Computer Numerical Control (CNC) Plasma Cutting machines have high and consistent accuracy. Computer Numerical Control cutters are equipped with digitally-calibrated CNC cutter controllers that will allow QuocHoa to process products with high accuracy and complexity much more than with manual cutting. With the program and product parameters calibrated correctly and the machines activated, the CNC cutter fabricates products that are of consistent quality. Flaws caused by cutting by hand will be almost completely eliminated. Use of CNC plasma cutting machines will eliminate the detailed cutting process previously performed in the manual cutting process. Computer Numerical Control plasma cutting machines can cut the exact shapes as required without additional steps. This reduces the amount of material loss, thereby reducing cost of raw materials. Use of a CNC plasma cutting machine could save QuocHoa about 30% of steel raw material costs over manual cutting.

Computer Numerical Control (CNC) Plasma Cutting machines are extremely versatile in production processes. Initiating production of a new product requires loading a new CNC machine operating system. Operators use Computer-aided design and Computer-aided manufacturing (CAD / CAM) software programs to calibrate a new CNC cutting machine. This job can be performed by a current QuocHoa employee. Utilization of a CNC plasma cutting machine will enable QuocHoa to respond quickly to the rapid and continuous changes in product design and styles requested by its customers.
Finally, Computer Numerical Control (CNC) Plasma Cutting machines are safer to use than manual cutting. QuocHoa’s existing equipment use oxyfuel to cut steel plates. Manual cutting consumes large quantities of oxyfuel because it is not possible to adjust the amount of oxyfuel consumed to the thickness of steel plates to be cut. Use of oxyfuel presents a fire hazard as well. Oxyfuel is a mixture of oxygen and natural gas. The most common types of natural gas are acetylene, propane, and propylene. Acetylene is the most commonly used natural gas because it produces flames with the highest temperature of the gases and has a faster puncture time. Acetylene however is an unstable and highly flammable gas that is very sensitive to heat and pressure. An acetylene explosion can cause extensive damage to property and possibly death to human lives. Plasma systems, operated with compressed air, do not use flammable gas. Compressed air is more stable than acetylene and requires less special treatment. Use of plasma systems is therefore safer than use of traditional manual cutting at QuocHoa. A Computer Numerical Control plasma cutting machine will calculate the amount of gas needed for a task in accordance with the thickness of the subject steel plates. Hence, QuocHoa will also save on production costs.

4.2 Cost benefit analysis

Automation would be beneficial to QuocHoa. Investment in CNC plasma cutters would require a huge capital investment by QuocHoa. To manage its cash flow and finances responsibly, QuocHoa should buy CNC plasma cutters fabricated and assembled in Vietnam instead of investing in imported machines. A Computer Numerical Control (CNC) Plasma Cutting machine assembled in Vietnam has a current average price of 300,000,000VND. To finance the purchase, QuocHoa would borrow from the Joint Stock Commercial Bank for Foreign Trade of Vietnam (Vietcombank). QuocHoa has been doing business with Vietcombank since QuocHoa was established and has a favourable rating with the bank. QuocHoa could also self-finance with advance payment from HaoCanh, or from existing company funds.

To borrow from Vietcombank, the bank requires a borrower to make a down payment of one third of the borrower’s asset value. Thus, QuocHoa will have to pay 100,000,000VND in advance. With the current financial capacity of the company, the advance payment of 100,000,000VND is possible. Under normal and manufacturer-recommended operating conditions a CNC plasma cutting machine will last five years with minimal residual value. The current average lending rate of Vietcombank is 7.5% per annum. Thus, QuocHoa has to pay the bank 4,000,000 VND every month for a five-year term loan. QuocHoa also has to spend 1,000,000VND per month for equipment maintenance. Total monthly expenditure for a CNC machine therefore will be 5,000,000VND.
Table 1
Cost Comparison of Alternative Options: Obtain Funding from Bank to Pay for Equipment vs. Pay for Equipment with Company Funds (Required Investment to Support the HaoCanh Contract)

<table>
<thead>
<tr>
<th>Number of Units</th>
<th>4 (New Employees)</th>
<th>1 (One New CNC Machine)</th>
<th>1 (One New CNC Machine)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Capital Investment</td>
<td>10 million VND (Manual Cutting Machine)</td>
<td>300 million VND (Equipment Purchase)</td>
<td>300 million VND (Equipment Purchase)</td>
</tr>
<tr>
<td>Monthly Cash Outlay</td>
<td>40 million VND (-) (Salaries and Benefits)</td>
<td>4 million VND (-) (Bank Loan Repayment)</td>
<td>30 million VND (-)* (Accounts Payable)</td>
</tr>
<tr>
<td>Monthly Maintenance</td>
<td>0</td>
<td>1 million VND (-)</td>
<td>1 million VND (-)</td>
</tr>
<tr>
<td>Total Monthly Expenditure (Less One-time Initial Capital Investment)</td>
<td>40 million VND (-)</td>
<td>5 million VND (-)</td>
<td>31 million VND (-)</td>
</tr>
<tr>
<td>Average Monthly Income (From New Contract)</td>
<td>1,000 million VND (+)</td>
<td>1,000 million VND (+)</td>
<td>1,000 million VND (+)</td>
</tr>
<tr>
<td>Average Monthly Cash Flow</td>
<td>960 million VND (+)</td>
<td>995 million VND (+)</td>
<td>969 million VND (+)</td>
</tr>
</tbody>
</table>

* Accounts Payable of 30 million VND
After 10 months, the cost of the new CNC machine would have been discharged and the 30 million VND would then become net profit.

5 Conclusion

From the above analysis, QuocHoa should invest in production machinery instead of hiring more workers. One Computer Numerical Control plasma-cutting machine can replace four skilled workers, thereby saving on labor costs. Computer Numerical Control cutting machines offer many benefits, not only in the technical side but also, in the economic side. Improving the technology will help improve the quality of products, thereby increasing the reputation of QuocHoa. Cutting costs and saving time while boosting quality will help QuocHoa increase its productivity and profitability, from which the company can continue investing to grow, or raise staff salaries as an incentive for current employees to remain loyal to the organization.

References


**Biography of Authors**

**Hung Q. Nguyen**

Hung Q. Nguyen is a Master of Science in Engineering Management and Mechanical Engineering Technology student at Point Park University. He has a Bachelor of Science degree in Control and Automation Engineering. Before coming to the United States, he was working as an Electrical Engineer at Nam Huy Company Limited in Vietnam.

**Aike Okolo**

Aike Okolo, PhD., PE, is the Managing Principal of Multi-Lynx Companies, Inc. and has accrued over 20 years of professional experience in facilities management, civil engineering, and engineering project management. His professional experience has been in the areas of operations management, design, and construction of public infrastructure, construction management, and facilities management. Dr. Okolo has extensive experience in construction and project feasibility studies, engineering cost benefit analyses, engineering and project management, water resources engineering, geotechnical engineering studies, subsurface investigation and analyses, geotechnical engineering site investigation, and agency permit application review protocols.

Dr. Okolo is an Adjunct Professor at Point Park University, at the School of Natural Sciences and Engineering Technology.
Diversity Awareness Initiatives in 3 Western Pennsylvania School Districts

Robert Kartychak  
*Hopewell Area School District*

Jason Olexa  
*Brentwood Borough School District*

Laura Ward  
*Fox Chapel Area School District*

**Abstract**

With the number of diverse students increasing each year, the nation is experiencing a cultural mismatch between students and educators. School districts in Western Pennsylvania are beginning to take steps in bridging these cultural gaps. Included in this three-part presentation are ways that three area school districts are creating inclusive schools for diverse students by creating institutional meaning of diversity, school culture strategies and community outreach, a model for new educator induction programs that includes diversity awareness and the implementation of a K-12 diversity plan that is age appropriate at all district levels.

**Keywords**

Diverse Populations, English Language Learners, New Teacher Induction Program, Cultural Competence, Socio-economic, PBIS

**Headings**

Brentwood Borough School District: Diversity Plan for Diverse Students  
- Diversity Plan  
- Assessment of Need  
- Theoretical Framework  
- Measureable Goals  
- Sustaining the Plan  
- Summary  

Fox Chapel Area School District New Teacher Induction Program  
- Diversity Component for Induction Plan  
- Assessment of Induction Program  
- Sustaining the Program  
- Summary of Induction Program  

Hopewell Area School District Diversity Initiative Project Summary  
- Objectives and Supporting Programs  
- Supporting Research
Brentwood Borough School District: Diversity Plan for Diverse Students

Over the past six years, there has been a significant increase in English Language Learners (ELL) population within the Brentwood Borough School District. In the 2012-2013 school year, there were nine ELL students district wide. In the 2017-2018 school year, there are 74 ELL students district wide. In a six-year period, the ELL population in the Brentwood Borough School District has increased 517%. This number is projected to continue to increase. There are three school districts in the Pittsburgh area that have seen a significant increase in ELL students, and they are the Pittsburgh Public School District, Baldwin-Whitehall School District, and the Brentwood Borough School District. The Brentwood Borough School District was not in a position of preparedness for this increase for several reasons. There is a need for this population of students and parents to be addressed as part of the strategic goals of the school district. Addressing inclusivity of this population of students and their parents will benefit the students and the families, as well as the district.

This diversity plan will follow two models based in research. The first will be Carolyn J. Riehl’s model based on her paper entitled “The Principal’s Role in Creating Inclusive Schools: A Review of Normative, Empirical, and Critical Literature on the Practice of Educational Administration.” In this work, there are three administrative tasks that are highlighted which are: “fostering new meanings about diversity, promoting inclusive school cultures and instructional programs, and building relationships between schools and communities.” These will be the starting points for the development of the diversity plan administratively. The other research is Janet M. Bennett and Milton J. Bennett’s study entitled “Developing Intercultural Sensitivity: An Integrative Approach to Global and Domestic Diversity.” The importance of this research is gauging where the organization and individuals within the organization are regarding integrating diversity programs. Bennett and Bennett found that, “The developmental model will be used to examine how and why resistance and “pushback” occur at various stages in individual and organization development and to suggest that diversity initiates work most effectively when sequenced to the developmental readiness of the client.” By using this framework, the district can monitor where individuals within the organization and the organization stand regarding the change model and the district will be better able to plan and implement strategies to address the needs and move the organization forward with limited pushback. These two pieces of research will be the starting points for developing a research-based diversity plan for the Brentwood Borough School District.

Assessment of the Organizational Need

During the 2014-2015 school year, the district experienced several major issues due to state budget constraints. The school district decided to furlough eight teachers to cut costs. The following school year, 2015-2016, the teachers worked the year without a contract agreement. After the 2015-2016 school year, four more teachers decided to retire, and they were not replaced, bringing the total teachers lost total up to 12 teachers. Tensions were high between the bargaining unit and the administration. The contract was finally settled at the end of the 2015-2016 school year, but the teachers lost a salary step. This caused more strained relations between the teachers and the administration. To complicate matters, the special education population grew exponentially during this time. The district was faced with the following issues: a budget deficit and crisis, discord with the teachers’ union, a decrease in available staff, an increase in economically disadvantaged students, an increase in special education students and an increase in ELL students. This situation for the district was bleak.
When ELL students began entering the Brentwood Borough School District in the 2009-2010 school year, it was one family. Because of the low number of students and only a minimal need, the district decided to contract ELL services from the Allegheny Intermediate Unit (AIU). As the number began to grow, the cost the district was paying to the AIU increased putting further strain on the budget. In accordance with the contract, if the Brentwood Borough School District wished to provide their own services they would have to buy out the AIU. The cost for this option was too high. The district decided to contract for two ELL teachers; one at the middle/high school and one at Elroy Elementary. Due to the low number of ELL students at Moore Elementary, the district employed their own ELL certified teacher with a half-day schedule. Currently, there are 30 ELL students at the middle/high school, 29 students at Elroy Elementary and 15 students at Moore Elementary making up the district’s 74 students.

The organizational need for a diversity plan is great. The next step was to identify all the parties that need to be involved in this diversity process. On the administrative side, the people involved are the superintendent of schools, the director of curriculum development, instruction and professional development, the special education director/ELL director, and the building principals at all four buildings. On the faculty side, the people involved are the AIU ELL teachers at the middle/high school and Elroy Elementary, the district employed ELL teacher at Moore Elementary, and teachers who have ELL students assigned to their rosters. The needs of the program are to improve instruction and inclusiveness in the regular classroom settings. There is also a need to integrate more social opportunities outside of the ELL cluster of students. The district desires to have more parent involvement and outreach from the parents of the ELL students. There is a need to develop a culture where the ELL students and parents feel welcome and part of the educational process. The district also needs to improve its community outreach with outside ethnic organizations that the ELL families are associated with, as well as with local universities and resources.

These needs were identified by interviewing the stakeholders involved. The district is providing all the legal requirements for instruction for the ELL students. However, not all ELL students are performing well in their academic classes. Some teachers are doing an outstanding job adapting lessons and assignments, translating as much as they can into their native languages, and working in concert with the ELL teachers to provide quality instruction. Other teachers are doing the bare minimum, and these areas are the most concerning for the ELL students’ success. The district has discovered that the ELL students are staying to themselves in their own social group. There are ten different home languages districtwide, Afro-Asiatic, Arabic, Burmese, Chinese, Dari, French, Gujarati, Karen, Nepali, and Spanish. What is being found is that regardless of the language, the ELL students are staying together in their own social group. There is very little interaction or integration with other students. The district also discovered that the students and the parents do not feel connected to the school district. The district has attempted outreach for specific days and nights where parents and students can come in with interpreters to learn about the school, the curriculum and the processes that are important to parents and students. These attempts have been poorly attended. The district needs to get the parents and students more involved in school life and create a connection to the organization. Many of our students and their parents are involved in outside community groups like the Nepalese Community of Greater Pittsburgh, the Bhutanese Community Association of Pittsburgh (BCAP) and Casa de San Jose. The parents and students are active in these organizations, but the district has not developed a working relationship with these groups. The district
administration has identified these needs and is willing to pursue a diversity plan to implement strategies to address them.

Theoretical Framework for the Diversity Plan

This project will be an ongoing and open-ended diversity plan that will adjust to the changing needs and populations of ELL students and their families within the Brentwood Borough School District. For this project, the Brentwood Borough School District: Diversity Plan for Diverse Students will be a five-year plan with benchmarks for review. The first year of the plan will be to review the discoveries made in assessment of the total program, and to prioritize each issue facing the district. In the first year, the district will form a Diversity Committee to address the issues, the planning, implementation and measurable goals of the project. The committee will be chaired by a district administrator who has access to resources, policies and staffing. Committee members will be comprised of district administrators, ELL teachers, representatives of each level of the teaching staff, elementary, secondary, core teachers and elective teachers, ELL students, non-ELL students, ELL parents, non-ELL parents and community organization representatives.

The second and third year of the plan will be for implementation and review. The model that will be used was cited in Riehl’s research, which calls for the district to develop plans which are: “fostering new meanings about diversity, promoting inclusive school cultures and instructional programs, and building relationships between schools and communities.” During this time, the district will purchase and/or implement the Bennett and Bennett model of Developing Intercultural Sensitivity to effectively measure where the organization stands internally and externally regarding intercultural sensitivity, and to monitor and develop plans to address the deficits. The district will explore partnerships with universities, translation and interpretation services to inquire about reduced costs and community organizations related to the diverse student and family population.

In years four and five, the district and the Diversity Committee will monitor and review the strategies for implementation and evaluate their effectiveness. Recommendations for corrections and revisions will be made to the plan to address continued areas of need, and any new concerns that may develop from working with the ELL population of students and parents. The Diversity Committee will be evaluated annually. There will be a common vision and goal that is established. The goals will be measurable and evaluated for effectiveness.

Measurable Goals and Objectives Based on Research

Based on the Riehl research framework, the district will begin the diversity plan by “fostering new meanings about diversity, promoting inclusive school cultures and instructional programs, and building relationships between schools and communities.” Starting with fostering new meanings about diversity, the district will identify areas of deficiency in understanding the diverse population and develop strategies to address these deficits. What does diversity mean and look like inside and outside of the district and how does the district define it? What is the vision of the Diversity Committee and how does that look in practice? The district will continue its specific professional development for all teachers but design it to address the specific needs and backgrounds of ELL students. This new definition will be used in the literature and the professional development moving forward. Defining what diversity is for the Brentwood Borough School District needs to be a democratic process and specific to the organization.
Second, the district will “promote inclusive school cultures and instructional programs”\textsuperscript{20}. The first step will be to humanize the student, giving the teachers a snapshot of their background, their personal story, understanding their culture, language, customs and their strengths and weaknesses. By knowing the students on a more personal basis, the district can begin to foster empathy and knowledge of the student for instructional planning. There was one young man at the high school who speaks English perfectly. However, his grades and tests were poor. What was discovered was that due to his immigration to the United States, he did not have a strong grasp of complete literacy in his native language. He could speak and understand his home language, but he had difficulty reading and writing in his home language. These deficits transferred to his English language learning. He can speak and understand English but has difficulty with reading and writing. He tries to over compensate with his verbal language skills in the classroom. Fostering these new meanings in the classroom will assist the teachers in their instruction of ELL students. The district will assist them in understanding what the academic needs are as they relate to a specific student. This will require an educational profile and plan for each ELL student. Creating an environment of understanding and cooperation is also necessary.

There needs to be an orientation developed for entering students so that the students and the families can be meaningfully engaged in the process. The increase of meetings and meaningful communication will be developed and explored. One of the main hindrances in this area is the extreme cost of translation. Documents and communications are being translated, but the translations are not strong. Many of the ELL parents are not literate in their own native language.

The research of Dessel\textsuperscript{10} supports the promotion of inclusive cultures in schools. Brooks, Adams and Morita-Mullany\textsuperscript{4} promote professional learning communities centered on ELL teaching and learning. Bowman-Perrott, deMarin, Mahadevan and Ethells\textsuperscript{2} promote the value of peer tutoring coupled with language acquisition. All of these promote the culture that the district desires which is improving the culture of the district as it relates to ELL students, professional learning communities for the teachers, peer tutoring for the students. These are all programs that are partially in place and can be improved upon within the existing structure.

Addressing Dessel’s\textsuperscript{10} paper on “Prejudice in Schools: Promotion of School Culture and Climate”, this article was useful in the planning process because it mainly addressed teacher development of this diversity plan, as well as aspects of the Diversity Committee. In its usefulness to the definition stage of the plan (Diversity Committee) Dessel\textsuperscript{10} wrote, “Moral education programs, such as character education, are based in social learning theory and seek to promote social responsibility and democratic principles”\textsuperscript{10}. This reinforces the importance of the democratic principles and process as it relates to people’s discussion of diversity and inclusion. All stakeholders need to have a stake in the process. The strategies presented in addressing culture were very helpful citing a variety of programs that were studied. The important piece of the finds was that “changing school culture and climate specifically involves teacher education”\textsuperscript{10}. In this plan, we specifically addressed teachers knowing the students on a more intimate level, as people, and understanding their background. Without this teacher focus and training, the culture may not change to the positive. What happens in the classroom is where the rubber meets the road.

Keeping teacher education and training in mind, the research of Brooks, Adams and Morita-Mullaney’s\textsuperscript{4} work entitled “Creating Inclusive Learning Communities for ELL Students: Transforming School Principal Perspectives” was used in developing the district-wide plan. At the heart of this research is the professional learning communities. The district has
found that peer to peer in-service training programs work best. There is instant credibility and the teachers can see the relevance to their own class. Brooks, Adams and Moria-Mullaney\(^4\) write, “Educators need time and space to be able to have difficult discussions to examine their underlying assumptions about the languages, cultures and experiences their ELL students bring to the school community and how they can integrate these student assets in ways that better prepare all students for our increasingly global world”\(^4\). The teachers are a critical part of making this program work. Professional learning communities need to be developed and fostered as they relate to ELL students.

The next research piece that fits the purpose of this plan was Bowman-Perrot, deMarin, Mahadevan and Etchells\(^2\) work entitled “Assessing the Academic, Social, and Language Production Outcomes of English Language Learners Engaged in Peer Tutoring: A Systematic Review.” In our interviews of the superintendent, directors, and the ELL teacher at the middle/high school, a common theme emerged in a strategy for ELL students to interact with peers outside of the ELL group. The strategy that emerged again and again was peer tutoring. This article supports research that relates to peer interactions and language acquisition. It was discovered that there has been 40 years of peer tutoring studies conducted. The results are that “ELL students benefit from peer tutoring academically, socially and linguistically”\(^2\). This was proven across grade levels from kindergarten to grade 12. This is a strategy and a process that cannot be ignored in changing the culture of peer to peer relationships.

The next step is “building relationships between schools and communities”\(^20\). There are three community organizations that work with the families of ELL students in the Brentwood Borough School District, which are the Nepalese Community of Greater Pittsburgh, the Bhutanese Community Association of Pittsburgh (BCAP) and Casa de San Jose. The relationships with these organizations need to be explored and developed. The inclusion and input from these organizations may be beneficial and add insight to areas that have not been explored or are not yet recognized. Mogge, Martone-Alba and Cruzado-Guerrero\(^14\) promote the idea of university and school partnerships. This area needs to be explored if there is a willingness, desire or ability to partner with universities in this endeavor. At this point, the community groups and the universities have not been approached.

The final research article that was consulted was Mogge, Martinez-Alba and Cruzado-Guerrero’s\(^14\) work entitled “Supporting School Responsiveness to Immigrant Families and Children: A University-School Partnership.” This research establishes guidelines for the university and the school district to follow in establishing a partnership. It also examined a wide range of communications like Blackboard posts, apps, websites and Glogster. The partnership was focused primarily on Spanish-speaking students that were in this school district. The university and school partnership was a win-win with the university being able to conduct research and the school district gaining resources that they did not have to fund. It is a model to keep in mind with the community involvement piece of this plan.

Lastly, using Bennett and Bennett’s\(^1\) framework on Developing Intercultural Sensitivity, this needs to be evaluated in and outside of the school district. Bennett and Bennett\(^1\) propose that individuals and organizations go through stages in developing intercultural sensitivity. The success and failures of implemented programs and strategies can be reasonably determined by knowing where the individual or organization is on the scale. This research is a framework for evaluating the individuals and the organizational readiness for inclusive programs and changes. The premise is built that individuals and the organization move from Ethnocentric
Stages (Denial, Defense, and Minimization) when it comes to intercultural sensitivity. Individuals and organizations then move to Ethnorelative Stages (Acceptance, Adaptation and Integration). Understanding that individuals and organizations can move between stages helps the leadership to plan and assist their employees and the organization. Bennett and Bennett found that push back and resistance can be minimalized if the leadership is aware of where they are in the stages. It helps to plan and educate the individuals and benefits the organization. An evaluation of the district and the stakeholders, via survey, will need to be conducted annually and planning and implementation can then be adjusted.

Sustaining the Diversity Project

There is and will be an increase of ELL students entering the Brentwood Borough School District. The trend has started and increased over the five-year period. There is ample rental property in the borough and housing is affordable. The influx of these diverse groups has also attracted others from the same culture to move into the community. Sustaining the project will be a result of a need to serve this population.

Once the project has been established, it should become part of the fabric and operations of the district. This is an area that was addressed, but the true meaning of servicing this community was undervalued. Once there are positive interactions and results from the project, it will create a desire from the ELL population for it to continue to service their needs. The key is the buy-in from the teachers. If the teacher embraces this program and see the benefits, it should sell itself. If it turns out to be one more mandate, or one more task, then it will just be completed to complete the task. Making it meaningful and helpful to the teachers is a key to sustaining it. Some teachers are frustrated with the ELL students in their classroom, especially with the beginning students. Once they see the results and the positive impact they can have on the students and making their jobs more attainable with the instruction, it should help.

The district leadership needs to stay committed to this population. Isolating them or having the ELL population feel disconnected to the school is not good for either party. Attempts have been made to reach out to this population with little return. Using the community outreach and embracing them in the process should also help to sustain the project. The district, through this program, is attempting to give a voice to a group who currently does not have one. Once they are engaged, hopefully they will be less prone to slip back to where it was before the project started.

The formative assessments will be getting a Diversity Committee in place and operational. There will also be a result of the phase of defining diversity and inclusive practices in the Brentwood Borough School District. Then, next, will be addressing teacher instruction and ELL individual plans and information being in place and used by the teachers. There will also be professional learning communities meeting, and feedback from those meeting being reviewed. Peer tutoring will develop and meetings and feedback from those meetings will be reviewed. Next, the community outreach will need to be established. The feedback and willingness of these community groups will be reviewed and discussed. These will all be ongoing formative monitoring of the program as these steps are taking place.

The summative assessment will occur at the midpoint of the school year and at the end of the school year based on survey feedback, interviews, and student academic and social performance in the schools. The Bennett and Bennett survey will evaluate Developing Intercultural Sensitivity with individuals and the organization, and this will provide summative information.
for planning. Teachers will be surveyed on their instruction, learning communities and perceptions. Students will be surveyed on their instruction, learning, academic performance and social interactions. These surveys can then be compared to academic performance and ELL involvement in school activities. These can all give feedback on the effectiveness of the project and the desired outcomes.

Diversity Plan Summary

This section will attempt to streamline the initial goals of the project over the first five years. A Diversity Committee will need to be formed. In doing so, the committee will start with fostering new meanings about diversity, the district will identify areas of deficit in understanding the diverse population and develop strategies to address these deficits. What does diversity mean and look like inside and outside of the district and how does the district define it? What is the vision of the Diversity Committee and how does that look in implementation? The district will continue its specific professional development for all teachers but gear it to highlight the specific needs and backgrounds of our enrolled students. The teaching staff needs to be engaged in professional development and discussions to create the meaning of what diversity means and looks like inside the Brentwood Borough School District. The Diversity Committee will engage in the same conversation what diversity looks like inside and outside of the Brentwood Borough School District. This new language will be used in the literature and the professional development moving forward. Defining what diversity is for the Brentwood Borough School District needs to be a democratic process and specific to the organization 20.

Second, the district will “promote inclusive school cultures and instructional programs” 20. One step will be to humanize the students, giving the teachers a snapshot of their background, their personal story, understanding their culture, language, customs and their strengths and weaknesses. By knowing the students on a more personal basis, the district can begin to foster empathy and knowledge of the student for instruction. Fostering these new meanings in the classroom will assist the teachers in their instruction and delivery for the ELL students. The district will assist them in understanding what the diversity is as it relates to the specific student. This will require an educational profile and plan for each ELL student. Creating an environment of understanding and cooperation is also necessary. There needs to be an orientation developed for entering students so that the students and the families can be meaningfully engaged in the process. Teachers will participate in professional learning communities as it relates to ELL students. The research of Dessel 10 supports the promotion of inclusive cultures in schools. Brooks, Adams and Morita-Mullany 4 promote professional learning communities centered on ELL teaching and learning. Bowman-Perrott, deMarin, Mahadevan and Ethells 2 promote the value of peer tutoring coupled with language acquisition. All of these promote the culture that we are desiring in the school district which are improving the culture of the district as it relates to ELL students, professional learning communities for the teachers, peer tutoring for the students. These are all programs that are partially in place and can be improved upon with the existing structure. The next step is “building relationships between schools and communities” 20. There are three community organizations that work with the families of ELL students in the Brentwood Borough School District which are the Nepalese Community of Greater Pittsburgh, the Bhutanese Community Association of Pittsburgh (BCAP) and Casa de San Jose. The relationships with these organizations need to be explored and developed. Mogge, Martonez-Alba and Cruzado-Guerro 14 promote the idea of university and school partnerships. This area needs to be explored
if there is a willingness, desire or ability to partner with universities in this endeavor. At this point, the community groups and the universities have not been approached.

Lastly, using Bennett and Bennett’s framework on Developing Intercultural Sensitivity this needs to be evaluated in and outside of the school district. Bennett and Bennett\cite{1} propose that individuals and organizations go through stages in developing intercultural sensitivity. The success and failures of implemented programs and strategies can be reasonably determined by knowing where the individual or organization is on the scale. An evaluation of the district and the stakeholders via survey will need to be conducted annually, and planning and implementation can then be adjusted.

This issue of ELL students is the biggest diversity issue facing the district currently. It is the population with the largest growth and it is projected to continue to grow. The district has engaged in a feasibility study of the facilities and the programs that are currently in place. I think a general review of all programs and all populations would be beneficial to make sure that all students are receiving the same level of service. The ELL population explosion is one of the most important issues facing the Brentwood Borough School District currently. Special education may be the next biggest growing population followed by the growing number of economically disadvantaged students. A similar review with these populations may be advantageous to the school district for future planning.

**Fox Chapel Area School District New Teacher Induction Program**

The Fox Chapel Area School District has a formal educator induction plan in place focusing on eight various areas that new teachers should have a firm understanding. However, addressing the unique needs of working with students from diverse backgrounds is not part of the current new educator induction plan. Effective January 2019, a new component focusing on the rich cultural backgrounds and diverse student population will be added. This component will meet two specific areas of the Danielson Framework\cite{9}. The areas being met are Domain 1 b Planning and Preparation- Demonstrating knowledge of Students and Domain 4 c and 4 f Communicating with Families and Demonstrating Professionalism.

When surveying first-year teachers, teachers in their first five years at FCASD and veteran teachers, one common component surfaced. Teachers noted there is a cultural piece that could be addressed through the induction program that would ultimately be really helpful in integrating into the school. This cultural piece would address needs of the 221 students currently enrolled at the high school who are not white or Caucasian. Adding a session on the diverse student body in place of the January journal reflection will meet the needs of the new teachers entering the district. Reiter and Davis\cite{19} found that one of the most common strategies for accommodating the growing diversity in American public schools is implementing a teacher diversity training program. Teachers, veteran and those at the beginning of their careers, need to remember that they are teaching in intercultural classrooms even if they are not aware of it, want to or think it’s their responsibility or area of discipline\cite{13}. Adding a component to the induction program will give all teachers involved a much-needed reminder to remain mindful of each unique classroom setting in which they teach.

Since 2011, school districts across the country have implemented teacher training programs with the intent of eliminating the issues that arise with cultural biases in teachers\cite{19}. By infusing a multicultural piece into the established educator induction program, the Fox Chapel Area School District is ensuring that all new teachers are aware of the demographics within their
new district. Elhoweris, Parameswaran and Alsheikh\textsuperscript{11} remind readers to break down the myth of cultures being static and having unchanging core characteristics. By looking at a culture as a static, fixed institution, new teachers often place values on cultures. When this happens, new teachers are looking for a “one-size fits all” method of teaching for specific groups. By implementing a dynamic component to the induction plan, teachers will be able to learn and grow as the demographics of the district continue to change.

**Diversity Component for Induction Plan**

One goal for the revising of the induction program is to remain consistent with the other components of the induction program. The first step in implanting this new component to the program is to enlist veteran teachers to lead the instruction. As with the current program, the directors of curriculum will select veteran teachers to facilitate each monthly session on a variety of areas such as Data Driven Instruction, Inclusive Practices and Educational Support Services or Student Information Services. These trainings are presented by current teachers from varying grade levels within the district. The same will hold true for this additional piece to the induction program.

For the morning of the diversity awareness session, the ESL teachers from around the district will be recruited to facilitate a portion of this session. This one-hour segment will focus on home and school connections. Often teachers forget that students go home to different situations. The “Family Engagement” resource from the Teaching Tolerance\textsuperscript{22} website’s Professional Development resources will be used as a guide, in addition to Talking Points website’s one-page guide. After the fifteen-minute break, the ESL teachers will engage the participants in a “Privilege Exercise” adapted from Kumea Shorter-Gooden’s work. Teachers will discuss the results of the exercise with a partner. Before breaking for lunch, the district library team will discuss the We Need Diverse Books movement and how they incorporate window books and mirror books in their collections. Starting at a young age, all children should have the opportunity to read books with characters who look and sound like themselves. In addition to these “mirror books” students should also be afforded the opportunity to read books that teach them about new cultures. These “window books” give students the ability to travel around the world and learn about others without leaving their schools.

After an hour-long lunch break, the afternoon session will begin with the TEDx Talk “Implicit Bias: How It Affects Us and How We Push Through” by Melanie Funchess\textsuperscript{12} from TEDx Flour City. After discussing the TEDx Talk, teachers will independently complete the Implicit Association Test (https://implicit.harvard.edu/implicit/) from Harvard University. Once the IAT is completed, the teachers will do a turn and talk with a partner to discuss the results. Both of these activities are created to allow teachers to take a closer look at their own implicit biases and think of ways they can adjust their classrooms to have less bias.

The afternoon concludes with a panel discussion comprised of current students, alumni, and current Fox Chapel Area High School teachers who were born and have lived in countries other than the United States, as well as a member from the University of Pittsburgh’s Graduate School of Public and International Affairs. These panel members will discuss obstacles they have faced in the classroom as well as give tips on what did and did not work in their experiences. This session will culminate with a question and answer period for the new teachers to pose their queries.
Assessment of Induction Program
The formal educator induction program uses reflections as a tool to measure new teachers’ growth. It is also used to gain an understanding of how effective each of the induction program components are. Both new teachers participating in the induction program and the veteran teachers facilitating the sessions will be surveyed after each session. These surveys will ask questions on how well the time was managed, valuable the session components are as well as relevance to today’s classroom. The surveys and the reflection journals will be used to refine the educator induction program and make any changes necessary from year to year. Reiter and Davis19 found that “diversity training programs have been implemented with the intent of diminishing the problems of cultural biases in teachers, but few programs have been systematically studied to determine whether they are actually accomplishing their goals.” The Fox Chapel Area School District will be able to assess if their program is working by seeking feedback from the teachers.

Sustaining the Program
As with any induction program, each year brings new teachers in to the district and in to the program. As new teachers quickly become veteran teachers, they will be asked to carry the torch and lead the induction program sessions. This will allow the teachers the opportunity to revise and adapt the induction program’s sessions to reflect what they are seeing in their classrooms. This will also ensure that the program remains dynamic and flexible when it comes to reflecting the changing cultures of the district.

One way to stay current in addressing the ethical and culturally diverse needs of the district’s student body is to maintain a strong relationship with the University of Pittsburgh’s Graduate School of Public and International Affairs. Reiter and Davis19 state that pre-service educators often do not receive the proper cultural and diversity awareness training they need due to the homogeneity and backgrounds of the teachers conducting the trainings. This is an important factor to keep in mind when enlisting teachers to participate and facilitate the modules for the diversity component of the new educator induction program. By forming a relationship with the local university, educators will be able to stay current on the area’s multicultural needs.

Summary of Induction Program
Often college students in teacher education programs take on common myths found in media and popular culture as their own, leaving it up to the college or university to dispel these myths15. One of these myths are that cultures are static. As the Fox Chapel Area School District changes and grows to be more diverse, it needs to implement a dynamic new teacher induction program to prepare new educators for the challenges they will face in their classrooms. The revision that has been presented in this paper for the Fox Chapel Area School District allows for new teachers to learn specific information about the multicultural district.

Hopewell Area School District Diversity Initiative Project Summary
There is a changing population within the Hopewell Area School District. As an individual that has been employed within the district since 2001, the recent demographics illustrate a more diverse population. During the early part of the millennium, the district faced a declining enrollment in response to U.S. Air leaving the Pittsburgh area after being stripped as a hub. While there is a resurgence in enrollment, partly due to a new housing plan, an increase in transient families has become a way of life for this district. Moreover, there has been a dramatic increase in families receiving free or reduced lunch over the last decade.
Pursuant to the student changes within the building levels, there has become an increase in behavioral incidents among students. A general perception among district administrators was there were less incidents when the high school had an additional 350 students, however at that time the school had approximately half the percentage of those students on free or reduced lunch (21 percent currently). There is a perceived lack of cultural competence present among the staff by parents and students. At the elementary level the student or parent diversity concerns are minimal. Building administration is working to develop an age appropriate response to equip students with tools prior to their entrance to the Junior High School. The Junior High has combated most bullying issues through its Olweus program which has been in place since 2001. The Olweus team is working on addressing the race concerns through monthly meetings. Additionally, the Junior High hosted an Anti-Defamation League Anti-Bias training in the spring of 2017 and is planning a Restorative Practices training this March. The high school recently had Morris Morrison (a motivational speaker) speak to the entire student body. A Gay Straight Alliance Club was formed in October as an approved high school club. High School administration is working as proactively as possible with parents and students to address diversity concerns as they arise.

Vision Statement: To create a welcoming and inclusive school in order to support all students’ development and success in a globally and culturally diverse society.

Objectives and Supporting Programs
Objective One: Recognize and celebrate diversity (socioeconomic status, gender, and race)
Supporting Programs:
Identify monthly theme(s) to bring awareness to all Kindergarten through 12th grade classrooms.
Create opportunities to feature or celebrate issues of diversity during assigned month (i.e. video, assembly, marquis, website, student activities, bracelets, et cetera)
Recognize a student, staff member, or community member each month who exemplifies or advocates awareness of each theme to promote awareness.
Objective Two: Educate students to enhance personal awareness, empathy, and understanding.
Supporting Programs:
Create and implement school-wide positive behavior support plan.
Identify a program (Olweus, Boomerang) to adopt to support conversations regarding diversity (i.e. Courageous Classrooms, Anti-Defamation League, Responsive Classroom)
Kick-off topic and begin conversation regarding diversity with assemblies, maintaining a consistent message that is impactful.
Objective Three: Educate staff to enhance personal awareness, empathy, and understanding.
Supporting Programs:
Train staff in the identified program to adopt and support conversations regarding diversity.
Awareness of topic and begin conversation regarding diversity with guest speakers during professional development days.
Objective Four: Educate and communicate with parents to support student success and development.
Supporting Programs:
Create quarterly highlight on social media to raise awareness and highlight accomplishments.
Invite parents to assemblies and communicate with parents via school messenger to provide information to discuss with their children at home.
Supporting Research

Diversity truly means difference. School leaders grasp that diversity no longer simply means race. To assist in facilitating diversity school leaders need to “redefine how parties can work together so they can effectively communicate with respect and build their relationships”7. Building diverse relationships in a school should be a norm rather than exception. Bunner5 highlights six student facilitators to assist in fostering student voice and choice to develop a culturally responsive school. The first student concept Bunner5 highlights is visibility, which is defined as “creating learning spaces in which every student feels acknowledged, valued, and included as equal members of the community.” The second concept was that of proximity which was defined as “using physical space, personal space, and design to engage students and reduce perceived threat.” The third concept was connecting to student lives which the author defined as “creating learning spaces where content is linked to student experiences and perspectives for the purpose of helping students understand themselves and their history.” The fourth concept Brunner shared with engaging students’ cultures is the belief in “incorporating positive elements of students’ cultures into learning and community building in appropriate ways.” The fifth concept involves addressing race to foster dialogue about how race impacts the overall student experience and this is imperative. The final concept entails connecting to the larger world with the students becoming cognitive of their own individual future.

The aforementioned student facilitators lend themselves for schools to be more culturally responsive. Cultural responsiveness factors “fluidity of cultural practices, beliefs, and knowledge, and conveys a dynamic, synergistic relationship between the provider and adolescent participants”21. Schools that become more culturally responsive and diverse inevitably create more authentic experiences for their students. Simpkins21 highlights various practices of culturally responsive programs in regards to structure as well as staff. Their structure almost mirrors the shell that Bunner5 provided. The role of staff is essential for building relationships within the school community fostering the cultural responsive community. Finally, Simpkins et al.21 addressed the need for cultural flexibility within students. Students, specifically adolescents that have built problem solving skills have shown the ability to navigate successfully beyond their own comfort zone with the notion of cultural flexibility. These are all essential skills that should be taught within a diverse school community.

In 2011, the federal government released the Support School Discipline Initiative in an effort to have school administrators evaluate their disproportionate discipline practices to attain equity for all students. Positive Behavior Interventions and Supports (PBIS) is “a multi-faceted, evidence-based practice that focuses on classroom management and school-wide systems.”16 Even as over 20,000 schools implement PBIS17 disproportionality remains. “African-American students are excluded from school at a higher rate for less severe behavioral violations than Caucasian peers” potentially illustrating subjective behavior judgements.18 Teachers with an increased sense of efficacy take greater risks in the classroom potentially contributing to student success.6 Schools that are cognizant of the disparity or public perception that there are inequities are obligated to make a change. Vincent, et al.23 developed the Culturally Responsive School Wide Positive Behavior Supports (SWPBS) framework by integrating six culturally responsive practices to address the disproportionality and hopefully offset disciplinary referrals from underrepresented classes.
The goal with the inclusion of those six practices is that students would feel a greater sense of belonging, thus reversing the disproportionate number of subjective referrals that are currently occurring. Callaway would analyze the relationships between personal teacher efficacy and the following four constructs: cultural teaching, instructional strategies, student engagement, and classroom management. Statistically speaking, a positive, to statistically significant relationship was found among those four constructs when embedded into teacher practice. Introducing the notion of cultural competence would also be advantageous. Cultural competence is defined as “the ability to work with and across diverse populations and groups.” Increasing teachers’ cultural competence thus promoting inclusiveness should further build teacher efficacy within those individuals.

References

**Robert Kartychak**
Robert Kartychak has worked in public education for 16 years as an elementary or middle school math teacher and currently is a building administrator for the Hopewell Area School District. Mr. Kartychak is a doctoral student at Point Park University researching the age appropriateness of text dependent analysis questions on PSSA testing. He obtained his Bachelor of Science degree in Elementary Education from Clarion University of Pennsylvania and Master of Education in Administration and Policy Studies from the University of Pittsburgh.

**Jason Olexa**
Jason Olexa is currently enrolled at Point Park University in the Doctorate of Education in Leadership and Administration program as a member of Cohort 5. Currently the principal at Brentwood High School and has held that position for the past twelve years, Mr. Olexa is a career public educator with twenty-five years of experience. Mr. Olexa holds certificates from
the Pennsylvania Department of Education in Special Education and as a Secondary Principal. In addition to a bachelor’s degree from California University of Pennsylvania in Special Education, he also has a master’s degree from the University of Pittsburgh in Administration and Policy Studies. Throughout his career he has served in the Penn Hills School District, Bethel Park School District and the Peters Township School District in teaching and administrative roles.

Laura Ward
In her thirteenth year in education, Laura Ward is the high school librarian at Fox Chapel Area High School. Mrs. Ward is a doctoral student at Point Park University researching the correlation between school librarians and high school students’ standardized test scores. In addition to a Bachelor’s degree in Communications from Robert Morris University, she also has a Master’s degree in Library and Information Sciences from the University of Pittsburgh. An active member of the Pennsylvania School Librarians Association, Mrs. Ward is serving at the Communications Committee Co-Chairperson for a second year.
Appendix A

Brentwood Borough School District ELL Five-Year Snapshot

<table>
<thead>
<tr>
<th>School Year</th>
<th>Middle/High School ELL Students</th>
<th>Elroy Elementary ELL Students</th>
<th>Moore Elementary ELL Students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>13</td>
<td>2</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>2013-2014</td>
<td>29</td>
<td>4</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>2014-2015</td>
<td>40</td>
<td>12</td>
<td>4</td>
<td>56</td>
</tr>
<tr>
<td>2015-2016</td>
<td>49</td>
<td>22</td>
<td>9</td>
<td>80</td>
</tr>
<tr>
<td>2016-2017</td>
<td>56</td>
<td>34</td>
<td>16</td>
<td>106</td>
</tr>
<tr>
<td>2017-2018</td>
<td>30</td>
<td>29</td>
<td>15</td>
<td>74</td>
</tr>
</tbody>
</table>
Appendix B

Current Fox Chapel New Educator Induction Program Outline – First Year

<table>
<thead>
<tr>
<th>First Year</th>
<th>September</th>
<th>October</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>*New Staff Induction Days</td>
<td>*Professional Standards and Ethics PD</td>
</tr>
<tr>
<td></td>
<td>*Inclusive Practices and Educational Support Services</td>
<td>*DI- Ongoing Assessment</td>
</tr>
<tr>
<td></td>
<td>*Differentiated Instruction (DI) Philosophy/Overview</td>
<td>*Journal Reflection</td>
</tr>
<tr>
<td></td>
<td>*Journal Reflection</td>
<td>*Journal Reflection</td>
</tr>
<tr>
<td>November</td>
<td>*Technology PD</td>
<td>December</td>
</tr>
<tr>
<td></td>
<td>*Journal Reflection</td>
<td>*DI- Respectful Tasks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Journal Reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Journal Reflection</td>
</tr>
<tr>
<td>February</td>
<td>*DI-Quality Curriculum</td>
<td>March</td>
</tr>
<tr>
<td></td>
<td>*Journal Reflection</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Journal Reflection</td>
</tr>
<tr>
<td>May</td>
<td>*End-of-Year Induction Meeting</td>
<td>June</td>
</tr>
</tbody>
</table>

- Continue the FCASD Teacher Evaluation Model

- Have completed online:
  - Needs Assessment
  - Journal Entries
  - Program Evaluation
  - Photos, videos, etc highlighting the year
Appendix C

Current Fox Chapel New Educator Induction Program Outline – Second Year

<table>
<thead>
<tr>
<th>Second Year</th>
<th>September</th>
<th>October</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>August</strong></td>
<td>*Revisit Needs Assessment</td>
<td>*Journal Reflection</td>
</tr>
<tr>
<td>*DI-Flexible Grouping</td>
<td>*Journal Reflection</td>
<td></td>
</tr>
<tr>
<td>November</td>
<td>*Journal Reflection</td>
<td></td>
</tr>
<tr>
<td>December</td>
<td>*DI-Learning Environment</td>
<td>*Journal Reflection</td>
</tr>
<tr>
<td>January</td>
<td></td>
<td></td>
</tr>
<tr>
<td>February</td>
<td>*Journal Reflection</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>*Journal Reflection</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>*Journal Reflection</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>*Program Evaluation</td>
<td></td>
</tr>
<tr>
<td>*End-of-Year Induction Celebration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>Induction Completion letters and certifications sent to inductees</td>
<td></td>
</tr>
</tbody>
</table>

- Continues the FCASD Teacher Evaluation Model
Appendix D

Proposed addition to the current program. This would take the place of the January reflection journal.

<table>
<thead>
<tr>
<th>Module</th>
<th>Time</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Engagement / School → Home Communication</td>
<td>8:30am - 9:30am</td>
<td>ESL Teachers</td>
</tr>
<tr>
<td>Break</td>
<td>9:30am - 9:45am</td>
<td></td>
</tr>
<tr>
<td>“Privilege Exercise” Diversity in the Classroom - Role Play and Scenarios</td>
<td>9:45am -10:30am</td>
<td>ESL Teachers &amp; Social Studies</td>
</tr>
<tr>
<td>We Need Diverse Books</td>
<td>10:30am – 11:30am</td>
<td>Librarians from the district</td>
</tr>
<tr>
<td>Lunch on your own</td>
<td>11:30am -12:45pm</td>
<td></td>
</tr>
<tr>
<td>TED talk - Implicit Association Test &amp; Discussion on results and how will apply results in the classroom</td>
<td>12:45pm – 1:45pm</td>
<td>Led by FCAHS teachers</td>
</tr>
<tr>
<td>Break</td>
<td>1:45pm – 2:00pm</td>
<td></td>
</tr>
<tr>
<td>Panel Presentation</td>
<td>2:00 - 3:30pm</td>
<td>FC Alumni, Current students, professor from University of Pittsburgh GSPIA, Teachers from FCAHS</td>
</tr>
</tbody>
</table>
Appendix E

### Privilege List

<table>
<thead>
<tr>
<th>Privilege</th>
<th>Check if you have</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a child, I never shared a bedroom</td>
<td></td>
</tr>
<tr>
<td>I've lived in a home with four or more bathrooms.</td>
<td></td>
</tr>
<tr>
<td>As a child growing up, I never lived in a rented apartment.</td>
<td></td>
</tr>
<tr>
<td>My family owns a summer home or second home.</td>
<td></td>
</tr>
<tr>
<td>I've never worked at a fast food restaurant.</td>
<td></td>
</tr>
<tr>
<td>I expect to get an inheritance from my family.</td>
<td></td>
</tr>
<tr>
<td>No one in my immediate family has ever been on welfare.</td>
<td></td>
</tr>
<tr>
<td>Neither of my parents ever collected unemployment benefits.</td>
<td></td>
</tr>
<tr>
<td>I don't have to work in order to have spending money [I get it from parents].</td>
<td></td>
</tr>
<tr>
<td>No one in my immediate family has ever been in jail.</td>
<td></td>
</tr>
<tr>
<td>I've never bought anything using a layaway plan.</td>
<td></td>
</tr>
<tr>
<td>I've always had health insurance.</td>
<td></td>
</tr>
<tr>
<td>I've traveled to a country outside the United States where I have no relatives.</td>
<td></td>
</tr>
<tr>
<td>I have a trust fund or stocks or bonds in my name.</td>
<td></td>
</tr>
<tr>
<td>I have purchased and worn a pair of shoes that cost more than $150.</td>
<td></td>
</tr>
<tr>
<td>I have a credit card that my parents paid for.</td>
<td></td>
</tr>
<tr>
<td>I've never shopped with food stamps.</td>
<td></td>
</tr>
<tr>
<td>I've never lived in a neighborhood that I considered unsafe.</td>
<td></td>
</tr>
<tr>
<td>At some time in my life, I've owned a brand-new car.</td>
<td></td>
</tr>
</tbody>
</table>

**Total:**
Appendix F

Fox Chapel Enrollment Summary by Ethnicity 2017-2018 School Year

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Total in Grade</th>
<th>American Indian</th>
<th>Native Hawaiian</th>
<th>Black/African American</th>
<th>Hispanic</th>
<th>White</th>
<th>Multi-Racial</th>
<th>Asian</th>
<th>Unclassified</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>322</td>
<td>1</td>
<td>0</td>
<td>18</td>
<td>10</td>
<td>265</td>
<td>2</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>344</td>
<td>1</td>
<td>0</td>
<td>18</td>
<td>13</td>
<td>278</td>
<td>7</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>329</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>14</td>
<td>275</td>
<td>2</td>
<td>27</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>323</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>5</td>
<td>279</td>
<td>2</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1318</td>
<td>2</td>
<td>0</td>
<td>58</td>
<td>42</td>
<td>1097</td>
<td>13</td>
<td>106</td>
<td>0</td>
</tr>
</tbody>
</table>
Appendix G

Administrative Survey

In an attempt to garner diversity concerns from district administrators, a brief survey was conducted. The impetus behind the survey was to determine how they address diversity concerns with stakeholders they encounter as well determine potential needs. Administrators were asked the questions below and provided a narrative.

What are some diversity issues that have occurred within your building over the last 12 months?
How do you address diversity with students, parents, and staff?
What are some initiatives regarding diversity you are doing within your building?
How has the student complexion changed during your tenure within the building?
What has been the most challenging situation you have had to address?
## District Demographics

### Hopewell Elementary Schools (3 of them)

<table>
<thead>
<tr>
<th></th>
<th>Total Enrollment</th>
<th>Percent of White Students</th>
<th>Percent of African American Students</th>
<th>Percent of Hispanic Students</th>
<th>Percent of Free/Reduced Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1152</td>
<td>97%</td>
<td>3%</td>
<td>0%</td>
<td>23%</td>
</tr>
<tr>
<td>2005</td>
<td>900</td>
<td>96%</td>
<td>3%</td>
<td>&lt;1% (7)</td>
<td>23%</td>
</tr>
<tr>
<td>2010</td>
<td>780</td>
<td>95%</td>
<td>2%</td>
<td>&lt;1% (7)</td>
<td>31%</td>
</tr>
<tr>
<td>2016</td>
<td>812</td>
<td>91%</td>
<td>3%</td>
<td>&lt;1% (6)</td>
<td>30%</td>
</tr>
</tbody>
</table>

### Hopewell Memorial Junior High School

<table>
<thead>
<tr>
<th></th>
<th>Total Enrollment</th>
<th>Percent of White Students</th>
<th>Percent of African American Students</th>
<th>Percent of Hispanic Students</th>
<th>Percent of Free/Reduced Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1003</td>
<td>97%</td>
<td>3%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
<tr>
<td>2005</td>
<td>943</td>
<td>96%</td>
<td>3%</td>
<td>&lt;1% (2)</td>
<td>12%</td>
</tr>
<tr>
<td>2010</td>
<td>770</td>
<td>95%</td>
<td>3%</td>
<td>1%</td>
<td>18%</td>
</tr>
<tr>
<td>2016</td>
<td>603</td>
<td>91%</td>
<td>4%</td>
<td>1%</td>
<td>32%</td>
</tr>
</tbody>
</table>

### Hopewell Senior High School

<table>
<thead>
<tr>
<th></th>
<th>Total Enrollment</th>
<th>Percent of White Students</th>
<th>Percent of African American Students</th>
<th>Percent of Hispanic Students</th>
<th>Percent of Free/Reduced Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1068</td>
<td>97%</td>
<td>2%</td>
<td>&lt;1% (4)</td>
<td>8%</td>
</tr>
<tr>
<td>2005</td>
<td>960</td>
<td>97%</td>
<td>3%</td>
<td>&lt;1% (2)</td>
<td>10%</td>
</tr>
<tr>
<td>2010</td>
<td>901</td>
<td>95%</td>
<td>3%</td>
<td>1%</td>
<td>16%</td>
</tr>
<tr>
<td>2016</td>
<td>692</td>
<td>94%</td>
<td>3%</td>
<td>&lt;1% (4)</td>
<td>17%</td>
</tr>
</tbody>
</table>
Appendix I
Supporting Programs:
Create quarterly highlight on social media to raise awareness and highlight accomplishments. Invite parents to assemblies and communicate with parents via school messenger to provide information to discuss with their children at home.

Diversity Initiative Timeline
(Six months prior to roll-out) District Administration and all school counselors will meet together to determine a diversity needs assessment for the district. Counselors and administration will also discuss a dollar amount to incorporate into their budgets to meet the initiative’s needs. Building administration will also work with the Parent-Teacher Associations about possibly revising any “staple” programs that have occurred in the past, that could potentially lend themselves to increase diversity awareness. Each building should have approximately $2500.00 in their building budget to spend towards diversity programs. This would include rewards for Positive Behavior Interventions and Supports (PBIS), literature to support diversity, and a speaker/assembly.
(Six months prior to roll-out) Begin/Continue to have additional staff SAP (Student Assistance Program) trained. There is currently a SAP team at the secondary levels, but not one at the elementary. The ESAP team would begin to identify barriers to learning and hopefully remove them in order to provide extra assistance to students.
(Five months prior to roll-out) District Administration and all school counselors will meet with a diversity expert thus addressing ways to infuse diversity within the curriculum and using the correct verbiage.
(Four months prior to roll-out) There will be the configuration of a diversity team comprised of: coordinator of pupil services, a principal from each level, and at least one school counselor from each level. While all individuals are encouraged/expected to be present and participate, these key stakeholders will be the face of the program. Opportunity will also exist for any other influential teachers (or paraprofessionals) to join the team. Their participation should quell association concerns about “extra work” that are bound to arise.
(Three months prior to roll-out) Diversity team will begin to develop a Positive School Wide Behavior Program thus creating norms for all students and defining the aforementioned norms.
(Two months prior to roll-out) Diversity team will vet various pre-packaged diversity curricula that is present on the market. Teaching Tolerance and Teaching for Change are two common models that will be examined. Diversity team is encouraged to use a conglomeration thus creating a plan best suited for our district needs. Diversity team will also highlight monthly diversity themes throughout the course of the year ensuring that diversity is a constant discussion and not a one-timed canned approach. Finally, close examination will be done as to how new students are transitioning into the district. Supports developed by the Diversity team will be implemented for the upcoming school year.
(One month prior to roll-out) Diversity team will prepare for an opening day kick off with all staff. Each individual will be responsible for sharing the diversity team plan with an age-appropriate approach at the respective grade level.
Opening Day Kickoff: Diversity team will present the plan to all staff. Considerable amount of time will be spent on the PBIS implementation since all staff will be responsible for implementation and daily support. Principals and counselors will be responsible in smaller breakout meetings to define what diversity is within the district and highlight the staff and student portion of our objectives.
First early release day: Diversity team will focus on how the PBIS is working within the district at all levels. This would be in preparation for either a monthly or quarterly basis where students with positive behavior are recognized. First two monthly themes will also be discussed and analyzed at this meeting.

End of the first quarter: Revisit PBIS and monthly themes. Diversity team will also meet to discuss strengths and weaknesses at each respective level for the first quarter.

End of the semester: Continue to revisit and refine themes. If any substantial diversity issues arose during the first semester, determine how to address those in a proactive manner. Final component of the diversity initiative (parents) will begin to be rolled out. Parental education will potentially be the most challenging of the three groups.

End of the third quarter: Analyze disciplinary referral numbers to determine if the PBIS made an impact. Continue to revisit and refine monthly themes. Discuss major incidents throughout each level and determine if there was any way they could have been avoided or ways they could have been addressed.

Final early release day of the year (late May): Gather staff at each department or grade level to brainstorm ways to increase the amount of diversity awareness that is occurring within each discipline or grade on a regular basis. Recommendations would go to the Diversity Team to be analyzed and subsequently implemented for the following school year. Particular focus will be on how parents can be educated within the community. Roundtable discussion of best practices throughout the district.

Year Two:
Quarterly diversity meetings within department/grade level teams to assure the staff that this is not another initiative that will be going away. Continued refinement will occur as well based on student needs.
The Impact of Community Engaged Racialized Conversations on Educational Planning for African American Students

Trisha M. Gadson

Point Park University

Introduction

Multiple studies have examined the existence of racial achievement gaps and demonstrated the necessity to close them (Banks, 2016; Ladson-Billings, 2006; Howard, 2010). While numerous strategies have been identified as processes for enhancing the education of students of color, effective communication is necessary to move teachers, parents and the community toward the same goal. To achieve real reform, Milner (2015) contended that states, districts and schools must work towards successful methods of engagement. hooks (2003) stated that only engagement in dialogue can the possibility of making change exist. Consequently, measuring the effectiveness of racialized conversations as a valued course in the progression of closing racial achievement gaps is noteworthy.

It is commonly asserted that education is the great equalizer in societies where injustices are notable. Sizemore (2008) defined education as the acquisition of knowledge, information, skills and experience. She further stated that all students can be inspired and motivated to learn (Sizemore, 2008). While the process of expanding one’s sense of understanding and enhancing newly acquired skills is a step toward achieving equity, the freedom that exists within a just society cannot exist if students are not permitted to rigorously participate in the process of learning and knowing (Freire, 2000).

Although formalized learning serves as a mechanism to acquire the aforementioned knowledge and skills, if an incongruity in access to education and its correlating resources exists, the educational system by virtue of design, can serve as the vehicle to create and maintain a distinctive underclass (Growe & Montgomery, 2003). This phenomenon is particularly stark when considering the intersection of race and socioeconomics and its impact on the school experience for African American students (Milner, 2015). An equitable community cannot exist when a portion of its population does not have entrée to the very asset that is established to assure impartiality for its citizens. This is illustrated by the reality that a Black or Hispanic student is nearly four times more likely to be enrolled in one of the city’s poorest high schools (Milner, 2015). Accordingly, a concern for contemporary urban public school educators in the United States is their responsiveness to the needs of children, families and the community. Given that many urban schools are predominately comprised of African American students (Kozol, 1991), an examination of race and the educational system’s preparedness to engage in discussions about racial inequity is not only germane, but a moral and social necessity.

Educational programs in communities throughout the United States should reflect a response to both racial and cultural differences (Banks, 2016). The need is especially acute in southwestern Pennsylvania. Recently, administrators from the University of Pittsburgh and local policy makers met with the university’s researchers to discuss findings from a study that examined the necessity for building positive racial self-perceptions for children and the impact of those efforts on school performance (Waltz, 2006). The report acknowledged gaps between those who are under-resourced, as well as those from different racial minority groups.
Furthermore, the report recommended that parents and teachers to work together to communicate with children about race, as a technique for closing gaps (Waltz, 2006). Specifically within Allegheny County, the second largest county within the Commonwealth of Pennsylvania, 81% of the population is white, 13% African-American and 6% constitute other racial groups (A+ Schools publication obtained data from US Census – need APA). However, 85% of African-American students in county public schools are concentrated in 10 out of 43 school districts (A+ Schools publication obtained data from PA Department of Education – need APA). Consequently, the topic of racialized conversations in education is timely.

The purpose of this study is to assess the impact of community-engaged racialized conversations about educational planning for African American students in public schools in Pennsylvania. This will be accomplished by training community groups on the Courageous Conversations protocol (Singleton, 2014); facilitating focus groups with community clusters of interested citizens who are motivated to improve educational outcomes for African American students in grades P – 12; and conducting in-depth interviews with the leader of each community group. The tools that will be used to measure the effectiveness of the conversations are the Courageous Conversation Strategy (Singleton, 2014) and the Race Equity and Inclusion Action Guide (Annie E. Casey Foundation, 2014).

To further illustrate the necessity of this study, Pittsburgh Public Schools, which is not included in this inquiry due to its size and swath of demographic communities, is the largest district in Allegheny County with an enrollment of 24,652 students of which 53 percent are African American (Pittsburgh Public Schools, n.d. a). In 2006, the district introduced a reform agenda to accelerate the learning of African American students by creating the Excellence for All Agenda, a measure of practice improvements (Pittsburgh Public Schools, n.d. b).

The example of this district and the well documented evidence of gaps that can be predicted by race on a national level are generally referred to as racial achievement gaps. Milner (2006) stated:

The achievement gap discourse in education usually focuses on students’ scores on standardized tests, it also concerns student graduation rates, patterns in gifted and advanced placement and talent programs, as well as other measurable outcomes that allow comparisons between white students and other racial groups of students. (p3)

A parallel perspective offered by Ladson-Billings (2006) asserted that achievement gaps are often the result of educational inequality. She suggested that decisions and policies within this country which adversely impact Black and low-income communities led to the development of educational debt as opposed to achievement gaps. These debts are categorized into:

Historical – laws and policies which prevent and limit educational opportunities
Economic – income and wealth accumulation disparities among the races
Sociopolitical – the disenfranchisement of people of color in the civic process
Moral – the lack of action and/or investment to correct historical inequalities (Ladson-Billings, 2006).

Drawing upon Ladson-Billings’ (2006) socio-political perspective on racial disparities in educational outcomes, this study utilizes Critical Race Theory and Critical Race Theory in Education as the fundamental framework. Through this lens, the literature review includes
empirical studies pertaining to the influence of race and poverty on educational policies and practices, and the resulting interactions between students, educators and communities. This review will also include research about racial disparities in student discipline, perceptions of African American students by educators and the process utilized to assign African American students to academic courses. Additionally the review included literature supporting parental and community engagement and the impact of racialized conversations on the process of closing achievement gaps.

**Problem Statement**

Disparity in academic achievement between Black and white students matriculating in the United States’ public education system has been documented over many years (Pine & Hilliard, 1990; Hilliard, 2000; Gorski, 2013; Ladson-Billings, 2006; Sizemore, 2008). The discussion generally produces angst and defensiveness by parents, educators and community members as it is commonly believed that the disparity is a result of a long history of social injustices (Milner, 2015). This study will utilize the Pine and Hilliard (1990) definition of educational equity as every child has access to scholastic excellence and that every school district’s delivery system assures intellectual rigor. The absence of equitable access produces achievement gaps, which is an indicator of a larger institutionalized phenomenon referred to as opportunity gaps (Pine & Hilliard, 1990; Hilliard, 2000). Milner (2015) and Gorski (2013) suggested that “opportunity gaps” are the reason for disparate outcomes experienced by Black and low-income children in the United States. Milner (2015) also described opportunity gaps as complicated, multifaceted and a more nuanced description of the occurrence than what the term achievement gap implies. For the purpose of this study, the focus will be on the role that conversations about race and culture play in defining pedagogical approaches for Black students who experience different educational outcomes. The examination of strategies found useful to closing racial achievement gaps will be reviewed. However, the central focus of this study is to consider the role of racialized conversations within those practices.

Gorski (2013) recognized the need for aptitude in communication and pedagogy, and identified the following factors required for reducing or eliminating opportunity gaps:

**The development of skill**

The ability of stakeholders to recognize, respond and redress conditions that deny some students access to educational opportunities enjoyed by their peers (Gorski, 2013).

Gorski’s (2013) assertion aligned with the work of Howard (2010) who referred to access to education as a valued commodity. More broadly, Howard (2010) suggested that a myriad of factors contribute to widespread disparities in achievement. As a result, analysis of student school performance includes race and culture in the academic experiences of youth (Howard, 2010). Howard’s (2010) research is further supported by Ladson-Billings (2006) who contended that the achievement gap goes beyond how well students perform in school and requires a more complex analysis to understand and subsequently address it. She called for a move from the achievement gap to the education debt paradigm, in which the United States must be prepared to take a close look at the mitigating circumstances and historical factors that have contributed to educational inequalities (Ladson-Billings, 2016). These factors include:
The economic debt, or the funding disparities that have existed historically and contemporarily between non-White and White schools.

The historical debt, which includes social and educational inequities formed around race, class and gender

The sociopolitical debt, which describes the exclusion of people of color from the civic process; and

The moral debt, or the disparity between what we know is right and what we actually do when it comes to the just and fair treatment of all U.S. citizens (Ladson-Billings, 2006).

Ladson-Billings’ (2006) assertion that racial achievement gaps observed in academic outcomes are connected to American history is supported by Alexander (2012). Alexander (2012) contended that race and a resulting racial hierarchy was utilized in the United States to justify efforts to exterminate Native Americans and to inflict chattel slavery upon Africans. Consequently, a racial caste system aimed at drawing distinctions among citizens has been supported through the American legal system. Examples include the Naturalization Act of 1790, which allowed citizenship to free and white to immigrants only, and the Supreme Court decision of Plessy vs. Ferguson in 1896, which upheld segregation under the doctrine of separate but equal (Milner, 2015). Public policy regarding education began to shift with the Supreme Court decision in the Brown vs. the Board of Education in 1954, which established the unconstitutionality of separate education for Black and white students. The Civil Rights Act of 1964 further outlawed discrimination based upon race. Nevertheless, remnants of inequitable legal structures resulted in a lack of resources made available to children of color, leading to academic disparities (Education Opportunity Gap Oversight and Accountability Committee EOGOAC, 2016).

Educational equity requires raising the achievement of all students and narrowing gaps between the highest and lowest performing learners (Singleton, 2014). Consequently, eliminating ability to determine the race of the highest and lowest student achievement categories is a measurable benchmark for attaining impartiality in the educational system within this country (Haycock, 2001).

A (2008) State House initiative in Washington identified five areas necessary to close achievement gaps. The areas identified are:

- teacher quality;
- teaching and learning;
- school and district leadership;
- student support;

Efforts towards systemic transformation toward racial equity require deliberate and consistent actions by all stakeholders (Haycock, 2001).

Freire (2000) also supported the notion that systemic educational reform requires community participation. He contended that change requires the involvement of the disenfranchised by shifting political power, which enables the marginalized community to organize required changes (Freire, 2000). While numerous studies (hooks, 2003; Delpit, 2006; and Milner, 2015) referenced the importance of family and community engagement, it requires a psychologically safe environment to enable the exchange of ideas about emotionally charged topics. The difficulty of conducting racialized conversations in a multiracial environment adds...
further complexity. Discussing race for people of color is a norm, as protective messages are
routinely communicated to youth who are faced with racism and require guidance on how to
develop coping skills (Casey Family Programs, 2000). Singleton (2014) suggested that
Americans in general - and whites in particular - are accustomed to mainstream societal norms
and have limited experience participating in racial conversations without feeling uncomfortable.
As Singleton (2014) stated, “interracial conversation is difficult because people have different
styles of communication and different desired outcomes” (p.131).
This discord in communication styles creates a muzzled conversation preventing the inclusion of
the necessary cultural context to problem solve on behalf of students suffering from an
achievement gap (Delpit, 1988). Many individuals from dominant groups mistakenly believe that
culture is something possessed only by people of color and most view it as it is tied to ethnic
customs (Delpit, 1988). Howard (2010) also stressed that this limited view of culture is widely
held by those working in schools today.

To address these concerns and provide a means for enhancing dialogue pertaining to
educational inequities, Singleton (2014) developed “Courageous Conversation,” a
communication strategy to enable discussion of academic imbalance while isolating race.
Singleton (2014) contended that eliminating racial achievement disparities begins with an
examination of self. Consequently, Singleton (2010) offered an approach based upon three
pillars:
Engaging – engage through your own personal racial experiences, beliefs and perspectives while
demonstrating respectful understanding of specific historical as well as contemporary, local and
immediate racial contexts
Sustaining – sustain yourself and others in the conversation through mindful inquiry into those
multiple perspectives, beliefs and experiences that are different from your own.
Deepening – deepen your understanding of whiteness and interrogate your own beliefs about
your own association with and relationship to white racial privilege and power (p. 85).
The importance of measuring the impact of these conversations is timely as the number of white
students projected to enroll in public schools within the United States is decreasing (Milner,
2015). By the year 2025 white students are expected to constitute 46 percent of public school
enrollment while Hispanic students will account for 29 percent, African American students 15
percent, Asian/Pacific Islanders 6 percent and American Indian/Alaska Native students 1 percent
approximately 75 percent of the public school teachers in this country were female, 84 percent
were White, and they were almost exclusively middle class. Conversely, only 7.8 percent
teachers were African American, 5.7 percent Latino, 1.6 percent Asian American, and .8 percent
Native American (Howard, 2010). The National Collaborative on Diversity in Teaching Force
(2004) reported that more than 40 percent of schools in the United States do not employ a single
teacher of color (as cited in Howard, 2010).

Purpose of Study

Educational strategies are necessary to address the unique circumstances of African
American students within the public education system (Milner, 2015). This critical qualitative
study will assess the impact of community-engaged racialized conversations on the educational
planning for Black students. Carspecken (1996) contended that critical researchers support
efforts of change through the employment of cultural and social evaluation. Therefore, this study
will explore how racialized conversations with community groups - whose children are educated by Pennsylvania public schools - can impact policy and engagement strategies for African American students.

Critical qualitative research focuses on a connection between power and truth, structures of communication and social patterns (Carspecken, 1996). This methodology is well suited for this study as African American students and parents are often scapegoated by many educators as unwilling to learn and not valuing education (Delpit, 2006). A standardized, inflexible mold for educating students is not effective for culturally diverse communities. It specifically places the sole responsibility of learning on the students as opposed to requiring teachers to engage in a variety of strategies needed by pupils (Singleton, 2014).

**Significance of Study**

The significance of this study is twofold: to explore the impact of community-engaged racialized conversations between school districts and the African American Community and to document resulting implications for school policy. Conversation is a central component of transformative education, which assures that equitable systems are in place (hooks, 2003). Educators play an instrumental role in communicating with students, families and the community. This is particularly significant for public school teachers who are educating a higher percentage of Black and brown students. Singleton (2014) suggested that this type of transformative communication can only occur with reflective and prepared educators. This study which utilizes the Courageous Conversations Strategy (Singleton, 2014) and the Race Equity and Inclusion Action Guide (Annie E. Casey Foundation, 2014) could be beneficial to school district representatives and community members who are interested in interracial communication when discussing strategies for decreasing racial achievement gaps. Howard (2010) suggested that the limited knowledge and awareness that many teachers have about diverse groups raises important questions for educational equity and for hopes of closing the gap:

- What types of attitudes and beliefs do teachers have about teaching students from diverse groups?
- How can negative attitudes and dispositions held by teachers about diverse students be eliminated?
- What are the important types of knowledge and skills that teachers need to teach students from diverse groups?
- Are teacher education programs adequately suited to prepare teachers for working in diverse schools? (Howard, 2010, p. 40)

Reflective questions are pertinent as Freire (2000) contended that dialogue is a necessary component of the student-teacher relationship. Thus, in this sense, communication should never be viewed as a mere tactic to involve students in a task. Freire (2000) emphasized the necessity to engage with students in depth. Missed opportunities through superficial and transactional exchanges will not enable educators to develop a meaningful pedagogy. Freire (2000) further advised that if students are not able to transform their lived experiences into knowledge and to use already acquired data as a part of the process to unveil new understanding, they will never be able to participate rigorously in a dialogue as a process of learning and knowing. Likewise, Delpit (2006) contended that differing perspectives on the debate over skills versus process approaches can lead to an understanding of the alienation and miscommunication and thereby to the understanding of silenced dialogue. Just as Delpit (2006) advocated for rigorous...
conversations, Freire (2000) argued for educational practices that embrace student and community engagement. He referred to the traditional and historical educational approach of teachers teaching and students receiving knowledge imparted on them as the banking education method, which undermines effective education (Freire, 2000). The banking method does not result in partnership and contradicts educational transformation through the following attitudes and practices:

- The teacher teaches and the students are taught
- The teacher knows everything and the students know nothing
- The teacher thinks and the students are thought about
- The teacher talks and the students listen meekly
- The teacher chooses and enforces choice and the students comply
- The teacher disciplines and the students are disciplined
- The teacher acts and the students have the illusion of acting through the action of the teacher
- The teacher chooses the program content, and the students who are consulted adopt it
- The teacher confuses the authority of knowledge with his or her own professional authority, which she and he sets in opposition to the freedom of the students
- The teacher is the subject of the learning process while the pupils are mere objects (Freire, 2000, p. 73).

Race plays a defining role in academic outcomes. It is critical, therefore, to utilize tools to engage in conversations about race in order effectuate change. Racial equity tools were created to operationalize equity in the guidance and development of communication, decisions, policies and practices (Center for Social Inclusion, 2016). When properly utilized, these tools enable systems to become more deliberate about ensuring the inclusion of all participants in order to provide equitable access to systems.

To address and close achievement gaps experienced by African American students, Courageous Conversations (Singleton, 2014) is a necessary component. In order for these discussions to occur, educators and administrators must develop a racial consciousness (Carter, 2014). It is the lived experience of African American parents to manage frustration when discussing the cultural needs of their children with schools. Common responses such as, “we treat all of our students the same,” or “we are colorblind,” fuel the exacerbated emotions of Black students and their parents. While the school itself is a community, it is also part of larger municipal, state and national communities. Involving residents in planning discussions is a critical early step in the process (Singleton, 2014); and viewing parents and community members as partners produces better outcomes for schools (Gorski, 2013). This study proposes to explore the impact of racialized conversations among educators, parents and community stakeholders all of whom are members of the educational team charged with teaching children and youth.

**Conceptual Framework**

Critical Race Theory (CRT) and Critical Race Theory in Education (CRTE) are utilized to frame the study. The conceptual framework will also draw upon the critical elements of Courageous Conversations (Singleton, 2014) and the Race Equity and Inclusion Action Guide (Annie E. Casey Foundation, 2014) to assess the impact of racialized discussion on engagement practices and education polices (see Figure 1) utilized in racial achievement gap reduction processes.
Critical Race Theory (CRT) is an academic framework based on the core belief that race as a social construct is built into the legal fabric of this country (Taylor, Gillborn, & Ladson-Billings, 2016). Due to the discriminatory foundations that the United States is built upon, which historically included the elimination and/or limitation of people of color from accessing resources, racism in America has flourished and influenced all levels of institutions in America. CRT acknowledges society’s acceptance of racism as ordinary and creates counter narratives which include sharing stories of discrimination and retelling stories that promote the positive contributions of African Americans (Taylor, Gillborn, & Ladson-Billings, 2016).

Critical Race Theory in Education builds upon the framework of Critical Race Theory (Ladson-Billings and Tate, 1995). Ladson-Billings and Tate (1995) theorized that race and racism are not fully explored within the educational system. Consequently Critical Race Theory in Education highlights the systemic impact that the educational system has on Black students, a structure that was not originally created to further their development (Taylor, Gillborn, & Ladson-Billings, 2016). Racism is redefined to describe the larger systemic operational conventions and customs that uphold structural practices. Ladson-Billings (2015) described it as an analytical lens for viewing the nexus of race, inequity, justice and democracy and recommended having conversations about the intersection of race, power and privilege in dominant spaces (as cited in American Educational Research Association, 2015).

Communication is critical to understanding the conceptual framework of this study. Singleton’s (2014) research established that Courageous Conversations contain three components:
- They engage those who will not talk
- Sustain the conversation when it becomes uncomfortable
- Deepens the conversation to the point of genuine and meaningful action.
Singleton (2014) suggested that this technique helps to explain why racial gaps exist, how they originated and their long-term impact.
When conditions for communities of color are viewed as problems as opposed to expected outcomes of intentional policies and practices, it is detrimental to the healing process (Milner, 2015). Critical Race Theory scholarship reflects the distinctive experiences of people of color and centers those experiences as the foundation for communication.

The intended outcome of these critical conversations is a fuller awareness of classism and racism. Singleton (2014) strove for more and encouraged progression beyond just awareness. To go further, and take action, Singleton (2014) recommended that participants make the following four step commitment:

Stay engaged
Speak your truth
Experience discomfort
Expect and accept non-closure.

Singleton (2014) also contended that true action and dialogue toward equality requires effort from all racial groups – the racially advantaged and the racially disadvantaged.

Courageous Conversations is a communication strategy that requires the educational team to move beyond an awareness of social injustice endured by children and families of color, and spur them into action. It is rooted in the comprehension of race as a social and political construction and the recognition that African American children do not have the same privilege as other children. The effectiveness of this strategy is dependent upon the integration of a transformational framework which focuses on addressing systemic racial equity (Singleton, 2014).

This study will assess the impact of community engaged racialized conversations as it applies to the equitable development of educational planning for African American students in the public school system.

The following research questions will be addressed:

1. What is the impact of community initiated racialized conversations on the development of educational planning for African American students?
2. How can racialized conversations with stakeholders encourage school districts to change engagement strategies with youth, parents and the community?

This study will utilize Courageous Conversations (Singleton, 2014) to assist participants who want to engage in a transformative communication process by participating in racial equity conversations.

**Definitions**

**Achievement Gap** - any significant and persistent disparity in academic performance or educational attainment between different groups of students (The Glossary of Education Reform, 2013).

**Culturally Relevant Pedagogy** – the process of validating and affirming students in an effort to empower them while structuring academic content in a way that recognizes conceptions and misconceptions that students encounter in their learning (Howard, 2010).
Institutional Racism – the larger systemic structural conventions and customs that uphold and sustain oppressive group relationships, status, income and educational attainment (Taylor, Gillborn, & Ladson-Billings, 2016).

Racial Consciousness – the level to which one is conscious of how much race has an impact on one’s life (Singleton, 2014).

Racialized Conversations – drawing on the tenets of the principles highlighted in the racial justice discussion in the Race Equity and Inclusion Action Guide (Annie E. Casey, 2014), the operating definition is discourse that intentionally identifies race and the impact of race on the topic discussed (Gadson, 2018).

Racial Equity – when race can no longer be used to predict life outcomes and outcomes for all groups are improved (Center for Social Inclusion, 2016).

Opportunity Gap – disparities in educational outcomes for Black students in American schools as the result of unequal opportunities (Pitre, 2014).

Racial Achievement Gap – The achievement gap performance measure in Pennsylvania determined by comparing the percent of students who are proficient or advanced in a baseline year with 100 percent proficiency. Once the achievement gap is determined, schools are measured on the success in closing the gap. The benchmark for success is defined as fifty percent (one half of the achievement gap) closed over a six year period. The success rate is measured annually (Pennsylvania Department of Education, n.d.).

This study draws on literature that frames race, racism and power in a context that compels discourse on how these factors influence dialogue when engaging the community about educational practices. The literature highlights the relationship between the aforementioned dynamics of race and power and the relating influences that necessitate communication methods with African American students, their parents and caretakers, and their community at large.

**Bodies of Literature Overview**

This chapter reviews literature relating to Critical Race Theory and Critical Race Theory in Education in order to understand the role of race, history, socioeconomics, and culture on educational practices. Through the analysis of these larger frameworks, studies on pedagogies and other relating variables which demonstrate racial disparities in education will be described. In addition, data supporting the use of a communication protocol, Courageous Conversations, which promotes racialized communication, will be examined. This literature review establishes the foundation for the study of how community-engaged, racialized conversations impact the academic planning for African American students.

**Critical Race Theory**

Critical Race Theory (CRT) as a form of scholarship is derived from a tradition of resistance to unequal and unjust distribution of power and resources (Taylor, Gillborn, & Ladson-Billings, 2016). Historically limited opportunities as a result of race were viewed from a single lens (Delgado & Stefancic, 2017). On the contrary, CRT views race, racism and power in
relation to a larger systemic structural phenomenon (Bell, 1995; Delgado & Stefancic, 2017). Bell (1995) further explained the core of CRT as the realization that race as a social construct is built into the legal fabric of this country. Due to the discriminatory foundation of the United States, African Americans have been historically eliminated or limited from accessing resources. Specifically any avenue that promotes equitable citizenship for African Americans has been blocked (Taylor, Gillborn, & Ladson-Billings, 2016). Alexander (2012) described these barriers as “disenfranchisement and discrimination.” She explained that African Americans are excluded in every sphere of life which included schools, churches, housing, jobs, restrooms, hotels, restaurants, hospitals, orphanages, prisons, funeral homes, morgues and cemeteries. As a result, CRT describes racism as a state of being and not a threat of indignation.

CRT grew out of Critical Legal Studies, a theory that challenges accepted norms in legal practices (Trubek, 2011). Trubek (2011) noted that Kimberle Crenshaw, a student of Bell argued that further expansion of the theory was necessary in order to acknowledge the impact of race. The recognition of the need for scholarship grounded in the distinctive lived experiences and perceptions of people of color offered a fertile academic foundation for early critical race theorists (Taylor, Gillborn, & Ladson-Billings, 2016). Because conditions of communities of color are often viewed as problems, this academic framework grew from the recognition that the collective plight of African Americans is the expected outcomes of intentional policies and practices (Bell, 1995). Consequently, the discussion of race and its impact on structural systems within the United States are fully explored with the onset of Critical Race Theory (Bell, 1995).

Trepagnier (2006) suggested that in general, white people assume that racism is a rare occurrence. These suppositions that racism is hateful and rare imply that racism today is often unintended. Trepagnier (2006) further argued that racism consists of routine everyday acts that are not viewed as racist by the person performing them and therefore are not intentional. Accordingly she summarized her position by stating that unintentional racism produces institutional racism and results in racial inequality (Trepagnier, 2006).

Trepagnier’s (2006) supposition supports Delgado and Stefancic’s (2017) description of the basic tenets of CRT:
Ordinariness – Racism is difficult to address or cure because it is not acknowledged and it is a permanent part of ordinary American life. Further the concepts of “equality and colorblindness” addresses only the most blatant forms of racism.
Interest convergence – Racism advances the interests of white people, the elite class and the working class. As a result, large segments of the population have little interest in eradicating systemic racism without a direct benefit to them.
Social construction – Race is a product of social thought and relations and has no biological basis.
Storytelling - By sharing lived experiences people of color counter-stories are created to combat the dominant ideology which is empowering to people of color.
Commitment to social justice – A framework committed to a social justice agenda to eliminate all forms of subordination of people (Delgado & Stefancic, 2017, pp 8-11). This researcher offers that CRT as a framework is also supported by the work of Freire (2000) who argued that the denial that we live in a classless society is “academic dishonesty” and to further ignore that race compounds the issue is “fraudulent” (p.13).
The utilization of CRT also aligns with other areas of Freire’s writings. When discussing the relationship between the oppressed and the oppressors, Freire (2000) contended that a symbiotic connection exists between the two. Thus, it is necessary for each - the oppressed and the oppressor - to develop a level of critical consciousness to understand its relationship to one another. This is parallel to Delgado and Stefancic’s (2017) assertion that in order to eliminate racism, the population at large must be committed to do so. Freire (2000) described it as a mutual understanding by the oppressed and the oppressors that they are linked to each other. Freedom for both groups can only occur by eliminating unjust actions (Freire, 2000).

Milner (2015) also supported the systematic philosophy of CRT and Freire’s (2000) position on how to eliminate injustice. In fact, he stated that the essence of equity lies in the capacity to recognize that even though actions are in accord with a set of rules, the results of those actions may still be unjust. Thus Milner (2015) supported Freire (2000) in the position that a move beyond system norms is required. Accordingly, Milner (2015) stated: “equity goes beyond following the rules…equity gauges the results of actions directly against standards of justice.” Johnson (2006) also aligned with Milner and Friere by acknowledging that patterns of oppression and privilege are rooted in structures that all members of society participate in and feel drawn to follow regardless of the consequences on others.

This reality lends credence to the declarations of Lalik and Hinchman (2001) that silence about race with respect to research is a “misguided strategy.” (p.530). Consequently Smith, Yosso and Solorzano (2011) stated that because marginalized members of society do not regularly hear their stories in academic research, the counterstory – the telling of stories of disenfranchised citizens is an important component of CRT. Specifically the authors offered that counterstorytelling challenges racism as it shapes policy, pedagogy and curriculum (Smith, Yosso and Solorzano, 2011).

Critical Race Theory in Education

Because CRT provided academic validation for the African American community, Ladson-Billings and Tate (1995) viewed it as the nexus of race, inequity, justice and democracy. As a result, they further explored and applied CRT to experiences of Black students in school systems. This scholarly account lays the foundation for Critical Race Theory in Education (CRTE). This theory is the underpinning for the review of empirical data relating to the correlation between race and academic outcomes. Ladson- Billings (2015) described schools as a dominant cultural space which necessitates the development of bicultural skills for black and brown kids. This reality supports the need for engaging race into theories of education resulting in the introduction of Critical Race Theory in Education (Ladson-Billings, 2015).

Consequently Ladson-Billings and Tate (1995) opened the door to fellow researchers like Howard (2010) who recognized CRTE as the vehicle that highlights the role of race in educational research, scholarship and practice. He further asserts that the existence of this theory prevents educators from explaining the racial achievement gap as coincidence or school failure of students of color (Howard, 2010).

Howard (2010) deduced that critical race theorists based their assessment of racism in education in four primary ways:
By theorizing about race along with the intersectionality of racism, classism, sexism and other forms of oppression in school curriculum
By challenging dominant ideologies that call for objectivity and neutrality in educational research
By offering counter storytelling as a liberating and credible methodological tool in examining racial oppression
And by incorporating transdisciplinary knowledge from women’s studies and ethnic studies to better understand various manifestations of discrimination (Howard, 2010, p. 99).

Ladson-Billings and Tate (1995) suggested that the intersection of social and school inequities is the grounding principle of CRTE. The researchers also offered that this level of comprehension gives rise to a fuller understanding of injustice in school settings (Ladson-Billings & Tate, 1995). As a result, Ladson-Billings (1997) utilized the application of CRTE to examine curriculum, instruction, assessment, desegregation and school funding.

Utilizing CRTE to assess all aspects of the educational system is a significant factor in equity research. As an example, Milner (2016) supported a process that leads to the examination of how academic outcomes of Black children occur as opposed to placing the focus on the outcomes and test scores. Gorski (2013), like Milner, also supported utilizing a CRTE lens by emphasizing that children who live in poverty, particularly African American students, are denied access to school resources and opportunities that other students take for granted. Consequently, both authors recognized the significance of processing the way in which African American children experience education from a macro lens. Gorski (2013) further explained that the evidence of the disproportionate assignment to inadequately funded schools directly correlates to achievement outcomes. Pine and Hilliard (1990), pioneers of this position, added support for the necessity of CRTE by offering that racial achievement outcomes are tied to an unbalanced access to resources and a distorted history related to every academic discipline that justifies colonialism and racism.

As CRT and CRTE offers a wide-scale perspective of the universal impact that race has on institutional structures within the United States, particularly the public education system, the reviewed literature has been classified in the following categories:
Race and History
Race and Socioeconomics
Race and Culture
Race and Educational Practices
Racialized Conversations
Each categorization directly links the intersectionality of race and education and its combined effect on social, political, financial and cultural contexts for the African American community. Accordingly, it establishes a clearer review of empirical studies through the macro lens of the aforementioned conceptual frameworks. This paradigm shift encourages the review of outcomes from racial systemic phenomena as opposed to individual occurrences.

The Impact of Community Engaged, Racialized Conversations on Educational Planning for African American Students P-12 was a critical qualitative study. The purpose was to investigate the intersection of community engaged communication and pedagogy for African American students in two Pennsylvania communities. Within this study community was defined as any geographic area – township, city or borough that is served by the same school district. Hilliard (2000), Gay (2001), Delpit (2006) and Howard (2011) contend that the engagement of
students, families and communities are a necessary component of educational approaches and Carspecken (1996) suggests that social action and its patterns are worthy of social science research.

**Types of Methodology**

Critical social research, as described by Denzin and Lincoln (2011), recognizes qualitative research as the inclusion of the exploration of social phenomena and the interpretation of human actions. By nature of its advocacy and social justice components, critical qualitative research draws on the works of Bell (1995), Crenshaw (1995) and Ladson-Billings (2006), critical race theorists, who focus their work on the impact of racial systemic oppression.

Because critical qualitative research highlights the connection of power and truth (Carspecken, 1996) the conceptual framework of Critical Race Theory (CRT) and Critical Race Theory in Education (CRTE) are parallel in value and orientation to a critical qualitative study. This combination yielded the analytical framework (see diagram B) that is conducive to studying the impact of racialized dialogue on educational praxis. Specifically the principles of CRT and CRTE provided a format for structural analysis by which data obtained from community members who have advocated for the correction of racial inequities within school districts can be evaluated. As data is coded this researcher used the tenets of CRT and the proposition of the educational process as a system as defined by CRTE to gain an in-depth understanding of the perspectives of the research participants.

Bentz and Shapiro (1998) describe critical social science as a vehicle for determining the influence of a larger social system. Similarly hooks (2003), Delpit (2006), Freire (2000) and Milner (2006) speak to a necessity to give voice to those in need of advocacy when operating in resistance to systems. Accordingly, this researcher has identified the collective case study with ethnographic methods as the approach to data collection. The case study method enabled this researcher to understand each group’s racialized practice through the use of racial tools, *Courageous Conversations* (Singleton, 2014) and the *Racial Equity and Inclusion Guide* (Annie E. Casey Foundation, 2014).

Stake (1995) and Yin (2003) contend that the case study method is derived from a constructivist model. Specifically constructivism can be summarized by recognizing that an individual’s perception is their own reality. Consequently, the utilization of a case study to understand a community group’s racialized practice enabled this researcher to comprehend “localized experiences” as described by Compton-Lilly (2013).

According to Stake (2006), a single case is a complex opportunity to study a situation within its own habitat. On the other hand a multiple case study enables the researcher to assess a phenomenon in more than one context (Stake, 1995). As the goal of this study was to evaluate the impact of racialized conversations on engagement practices by community groups with their respective school districts, a multiple case study enabled this researcher to explore variances between cases (Yin, 2003).

As Yin (2003) points to the significance of assuring that relevant factors are considered when determining the use of case studies, Baxter and Jack, (2008) caution researchers to fully develop a bounded system for research which delineate the inclusion and exclusion criteria.
Consequently, for the recruitment of this study it was determined by this researcher that participants must meet one of the following categories for participation:

Parents/guardians of students who are educated by the public school district;
Community members who live within the assigned public school district;
Or teachers/administrators who work within the public school district.

A procedural adjustment was made during recruitment to include a fourth qualifier at the request of each community group leader. Accordingly, for this study members of each case met at least one of the following conditions:

Resident of studied school district
Parents/Guardians of students enrolled in studied school district
Educator/Administrator currently or previously worked in studied school district
Stakeholder (Pastor, business owner, or other relationship)

Each category identified a community stakeholder who by virtue of their relationship to enrolled students, their residency and/or employment establishes their financial investment in the well-being of the school district.

Case Overview

This research study included two cases representing school district community groups within Pennsylvania. Both groups had a self-proclaimed mission to employ educational advocacy techniques. Their respective goal was to address concerns of student racial disparities within their local school district. In order to participate in the study, all members of the group agreed to partake in three hours of training on the *Courageous Conversations* (Singleton, 2014) communication strategy and to participate in a focus group to discuss educational policies and practices while isolating race. The focus groups convened twice to answer questions adapted from the *Racial Equity and Inclusion Guide* (Annie E. Casey Foundation, 2014). An additional two questions were posed to the focus groups and the same two questions were added to the protocol for the individual interviews in order to determine the perspective of the community’s experience with engaging their respective school districts. Each recruited group comprised of seven individual participants. Upon completion of the focus group meetings, individual in-depth interviews with the key contact person from each case were conducted (see diagram C). The pseudonyms for the proposed studied communities are Mitchelville and Larraville.

References


Davis, P., Davis, M., & Mobley, J. (2013). The school counselor's role in addressing the
Parker, L. (2015). Critical race theory in education and qualitative inquiry: What each has to offer each other now? Qualitative Inquiry, 21(3), 199-205
Pittsburgh Public Schools. (n.d. b). Equity: Getting to all. Retrieve from https://www.pghschools.org/domain/31
Rothkopf, A. J. (2009). Courageous conversations: Achieving the dream and the importance of
Wang, M. T., & Huguley, J. P. (2012). Parental racial socialization as a moderator of the effects


Addiction and the Empty Self: Towards Alternative Approaches to Treatment

Ashley Bobak
Point Park University

Abstract

Substance addiction is commonly regarded from a medical model frame of reference, with the addiction being labeled as a “disease” which is located within the individual. Psychological treatment, from this perspective, attempts to then fix the individual through cognitive-behavioral techniques, motivational interviewing, and at times, psychotropic and/or maintenance medication. However, such treatment approaches are failing – relapse rates are high, and we are now in the midst of what the mainstream media coins the opioid epidemic. Drawing from the ideas of Phillip Cushman, Rene Girard, and Emmanuel Levinas, I offer an alternative conceptualization of addiction which emphasizes the role of society in forming and shaping the phenomenon of addiction. In addition, I propose a liberating approach to the treatment of addiction that begins with the ethical relation, or our duty to respond to the call of the other.

Keywords

Substance addiction, empty self

Introduction

33,000 individuals died of an opioid overdose in 2015 as reported by the Centers for Disease Control and Prevention. The opioid epidemic, as it is being referred to by mainstream media, is impacting individuals and their families throughout the United States. Opioid overdose deaths are shockingly common. Yet, treatment for individuals suffering from addiction does not appear to be improving. According to the National Institute on Drug Abuse, approximately 40%-60% of individuals relapse following treatment. NIDA writes off these high relapse rates as being a part of the process of recovery. While there may be some truth to that, it raises the question: if so many individuals are relapsing and dying, why are efforts not being made to reassess the typical treatment modalities utilized to treat addiction?

The phenomenon of addiction and the societal context in which it develops can be understood when placed in dialogue with the ideas of Phillip Cushman, Emmanuel Levinas, and Rene Girard. Cushman’s description of the empty self provides insight as to potential underlying historical and political factors that have contributed to the development of a self and society that has created the phenomenon of addiction. Girard’s contribution to the discussion lies in his concepts of mimetic desire and the scapegoat mechanism. Levinas provides an ethical framework by which to examine the current state of relations in society, and to reflect upon how clinicians can approach clients suffering from substance addiction in an ethical manner. His writings on metaphysical desire also provide a path by which to further explore alternative explanations to the development and course of addiction. When in conversation with one another, all three individuals provide insight related to how the current state of society created the phenomenon that is substance addiction, and how society scapegoats and rejects the population of human beings that it has categorized pejoratively as addicts. However, before an
alternate framework to the understanding and treatment of addiction can be discussed, the current, prevailing myths and remedies that have been constructed to explain and treat addiction must be reviewed and critiqued.

### The Disease Model Myth

Currently, addiction is primarily viewed as a chronic, relapsing brain disease, which is typically treated via medication (e.g. methadone, buprenorphine) and CBT, Motivational Enhancement Therapy (MET), and aspects of 12 Step philosophy. Individuals recovering from substance addiction are informed both in treatment, and at 12 Step meetings, that they are addicts and will remain addicts for the remainder of their lives. The label addict then, for individuals who accept it, becomes a part of one’s core identity. External risk factors related to addiction are acknowledged, such as family environment, family history of addiction, peer groups, etc., but the focus overall is on the individual. In addition, larger contributing factors to addiction, such as oppression of the impoverished, institutional racism, political factors, and so forth, are oftentimes unrecognized or ignored.

Instead of examining the causes of addiction as being a result of an oppressive, isolated society, the underlying contributors to addiction are largely individualized. From a medical model, the individual’s brain functioning is attributed as being the major cause of addiction. As a result, treatment often consists of isolating the individual from the rest of society, whether it be in an inpatient institution or outpatient setting, or numbing the individual with drugs such as buprenorphine, methadone, and a slew of psychotropic medications. Again, the individual is told that they are the problem – they are diseased, and need to be fixed.

Due to the emphasis on the individualized nature of addiction, efforts to address the environmental factors of addiction are minimal. Lack of assistance related to resources for housing are largely absent in the treatment of individuals suffering from substance addiction. At times this can be beyond the control of the treatment center itself, but in the hands of governmental policy and practice. For example, in Allegheny County, PA, all transitional and supportive housing programs (which are designed to assist individuals with working towards independent living) and the majority of homeless shelters are under the umbrella of an organization known as Allegheny LINK. Individuals residing in long-term drug and alcohol rehabilitation centers (the longest stay is typically 4-5 months) are ineligible to apply for housing assistance until they are 24 hours from discharge from the program. What oftentimes occurs when these individuals call the hotline upon discharge, the shelters and housing programs are full, and the individual is told to call the Allegheny LINK hotline daily to inquire about openings. Homeless addicts oftentimes return to the streets following inpatient treatment, or if they are “lucky,” are granted a bed in one of the available homeless shelters, many of which are notorious for being hubs of drug use. Recovering individuals whom had (largely unsafe) places to live prior to entering treatment often return to these same environments following treatment, as other housing options are not immediately available. Therefore, these individuals return to the same abusive, impoverished, and dangerous living environments (or if they are receiving outpatient treatment, remain in them) that contributed to the development of their addictions.

High relapse rates and “repeat customers” are explained away as being the result of this chronic relapsing brain disease known as addiction. Issues within the community and the individual’s
environment are not taken into consideration. Housing and other issues of basic needs remain largely unaddressed within addiction treatment as the major problem of addiction is the individual and their brain – what does safe housing or having basic necessities have to do with recovery? This viewpoint is part of what contributes to the revolving door that we call addiction treatment.

**Treatment-As-Usual: One Size Fits All**

The acceptance of the disease model of addiction as the “true” understanding of addiction provides an explanation for the lack of research related to treatments for addiction that are alternative to the current standards (e.g. CBT, Motivational Enhancement Therapy, 12 Step philosophy). As is common in the rest of the mental health field, this “true” understanding is then reinforced through research opportunities and publications, which are not as accessible to individuals promoting alternative ideas about addiction and the treatment of addiction. The financial influence of prominent institutions and companies allows for research conducted on the “true” nature and treatment of addiction to be spread throughout the mental health field, medical field, and general population. Netherland\(^6\) writes, “The National Institute on Drug Abuse, which at times has funded 85% of addiction research worldwide (NIDA, 2002), has a profound impact on addiction studies. Unfortunately, NIDA been accused of using its influence to advance a political agenda – specifically, NIDA is seen as being steeped in a drug war ethos.” Therefore, not only are these influences impacting the research on and treatment of addiction, they are also affecting policies related to substance use and possession, which further oppress and stigmatize the addicted individual.

As a result of this acceptance and promotion of the disease model of addiction as “truth,” a cookie-cutter approach to addiction treatment has been developed. Whether the certain modalities being used fit the personal and cultural views and beliefs of the individual is not taken into consideration. These approaches are revered as the “true” treatment of addiction; deviation from this path is certain to result in failure (e.g. relapse, death). Individuals whom are not receptive to CBT, MET, or 12 Step philosophy are viewed as “resistant,” “not ready for treatment,” or “in denial.” The disconnect between the treatment being utilized and its applicability to the individual contributes to high drop-out rates from treatment. Palmer et al.\(^7\) report “Rates of first-month attrition in outpatient (non-methadone) substance abuse treatment programs are approximately 30% and drop-out prior to 3 months can be 50% or more.” In addition to high voluntary drop-out rates, a connection may exist between individuals being therapeutically discharged from treatment and a lack of fit to the treatment method being utilized. The frustration and increased feelings of powerlessness, isolation, and helplessness associated with not feeling heard or understood by the treatment of choice could potentially result in individuals expressing their feelings in ways by which are not acceptable within the treatment setting (e.g. conflict with treatment team members or peers, disregard of rules established, continuing to use substances, etc.). As an alternative to being voluntarily or involuntarily discharged from treatment, the individual may also remain in treatment for the duration, but without receiving any kind of benefits. This could potentially lead again, to increased feelings of isolation, powerlessness, etc., as the individual cannot relate to or identify with the type of treatment being administered. Regardless of the reason, client attrition is concerning, but unfortunately is not of concern to for-profit rehabilitation centers and managed care companies. The discharges do not impact their bottom line significantly enough; there is
always another “eager” consumer willing to fill their beds or empty spots. Therefore, since individuals keep entering treatment, and these institutions are profiting from it, all is well. So, there is no reason to explore different avenues of treatment.

Cushman and the Empty Self

Cushman’s concept of the “empty self” provides a lens by which to examine the underlying causes of what society has labeled addiction. Cushman defines the empty self as “... the subjective experience of interior lack, absence, emptiness and despair, the desperate yearning to be loved, soothed, and made whole by filling up the emptiness.” Cushman addresses how the development of the empty self of today’s society is the result of years of colonialism, capitalism, and movement towards self-contained individualism. He discussed how the empty selves are preyed upon by advertisers as products are offered as a means by which to heal the empty self. Individuals are trained to consume as consuming allows the individual to fill the emptiness which in turn, facilitates healing.

The Other and Metaphysical Desire

In Totality and Infinity, Levinas offers an ethics that is grounded in responsibility to the other, an ethical relation to the other. Levinas states that we are called to the other – such a call is terrifying, and keeps us awake at night. He explains that this call of the other, in which we confront the other face-to-face, is primordial, or prior to our own existence. According to Levinas, this demand to respond to the call of other is what formulates the ethical relation. The face of the other brings forth the command, “thou shalt not kill,” to which we must adhere and cannot escape. Therefore, from a Levinasian perspective, the needs of the other come before my own. Levinas often describes the other in terms of the marginalized, such as “... the stranger, the widow, and the orphan.” However, the other reflects any individual or being that is outside of one’s self. The relation with the other, according to Levinas begins in dialogue. However, in order to truly hear the other, one must hear the voice of the other, rather than hearing the other’s voice distorted through one’s own thoughts, feelings, beliefs, etc.

Furthermore, Levinas’ concept of metaphysical desire will also be addressed in relation to the phenomenon of addiction. Metaphysical desire, in the Levinasian sense, refers to needs, such as the need for truth or the need for love, that can never be satiated. It refers to a desire for the Other, an Other whom resists totalization for transcendence, or infinity. Levinas’ theories will be applied to this paper to provide insight as to how the call of the other can become blocked or barricaded against, the role metaphysical desire plays in the development of addiction, and how his concept of ethical relation can be applied to the treatment of substance addiction.

Desire and the Scapegoat

Girard’s concept of mimetic desire reflects an individual’s obtaining desire, or learning what the individual wants, through observing others. This desire to acquire what others possess leads to mimetic rivalry. “The subject is convinced that the model considers himself too superior to accept him as a disciple. The subject is torn between two opposite feelings toward his model – the most submissive reverence and the most intense malice. This is the passion we call hatred.” Therefore, then, the individual grows to hate the model of the individual’s desire, as the model
has now become a competitor whom must be defeated. However, Girard points out that mimetic desire is not inherently evil, and in fact, can manifest in a positive manner. He highlights the example of Jesus Christ, writing that Jesus called on his disciples to follow his example. Despite its potential to inspire and motivate towards the good, in modern society, mimetic desire, amplified by the advent of capitalism and the empty self, appears to largely reflect the greed and jealousy at the forefront of relations with the other.

In addition, Girard’s scapegoat mechanism will be utilized to expand upon the previous section of this paper’s discussion on the stigma associated with addiction.

By a scapegoat effect I mean that strange process through which two or more people are reconciled at the expense of a third party who appears guilty or responsible for whatever ails, disturbs, or frightens the scapegoats. . . They now have a single purpose, which is to prevent the scapegoat from harming them, by expelling and destroying him.4

According to Girard, the scapegoat effect is created by mimetic rivalry; the individual becomes increasingly frustrated with the obstacle of the other in relation to the individual’s desires, and ultimately resorts to violence as a means by which to overcome this obstacle. The scapegoat mechanism allows for a “civilized” society to function by serving as an outlet for this violence; without it, society as a whole would destroy itself. Therefore, instead of a society where in which each member destroys the other, the scapegoat allows for the society’s desire for violence to be satiated temporarily. The scapegoat is ousted as the individual whom is deemed responsible for whatever is ailing the society. However, the characteristics or basis by which the scapegoat is judged is reflective of society’s unconscious desires. The scapegoat then, serves as a means by which for society to hide its efforts to act upon its desires, such as the desire for violence, that have been deemed unacceptable. The violence that society unleashes on the scapegoat satisfies society’s need for violence. In the example of the addict, society is unconsciously envious of the addict’s ability to ignore the sanctioned laws of the society, and use pleasure-inducing, illegal drugs. As a result, the addict is scapegoated and is ridiculed and rejected by society. The concept of addict as scapegoat will be explored further in this paper.

The Phenomenon of Addiction: Borne From a Diseased Society

When conceptualized via Cushman’s empty self, addiction manifests as an attempt to fill the void or emptiness of the empty self. Individuals suffering from addiction are attempting to fill their emptiness with drugs, or as Cushman refers to them, “the ultimate commodity.” As individuals are socialized to fill their empty voids with “stuff,” it makes sense that individuals would seek out mind-altering substances as a means by which to fill this vacuum. In fact, socially acceptable drugs such as alcohol are promoted by advertising companies as a means by which to have a good time and glean more enjoyment out of life – a way to numb oneself and fill the void. Psychotropic medications are touted as the “gold standard” in the treatment of many mental illnesses. The “benefits” of these medications are then sold to mainstream society as the answer or in other words, the “cure.” Medications for physical and biological ailments, although oftentimes necessary, are not exempt from this socialization of the individual to medicalize and sanitize oneself. The issue the commodification of disease and subsequent over-prescription of opioids has contributed both to the opioid epidemic and the belief that medications are the ultimate answer. Opioids numb both the external and internal pain of the empty self. The empty
selves of the public eagerly consume and internalize the construction of the medicalization of the self, as the cure of medication provides a quick and easy resolution to the issue of emptiness.

The acceptance and internalization of the medical model provides insight as to the development of the idea of addiction; individuals are simply repeating what they have learned, “I am sick; I take medication to heal my sickness.” However, when considering addiction, the only difference that exists is that the medication or drug being used simply is not the “right” one. These individuals are seeking healing through drugs that are not socially accepted, and therefore are labeled as addicts.

Bringing Levinas into the conversation, consuming and attempting to fill the void can provide a numbing effect, which enables the individual to block out the otherness of the world. The call of the other is terrifying, and cuts against the current of the values of an individualized, self-contained, capitalistic society. As mentioned previously, this terror and insomnia induced by the other is further exemplified in light of Girard’s theory of mimetic rivalry. Again, the other is strange, foreign, and a competitor for much sought-after resources at that. Rather than hear or face this call, an individual may attempt to numb oneself to the call of the other. Within the context of a self-encapsulated ego, numbing the self as opposed to facing the terror that is the other.

Both legal and illegal drugs easily numb and as a result, fortify the individual from the rest of the world. The addict is labeled as such simply due to the fact that the addict is using drugs that have been deemed illegal by society. However, upon entering sobriety, or ceasing use of illegal drugs, the addict is bombarded with a plethora of legal drugs in an attempt, via the medical model, to “fix” the addict or at least help the addict to function at a level that accepted within society. The methadone and Suboxone clinics provide a replacement for heroin, and the psychiatrists provide antidepressants, anti-anxiety medication, and anti-psychotics as a means by which for the addict to become further numbed and distanced from society. Instead of being directed toward the other in treatment, which could present as a potential cure, the addict is continued to be directed inward through medication, 12 Step programs, and cognitive-behavioral treatment. Again, the problem remains inside of the addict, and therefore must be addressed as such. Even in recovery, the addict remains sick, as the path to the other remains closed – stigma serves as a barrier to the addict reintegrating into society, again, a society that does not accept or want the addict to be a part of it.

As previously discussed, individuals have already been trained via capitalism to attempt to fill their emptiness with material goods. Drugs are the “ultimate commodity,” and therefore the most effective way of filling voids and keeping the other out. In this vein, addiction can be viewed as a blocking of the otherness of the world. Which is in fact, ironic, as the world or the other is the one thing that could potentially save the addict. In the phenomenon that is addiction, the other becomes replaced with the drug. In other words, the addict is called by the drug, and relates to the drug, as opposed to engaging in relations with the other. The drug becomes revered as the Divine, and is treated as such; the addict becomes consumed with obtaining and using the drug, which results in the development of an intimate relationship between the addict and the drug. Relations with the other are unable to occur; the other is represented as fellow addicts with whom the individual is in competition with as far as resources (e.g. money) and drugs. Or, the other that exists outside of the world of drugs, is represented as enabling loved ones, judgmental
or disapproving loved ones, or no one at all – perhaps, the other has altogether abandoned the addict. As a result, the addict’s already isolating existence as an empty self becomes further isolated and detached from the other. The addict becomes what is in actuality, a Frankenstein’s monster created by society, a highly functioning capitalist – using and manipulating others for her or his own gain – more drugs.

From a Levinasian perspective, the phenomenon of addiction could be construed as a misguided attempt to fulfill metaphysical desire, or in the context of Cushman, fill the void of the empty self. As Levinas discusses, individuals may come to confuse enjoyment-related needs for metaphysical desire. “The desires one can satisfy resemble metaphysical desire only in the deceptions of satisfaction or in the exasperation of non-satisfaction and desire which constitutes voluptuosity itself.” As Levinas asserts, the desires that are able to be satiated can deceivingly resemble metaphysical desire, and therefore the individual may attempt to fulfill metaphysical desire via enjoyment-related needs. Addiction represents a clear manifestation of such an attempt. The addict acquires and uses the drug in an attempt to fulfill the addict’s metaphysical desire, the desire for infinity, or the Other. This metaphysical desire could be interpreted as the emptiness inside of the addict, which was generated by a society ravaged by colonialism, capitalism, and the self-encapsulated ego. The emptiness of the empty self, despite the self’s continuing, repeated attempts, can never be full; this desire can never be satiated. Yet, the addict strives to do so, by the means that have been provided to the addict – first illegal substances, which are then followed by legal drugs in what society deems recovery.

**The Context of Addiction: A Diseased Society**

When brought into dialogue with Cushman, Girard, and Levinas provide a deeper understanding of the terrifying nature of the demands placed upon us by the other. Again, Cushman describes an empty self that has been constructed through hundreds of years of colonialism, capitalism, and a movement away from community and toward self-contained individualism. As Cushman discusses, this self-contained individualism has contributed to the destruction of previously tight-knit communities, and has resulted in individuals living isolated, solitary lives. Along this same line of thought, Girard’s theory of mimetic desire provides further explanation to the self-encapsulated ego, as individuals compete with one another to achieve capital gain. There is no room for the other in the world of the self-contained individual. The other is recognized as a competitor and a threat, is then demonized and rejected in relation to the empty self, and ultimately, the other is totalized.

The Westernized self, or empty self, perceives itself to be in control, and responsible for all successes and failures, which is reflected by the “pull yourself up by your boot straps” mentality so embedded in the self that it has become a mantra in the United States. This mantra has transformed into a major value of the United States’ – the value that individuals are self-sufficient and have the ability to accomplish whatever they set their minds to – a modern day Manifest Destiny. With such a mindset, one becomes deaf to the call of the other. The other is viewed as in charge and responsible for whatever accomplishments or defeats the other experiences. Reaching out and being with, and suffering with the other is viewed as enabling or charity, and is largely frowned upon. Healthcare for all? Not a chance. Opening the U.S. borders to human beings from war torn and impoverished countries? No way, in fact, we need to secure
our borders even more – Muslim ban. Free Narcan to all individuals diagnosed with opioid use disorder? Outrage – “junkies” choose to use heroin, they deserve to die.

It is here that Girard adds to the conversation, as within a capitalistic society, the expectation is that others will compete with one another in order to achieve the American Dream. In this autonomous, self-serving conceptualization of the self, which again, is constructed by and reflective of society, the call of the other is unable to be heard. The empty self, again, has been trained via capitalism to remedy all things – unhappiness, disease, etc. – through filling it up with stuff or material goods. However, individuals are constantly in competition with one another for this stuff – which again, can be attributed to Girard’s concept of mimetic rivalry. Within the construct of capitalism, the amount of stuff one accumulates is equal to one’s value or worth as a human being. This stuff then comes to serve as a buffer between the self and the other, which results in a society where in which treating one’s stuff or material goods with more dignity and reverence than the other is accepted, if not applauded and encouraged.

From a Levinasian perspective, the other has become replaced with material items and goods. I revere my flat screen T.V., iPad, and brand new car, while walking past the homeless man, refusing to make eye contact or acknowledge the other whom is calling out to me. What is more indicative of this than the 2016 presidential election? An openly racist, sexist, homophobic, classist, and xenophobic billionaire was elected president. An individual notorious for maintaining his wealth through inflicting pain and suffering onto others. An individual whom clearly values things over the other. An individual whom pronounced throughout his campaign that he had great plans to keep the other out via border walls, immigration bans, and hateful rhetoric; this rhetoric was eagerly consumed by a large population of Americans and ultimately propelled him into office. The election, and following Trump presidency, reflect a society that is damaged or diseased in some form – society has become deaf to the call of the other. The empty self and the society from which it was birthed are pathological in of themselves, but as such a self is the norm, is not perceived as such. Fromm describes this phenomenon in what he terms as being a “socially patterned defect:”

The individual shares it with many others; he is not aware of it as a defect, and his security is not threatened by the experience of being different, of being an outcast, as it were. What he may have lost in richness and in a genuine feeling of happiness, is made up by the security of fitting in with the rest of mankind – as he knows them, As a matter of fact, his very defect may have been raised to a virtue by his culture, and thus may give him an enhanced feeling of achievement.

Therefore, we as a society are defected or ill in some way, but cannot recognize it as our defections and illnesses are perceived as “normal.” In our society, acquiring things and engaging in cutthroat competition to obtain these things is considered the means by which an individual becomes successful or valuable. Answering the call of the other is impossible when conceptualized in this manner. The individual views the other as an object, an obstacle to overcome, rather than falling witness to the otherness of the other.
Addict as Scapegoat

Just as the addict rejects the call of the other, society rejects the call of the addict, or other. The stigmatization of addiction and oppression of addicts is evident on social media, within current treatment practices, and instilled in governmental policies. When considered in light of the capitalist society from which it is created, both Cushman and Girard shed light on the pervasive stigmatization of addiction.

Kemp & Butler⁹ discuss one of the major rules of a capitalist society – one must earn pleasure through work, which is typically perceived as an unpleasant experience. This rule provides the foundation for beginning to understand society’s disparaging views of addiction. One perception of addicts is that they are receiving pleasure without having to undergo the negative experience of work. Instead, they are leeches on the pleasure of the rest of society. Therefore, the hatred and aggression towards addicts by society is a result of their perceived short cut to pleasure. This perception reinforces the belief of the addict as “the other,” whom is everything that the self despises and rejects. While the perception that addicts are sponges of pleasure, taking it all in without any real effort, is completely incorrect, it is accepted by individuals blinded by capitalism. This perception held by a large portion of society can provide one explanation of the animosity demonstrated towards addicts.

Cushman’s discussion of the formulation of the other provides an elaboration of the phenomenon of stigmatization. Cushman describes how in the construction of the self, aspects of the self that are disowned or split off are then “. . . relocated into the unconscious and onto ‘the other.’” The self then, projects all aspects of itself that are viewed as unacceptable or inappropriate onto the other. The self then unconsciously envies the other for being able to exhibit the traits and behaviors that the self has denied itself from embodying. As a result of this process, the addict then becomes the other. Therefore, the addict possesses all the traits despised and rejected by the self. The addict is perceived as lazy, manipulative, lacking moral conviction or will, mooching off the rest of society, and attempting to shortcut the capitalist system by receiving pleasure without the prerequisite of work.

Girard’s contribution to the conversation lies in his conceptualization of what he termed the scapegoat mechanism. The scapegoat mechanism provides a deepened understanding of the stigma associated with addiction as well as the rejection of the addict by society. As previously mentioned, the addict becomes a scapegoat in a society where in which achieving pleasures via certain narcotics is criminalized. Society perceives addicts as achieving their desires for pleasure through these illegal drugs, in spite of the very fact that these drugs are illegal. The addict possesses no such concern of societal norms. Society, too, desires to experience the pleasure that is derived from such illegal drugs, but cannot bring itself to deviate from what is considered acceptable. In other words, the general public desires this perceived pleasure, but is denying itself the ability to indulge in such pleasures. The desire for such pleasure arises from society’s desire to imitate the substance-using behaviors glamorized by movie stars and famous musicians. As a result, the addict is identified as scapegoat as the addict is brazenly achieving her/his desires without second thought to the laws and rules of society. The addict is then isolated from society – designated to inpatient rehabilitation centers, methadone and Suboxone clinics, prisons, and the streets (homelessness). Society contradicts itself by on one hand, romanticizing substance use in movies, songs, etc., while at the same time being disparaging of what it has labeled as being the
addict. This mechanism of scapegoating the addict serves as a means by which for society to hide and atone for its’ desire to achieve pleasure through getting high. The violence inflicted upon addicts through imprisoning them in jails and fascist “rehabilitative” institutions, controlling them through medication, and placing their “sickness” within them, as a disease, satiates society’s desire for violence, and need to conceal its true desires. As a result, society is unwilling and unable to recognize how it has created what it now has diagnosed as substance use disorder.

The distinction between self and other described by Cushman adds to Girard’s discussion of violence, as it provides a further understanding of the communal acceptance of oppressing humans labeled as addicts via governmental bodies. As the addict embodies everything that is inhuman, displaying hatred and aggression towards these individuals is largely accepted, as they are less-than-human beings and not deserving of the same compassion and understanding that is granted to human beings (the label of human being only applies, by the way, if one is white, middle-to-upper class, and preferably male). So, solutions to the problem of the addiction such as “locking them up” or “letting them die” are widely accepted and at times, boisterously voiced via social media outlets. These solutions provide an easy way for “civilized” society to cleanse itself of the damaged and rejected.

The criminal justice system plays a major role in the continued stigmatization and oppression of individuals suffering from substance addiction. Despite being shown to be ineffective in facilitating change, the tough love approach remains widespread throughout the field of addiction. Addicted individuals are incarcerated for possessing or using drugs, or for engaging in behaviors to support their habits, such as stealing or prostitution. These individuals then may remain incarcerated or be mandated to drug and alcohol treatment. However, even if they complete treatment, these individuals remain black-marked within the community – that is, due to their criminal records, they struggle to secure employment or receive federal student aid to attend college. They may also be rejected by family and friends; further isolated from the human world. This issue brings to light again the lack of attention and concern paid to the environmental and political impacts of addiction. Addicted individuals are expected to transition back into society and find acceptable ways by which to earn capital and live their lives. This presents a paradox: how are individuals recovering from addiction supposed to transition back into a society that does not accept them?

However, the solution of “locking them up” alone does not resolve the issue of the addict. The medicalization of addiction therefore, provides society with a means by which to attempt to reform the other into something still not quite human, but more closely resembling humanity than the individual in active addiction. This reformation process enables society to control the other by pumping the other full of medications, ridding the other of “maladaptive thoughts,” and erasing and replacing any unacceptable behaviors with those more suitable to that of a “civilized” society. The political powers of society then create policies that endorse and at times mandate this psychological and physiological destruction of the addict by upholding the medical model through developing punitive practices associated with the treatment of addiction. Netherland states, “Whether through reinforcing neoliberal desires for self-governance and self-control, placing ‘addicts’ under the authority of a doctor, or locking up ‘criminals’, addiction has become one of our most expansive and influential systems of social control.”
Addict as Other

Levinas and his ethics of responsibility provide a lens by which one can begin to explore how addiction treatment could be provided in such a way that allows for the addict to be revered as Other; a human being that cannot be totalized. Experiential Personal Construct Psychology (EPCP) allows for a more grounded understanding of how Levinas’ ideas could be applied to conceptualization and treatment of addiction. This discussion will focus on how psychologists can move towards treating their clients humanely and ethically, by answering the call of the other, and working to facilitate healing through the therapeutic relationship.

Goodman\(^\text{10}\) provides a path by which to follow to begin to implement Levinas’ ideas into psychotherapy. As clinicians, bringing Levinas into practice means that clients are not being reduced to their biological natures (disease model of addiction), an assortment of “addictive” behaviors, or perceived psychological resistance to treatment (CBT). Instead, clients are treated with dignity and respect, and are viewed as human beings within their contexts. Psychotherapy is based upon the needs of the client, as voiced by the client. As a result, substance abuse clients would not be thrown on the conveyor belt of standard addiction treatment – 12 Step, MET, CBT, and medication. Instead, clients would be provided with the ability to co-construct their own treatment and goals (if such goals exist) – even if their goals are to continue using, but perhaps at more moderate level. Again, the client is an active agent in the client’s treatment. Ultimately, according to Goodman, Levinas cannot be systematically applied to treatment, but his concept of the ethical relation can serve as a guide by which clinicians utilize to ensure that ethical, other-oriented, relational treatment is being provided.

A relational approach that could provide a clearer conceptualization of how one can utilize Levinas’ ideas in practice is EPCP. Developed as an expansion of George Kelly’s personal construct psychology (PCP), EPCP conceptualizes the individual as a process of meaning-making, and emphasizes both intimate, meaningful relations with others (referred to as ROLE relationships) and that individuals always have the ability to choose how they do or do not construe or make meaning of their worlds. Although ROLE relationships are what give life meaning, they are also terrifying as others have the potential to invalidate our core constructs, or our core sense of who we are. Without ROLE relationships, however, life is meaningless and empty. They are, in other words, both awful and awful. Individuals are constantly risking and retreating ROLE relationships with others in an attempt to experience a life with meaning and connection, while simultaneously attempting to avoid the terror of injury and invalidation associated with such intimate relationships. One can never truly understand the other, the other will always remain a mystery, and that is terrifying – or in Levinas’ terms, what keeps us awake at night.

Within this model, individuals are not reduced to their genetics or behaviors or thoughts – what is traditionally viewed as psychopathology is conceptualized as an individual’s inability to engage in ROLE relationships due to profound terror. This ideology is consistent with the understanding of Levinas presented by Goodman of viewing the individual within their context/society and approaching the other with humility and respect. In EPCP, “symptoms” are understood to be a communication to the self, from the self, about the self. Traditional DSM diagnoses are not utilized within this approach, as diagnosis is viewed as something that should be utilized to help facilitate the understanding of the client’s core process of meaning-making, or
process of construing or understanding the world. Leitner et al.\textsuperscript{12} outline a “diagnostic system” of EPCP, complete with a tongue-in-cheek Axis system. However, this diagnostic system provides no categorical assumptions about the individual, but simply provides an understanding of how early traumas and invalidations profoundly affect an individual’s ability to engage in ROLE relationships throughout life. In EPCP, what is healing then, is the ROLE relationship developed between client and therapist. This ROLE relationship, like all such relationships, is co-created and constructed by both client and therapist – therefore both must risk exposing the very core of their being to one another, with the threat of invalidation ever-present. The therapist is not regarded as an expert, nor is “symptom reduction” the goal of therapy – the goal is to develop a ROLE relationship with the client, which in turn will facilitate the client’s developing ROLE relationships outside of therapy. In this model, individuals are not viewed as damaged or diseased but struggling to find meaning in whatever way they can. Elaborative choice, a concept within EPCP, reflects the idea that individuals are always making the best possible choice that they possibly can in the moment, even though this choice might not necessarily be a “healthy” or “good” choice – e.g. using drugs. The individual is not scapegoated or shamed for being “weak” or “immoral,” but instead, attempted to be genuinely understood. Therefore, within EPCP, addiction is conceptualized as a crisis of meaning, or in other words, the individual’s attempts at meaning-making have failed. As Thomas\textsuperscript{13} elaborates, rather than attempting to relate to others, the individual relates with the drug. In other terms, the addict has rejected the call of the other. The cure for the addict, again then, is to intimately and meaningfully relate (ROLE relate) with first the therapist, then others, as another human being or process of meaning-making. The task of the therapist is to be open to the other, which reflects the therapist’s awareness of her or his own retreats from the relationship, to allow for a true ROLE relationship to develop.

However, as addressed throughout this paper, addiction is not located directly within the individual as a psychological issue, or interpersonal relations, but reflects societal injustices and issues as well. The question then becomes, how does one begin to resolve the many societal issues associated with the phenomenon of addiction? Community psychology can provide a route to take to begin to address these issues. Although systemic changes regarding the way in which addiction is viewed and criminalized must take place in order to truly reform the treatment of addicts, smaller, local changes can facilitate this revolution. These local changes can be facilitated through involvement in city councils by advocating for local policy change that takes steps towards shifting the view from treating addicts as diseased criminals to viewing them as human beings experiencing a number of challenges in their internal and external lives. Mobilizing the community is a more challenging task to undertake due to the stigmatization of addiction, pervasive nature of addiction, and reluctance of addicts to reveal themselves (which is a result of stigmatization). However, smaller community groups can be offered as an alternative to the standard 12 Step approach. Changing the overall narrative of the community is also presents as an arduous, yet necessary task. This process can be begun through grassroots campaigns, which can facilitate the deconstruction of the idea that addiction is a disease. A counternarrative can also be developed by inviting individuals whom have recovered in ways off the beaten path, or in other words, did not follow the model prescribed by the medicalization of addiction, to share their experiences with the general public. The changing of public opinion and oppressive policies would in turn allow for the exploration of alternative treatment approaches to addiction.
Conclusion

When placed in conversation with one another, Cushman, Girard, and Levinas allow for an exploration of the phenomenon of addiction within its’ societal contexts. The trialogue between these individuals opens the door to considering alternative theories and approaches to addiction; theories and approaches that are liberating and empowering, as opposed to reductive and destructive. Stepping outside of the medical model of addiction allows for these alternative explanations to be formulated and heard, and hopefully someday, utilized in the development of treatment spaces that treat the addict as other, as a human being with dignity, and to whom an ethical responsibility is owed.

References


Ashley Bobak, MS

Ashley Bobak received a B.A. in psychology at Point Park University, M.S. in counseling psychology at Chatham University, and is currently enrolled in the PsyD. in Clinical-Community Psychology program at Point Park. She worked as a clinical therapist at Familylinks Family Treatment Center, an inpatient dual diagnosis treatment facility for women, for 2 years prior to entering the PsyD. program. She is currently teaching Psychological Foundations, and will be teaching Theoretical Foundations to Psychology in the fall.
Abstract

This paper highlights the sociohistorical and sociocultural trauma of sexism and racism for Black women sexual violence survivors in higher education. Through a review of the literature, this research explores the historical trauma of Black women and the misappropriation of their sexuality. The purpose of this paper is to introduce Black feminist thought as a lens through which to view sexual violence support in higher education to center those disproportionately impacted by rape and sexual assault and to discuss policy implications that center Black women’s experiences in higher education.

Keywords
Black Feminist Thought, Intersectionality, Higher Education, Sexual Violence, Sexual Assault

Introduction

This research study serves as an homage to the efforts of bell hooks in centering Black women’s experiences in her work. hooks’ book, titled ‘Sisters of the Yam: Black women and self-recovery’ (1993), serves as a mixture of both personal narrative as well as a social critique of the ways in which sexism and racism have simultaneously impacted Black women’s collective mental health. hooks’ book title actually stems from Toni Bambara’s nonfiction novel ‘The Salt Eaters’ (1990), where she referred to Black women as daughters from the yam. hooks (1993) took this a step further and developed a support group for Black women called ‘Sisters of the Yam’ because she felt that the yam served as a “life-sustaining symbol of Black kinship and community” (p. 6). She argued that Black women all over the world, no matter their location, receive nourishment and healing from yams when they eat them. Thus, hooks noted that yams serve as a symbol of Black women’s’ diasporic connections.

In this research paper, the researcher will look to the work of hooks in determining what about Black women’s experiences with sexual assault in higher education may also serve as a diasporic connector. Sexual assault, for the purposes of this study, will be defined as sexual contact or behavior that occurs without the explicit consent of the victim (National Institute of Justice, 2017; RAINN, 2016). Some forms of sexual assault include attempted rape, fondling or unwanted sexual touching, forcing a victim to perform sexual acts (such as oral sex or penetrating the perpetrator's body), penetration of the victim's body (also known as rape).

Background

Black women in the United States have a history of sexual violence victimization dating back to slavery (West, et al, 2013; Sommerville, 2004). As a response, hooks coined the phrase ‘sexual
politics of rape’, which posits that if one white woman is raped by a black man, it is considered to be a more pressing issue than if thousands of black women are raped by one white man (1981). This statement refers specifically to the sexual exploitation of Black women slaves who were raped and sexually violated by white slavers but even in a contemporary context there exists a discrepancy in the ways in which sexual violence is studied, sexual violence prevention policy is developed, and sexual violence prevention efforts are implemented.

DuMonthier, et al (2017), Bryant-Davis, et al (2009), and Wooten (2017) note that Black women’s unique experiences are often not included in sexual violence prevention efforts at the collegiate level nor are they included in conversations about disparities in the statistics surrounding the types of people who experience sexual assault. Black women’s exclusion from the dominant narrative about sexual assault within higher education begs the question: does there exist a sexual politics of sexual violence support efforts in higher education that mirrors bell hooks’ sexual politics of rape? Does the fact that the current narrative around sexual violence at colleges and universities primarily centers the experiences of white women impact the perceptions of support for those who do not fall into that demographic?

The existing literature about sexual assault in higher education credits the feminist movement in the 1980s with shifting the focus of sexual violence to campuses (Belknap & Sharma, 2014; Donat & Emilio, 1992). This shift in who society regarded as a sexual violence victim (namely, when sexual violence began to involve white women) is unsurprising because throughout the 1970s, white women began to surpass white men with the highest number of college enrollment (U.S. Department of Education, 1992; U.S. Census Bureau, 1999), but the demographics for the most educated have changed over the years. By both race and gender, a higher percentage of Black women are receiving degrees from postsecondary institutions (66% associates/64% bachelors), topping Asian women (57%/55%), white women (60%/56%) and white men (40%/44%) (U.S. Department of Education, 2017), so why are white women’s experiences still being held as the standard in sexual violence prevention efforts at colleges and universities in this country? These statistics highlights that there is a definite need for appropriate and effective institutional support for Black women and this paper will iterate the importance of centering Black women’s experience.

Threats of sexual violence for Black women often start in their youth and are carried throughout their lives. For young Black women victims of sexual violence, the young women are often seen as somehow complicit in the abuse or these young women react in violent ways to the abuse, leading them to become yet again victimized as they are disciplined at disproportionately higher rates than all other groups of girls in public schools (DuMonthier et al., 2017; Morris, 2015; Crenshaw, 2015). Crenshaw (2015) notes that Black girls are six times more likely than white girls to be suspended. Suspension can lead to expulsion and if a child is expelled from a school, it places them at a higher risk of low-wage work, unemployment, homelessness, and incarceration later in life (Crenshaw, 2015). Black boys and girls are also often forced into adulthood at early ages, being faced with threats of discrimination in the workplace, an increased risk for interpersonal violence, and lower health outcomes (Crenshaw, 2015). DuMonthier et
al.’s report goes on to mention that instead of receiving access to resources, care, and safety, Black girls who are the victims of sexual violence are often put into the criminal justice system. Given the negative impact of sexual violence in a person’s life, it is important to understand how it influences various populations differently and how someone’s racial, ethnic, gender identity, sexual identity, socioeconomic status, and class could position them in the world in terms of navigating various forms of oppression. Despite the efforts that have been made in recent years to promote sexual violence prevention efforts and criminal justice reform for some groups of men and women across the nation, very few efforts have begun to research the complexities of violence against Black women (Crenshaw, Ritchie, Anspach, Gilmer, & Harris, 2015) and the ways in which that violence is shaped by our various social characteristics (Crenshaw, 1991). For example, 1 in 5 Black women reports having been raped at some point during their lifetime (Tjaden & Thoennes, 2006). Additionally, while Black women reportedly experience less sexual violence when broadly compared to all women, more Black women are raped during their lifetime at 21.2% compared to 19.3% of all women aged 18 and older. So, while there is some research on Black women’s experiences with sexual violence, little research exists on Black women’s experience with sexual violence in higher education (Wooten, 2017). With Black girls facing threats of criminalization and Black women facing threats of death at the hands of their partners, this research study seeks to explore what support looks like for Black women after an assault if the research indicates that their experiences are often left out of the conversation surrounding sexual violence.

Information pertaining to the unique experiences of various populations is needed to develop culturally-competent sexual assault prevention efforts at the higher education level. Women between the ages of 18-24 years old are at the highest risk for sexual violence those both enrolled in college and not enrolled in college (Sinozich & Langton, 2014). Cantor, Fisher, Chibnall, Townsend, Thomas, and Lee (2015) provide the following statistics for undergraduate and graduate students from the Association of American Universities (AAU) Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct:

- 11.2% of all students report experiencing rape or sexual assault through physical force, violence, or incapacitation.
- Of these students, 23.1% of undergraduate females and 5.4% of undergraduate males report experiencing rape or sexual assault through physical force, violence, or incapacitation.
- About 1 in 6 female survivors of sexual violence report receiving assistance from a victim services agency after an assault.
- For transgender, genderqueer, and gender nonconforming college students, about 21% of college-age students report having been sexually assaulted compared to 18% of cisgender females, and 4% of cisgender males (note: cisgender refers to someone who’s gender identity matches their sex at birth (Trans Student Educational Resource Center, 2018; Cantor et al, 2015)).
For each of the groups mentioned, the statistics include only reported experiences of sexual violence. Consequently, it is impossible to understand the full reach of sexual assault in society since some survivors choose not to report or disclose their assault. To understand why a survivor might make this decision, it is important to explore what barriers may exist institutionally that could impact a student’s decision to report or seek support.

Institutions of higher education play a significant role in these perceptions of support from their campus, and there exist a number of federal provisions in place that help to alleviate this disconnect between students and institutional supports such as campus law enforcement. For example, 72% of campus law enforcement agencies are reported to have a staff member responsible for survivor response and assistance while 86% of sworn campus law enforcement agencies are reported to have a staff member responsible for rape prevention programming (Department of Justice, 2015). With the provisions that campuses have in place, it is curious that we still see such vile displays of patriarchal supremacy rooted in violence and oppression continuously manifested on college campuses in the form of sexual violence.

**Purpose of this research**

Over 40 years ago it was not the norm for Black women to be college educated, but that does not absolve institutions of higher education of their obligation to provide support for Black women students today. The researcher posits that centering women of color may be the only way by which the campus sexual assault epidemic can come to an end. Centering the experiences of those most marginalized by social oppression brought on by racism, classism, heterosexism, and sexism could have a residual effect on those with higher positions on the social hierarchy. Currently, white women’s experiences are centered so because they are privileged by their race. The institutional efforts that address only their needs fails to account for the experiences of women of color students. Failure to account for the differences in experience leaves students feeling as if their experiences are not valid. This is particularly salient with Black women students given the societal and institutional effects of their marginalization. For example, Black women respond with more feelings of self-blame after a sexual assault than any other racial group (Littleton & Dodd, 2016). This, and other examples that will be further explored, highlight the importance of culturally-competent sexual violence prevention programming and supports on higher education campuses. The participant narratives derived from the data collected during this research study will help to highlight the importance of creating campus communities where students feel socially connected and have a sense of trust in the college support systems that exist to help them.

**Significance of this research**

There is a significant gap in the literature pertaining specifically to Black women’s experiences with sexual assault on college and university campuses (Wooten, 2017; Harris & Linder, 2017). This study will help close the gap in three ways. First, this study will present the Black women
college student’s experiences directly derived from their stories. In doing so, the researcher will give the participants the agency to describe their stories in a way that is authentic and it will allow the researcher to re-story the participant narratives to extract themes across the participants (Clandinin, 2006). Second, this study will focus on Black women college student’s perceptions of campus and community support and connectedness to highlight higher education policy changes that could be made to better support Black women sexual assault survivors. Finally, this study will contribute to the limited literature presently available that focuses specifically on Black women’s experiences with sexual assault in higher education.

This qualitative research study will be based on the theoretical implications of Black feminist thought, specifically focusing on intersectional theory (a specific theoretical and analytical framework developed within a Black Feminist Thought epistemology) as praxis for the analysis of the participant’s narratives. For Black feminists, the implications of privilege and oppression are essential to understanding how Black women are impacted by sexual violence (Collins, 2000). Intersectionality adds an additional dimension by looking at the ways in which Black women’s various identifiers influence their experience with the same phenomenon, which is sexual assault in this study (Crenshaw, 1991). This study represents an addition to the narrative on sexual violence that centers the experiences of Black women by taking into account their social identity and the social stigma that they experience. hooks (1981) specifically mentions that a devaluation of Black women has occurred as a result of the sexual exploitation of Black women during slavery that has had a lasting impact on the community of Black women lasting even until today. The contemporary relevance of this historical marginalization can be seen in the way that Black women have had to navigate sexual violence in both societal and institutional spaces. This research study seeks to provide space for Black women to share stories about their experiences on their campus or within their community, their personal social supports, and their institutional support systems after their experience with assault.

The concept of people possessing multiple identities serves as the impetus for the researcher in selecting this research topic, theoretical frameworks, and the specific population of interest in developing this study. Crenshaw’s (1989) intersectionality theory as a natural extension of Black Feminist Thought, is essential to ensure that “for feminist theory and antiracist policy discourse to embrace the experiences and concerns of Black women, the entire framework that has been used as a basis for translating ‘women’s experiences’ or ‘the Black experience’ into concrete policy demands must be rethought and recast” (140). Therefore, it is important for this study to view sexual violence from an intersectional lens as the research purports that Black women’s experiences are not always part of the conversation in the current literature (Wooten, 2017). This exclusion is rooted in white supremacy and patriarchy and it is crucial that higher education continuously works to dismantle these negative oppressions within its context, as it could serve as a barrier for student’s educational attainments and success (Trachtenberg, 2017).

Black Feminist Thought

Given that the purpose of this study is to assess the sexual assault experiences of Black women students, Black feminist thought provides an important lens through which to understand the importance of this study. Black feminism consists of ideas produced by Black women that seek
to provide a perspective developed by and for Black women (Collins, 1994). Black feminist thought, as articulated by Patricia Hill Collins, serves as a critical social theory for this study, illuminating the ways that power and social ideologies have positioned Black women. Collins sheds light on the importance of learning from the" Outsider Within," or using the voice of marginalized Black women in predominantly white spaces as truth and guidance to influence policy for them that is made by them (1986; hooks, 1984). It iterates that Black women are constantly navigating a space that includes race, class, and gender and that they are never able to be fully welcomed in academic spaces that are predominantly white because of the limitations of their positionality in white supremacist and patriarchal environments.

It is important to remember, however, that Black women’s experiences are not monolithic. While Black feminist thought does have its unique standpoint, or theoretical perspective about Black women created by Black women, it does not purport to provide a single theoretical perspective that fully captures the experiences of all Black women. Collins’ (1986) articulation of Black feminist theory shapes this study in a way that works to fully acknowledge the identities of the research participants from a sociohistorical context. First, it is defined in a way that makes it “impossible to separate the structure and content from the historical conditions that shape the lives of its producers” (p. s16). Therefore, while this theoretical framework may be used by anyone, Black women are its original producers, and the content is created with Black women’s experiences explicitly at the forefront. Second, there exists an assumption that Black women possess a unique standpoint on their experiences and that there will be certain commonalities of perception shared by Black women as a group allowing for universal themes between the participants in this study. Finally, although there may be certain commonalities present for Black women, the introduction of identities such as class, religion, age, and sexual orientation results in different experiences. This final point has implications for the methodological approach used to understand the experiences of the participants in this study which will be explored further in the methodology section.

There are three key themes found in Black feminist thought that make it an appropriate theoretical framework for this study. First, it is derived from Black women’s self-definition of their experiences and self-valuation about what it means for them. Black feminist thought underscores the importance of Black women challenging the general perceptions of themselves and allows them to take an active role in creating their own definition of what it means to be a Black woman, which in the context of this study, allows them to explicitly say through their narratives what is needed to them in terms of support and connections. Second, it focuses on the interlocking nature of oppression. This refers to the unique position of Black women in terms of their need to navigate race, gender, and class oppression simultaneously and how that influences the ways in which they move in society (Beale, 1970; Davis, 1981; Dill, 1980; hooks, 1981; Collins, 1986). This theme is expounded in Kimberlé Crenshaw’s work on intersectionality which serves as an extension of Black feminist thought and focuses more on power and social structures, which is explained further below. The final theme is that it emphasizes the importance of Black women’s culture by redefining and exploring the various ways in which Black women navigate oppression from their unique cultural vantage point. As Collins (1994) mentions in Black Feminist Thought, the individual and group identities that
people assume such as race, gender, sexuality, and class impact how we experience our world and dictate how we navigate certain spaces.

**Intersectionality**

The direct impact of the many identities in which Black women operate can only be studied effectively using an intersectional lens in research and activism (Crenshaw, 1989). Intersectional theory derived as a product of critical race theorists and Black feminist theorists who noted that the majority of feminist scholarship did not account for how race impacted the social realities of gender (Crenshaw, 1989, 1991; Collins, 2000; hooks, 1984). Choo and Ferree argue that “intersectional analysis informs understandings of core sociological issues such as institutions, power relationships, culture, and interpersonal interaction” (2010, p. 130). Intersectionality, as an extension of Black Feminist Thought, is thought to be useful for bridging the gap between theory and practice for minority groups while also empowering minority groups through the accurate depiction of their lived experiences in research (Williams, 2015). For the purposes of this study, the use of intersectionality and a theoretical framework allows the researcher to acknowledge and embrace the participants’ social identities in a way that sets precedence for the importance of their inclusion of their unique experiences in the dominant sexual assault narrative.

Intersectionality is an approach to sexual violence prevention that stems from a sociological theory that outlines how an individual may face multiple types of overlapping discrimination dependent on race, gender, age, ethnicity, physical ability, class, or other characteristics that could place them in various forms of marginalization (Crenshaw, 1989). One of the most prominent advantages of intersectionality as a framework for sexual violence prevention is that it encourages viewing people as more than just one category; it emphasizes that people are not defined by their gender or race but that humans have multiple identifying factors. Intersectional theory, specifically, studies the overlapping or intersecting social identities and related systems of oppression, domination, or discrimination (Crenshaw, 1989). Crenshaw argues that “because the intersectional experience is greater than the sum of racism and sexism, any analysis that does not take intersectionality into account cannot sufficiently address the particular manner in which Black women are subordinated” (p. 140). The concept of participants in this research study navigating multiple levels of oppression transcends intersectionality and impacts how the participants in this study will uniquely describe their experiences with sexual violence. In terms of how that translates to institutional support, it is essential that students’ identities and multitudes be considered. From those multitudes, this study seeks to explore whether Black women students feel a sense of belonging to their institution and community and the role that it plays on their perceptions of support.

**Literature Review**

Sexual assault is not an act that is committed for sexual pleasure; rather, it is a mechanism for violence used in an attempt to exert power and control over another person (World Health Organization, n.d.). Historically, sexual violence (including sexual assault) has been used against Black women as a means of controlling the dominant narrative about them. Crenshaw (1989) states
When Black women were raped by white males, they were being raped not as women generally, but as Black women specifically: their femaleness made them sexually vulnerable to racist domination, while their Blackness effectively denied them any protection. This white male power was reinforced by a judicial system in which the successful conviction of a white man for raping a Black woman was virtually unthinkable” (p. 158-159). Some of these methods range from promoting caricature-like interpretations of their sexuality referred to as a Jezebel to excluding Black women’s early experiences with rape once the feminist movement led by white women in the 1980s began to explore its proclivity on college campuses.

There has been a warped social understanding of Black women’s sexuality dating back to the 17th century, where European travelers would travel to Africa and see what they interpreted as scantily-clad African women (White, 1999). The travelers equated this visual to sexuality, as opposed to the spiritual and cultural practices that they were, and assumed the native Africans to be hypersexual beings, falsely equating them to prostitutes (Price & Shildrick, 1999). Black women were even put on ‘display’ in European museums, clothed in loin clothes as a stereotypical representation of their homelands, and were widely referred to as “Bush people” (Nuttall & Coetzee, 1998). Sarah Baartman, a South African woman, is one of the most well-known manifestations of this live caricature created by white men in the 19th century. Sarah Baartman was referred to as ‘Hottentot Venus’ and represented the Hottentot trope: an African woman who they assumed to be hypersexual. Sarah was kept on display in a museum where European visitors paid to view her genitalia and buttocks, as it looked different, therefore ‘exotic,’ to them (Price & Shildrick, 1999). These inappropriate, fetish-like images of Black women were portrayed as primitive and which white men assumed to mean that Black women had higher sexual appetites than white women (Price & Shildrick, 1999) and overly sexual bodies (Capers, 2013). This stereotype followed Black women throughout the years and had a drastic impact on societal perceptions of Black women’s sexuality.

The historical context with which Black women have been forced to experience sexual violence is rooted in both white supremacist and patriarchal contexts (Wooten, 2017; Buchanan and Ormerod, 2002; Omolade, 1989; Crenshaw, 1989). As a result, one could argue that Black women’s contemporary reliance on intrapersonal social supports, lack of engagement with legal measures post-assault, and lack of reporting post-assault is a manifestation of Black women’s historical trauma associated with sexual assault. Historical trauma is further defined as a population’s cumulative emotional and psychological pain, over an individual’s lifespan and spanning across generations after them, that stems from a large-scale traumatic experience (Henderson, Acquaye-Doyle, Waites, & Howard, 2016; Brave Heart, 2003). Black people as a whole have a history of sexual violence that is teeming with racism and white supremacist beliefs. The ramifications of how these warped ideologies have affected Black people are visible in Black women’s lack of reporting and historical accounts of false accusations against Black men.

White men who raped women, regardless of race, were rarely punished by the legal system at the time (Dayton, 1995). The women in these cases were often found to be at fault, which made them believe that their experiences were not valid. So the Black women who were raped by
white men often did not bother reporting their assaults to law enforcement because they understood that it was very unlikely for the case to work in their favor anyway (Dayton, 1995). White women who were allegedly raped by lower-class men, or men of color, were far more likely to receive court cases. Primarily because the rape of these women was considered disrespectful towards the higher-class man to whom the woman was connected (whether she was their wife, their daughter, their sister, etc.) (Dayton, 1995; Lindemann, 1984). In these cases, the woman’s agency was inconsequential. The woman’s worth was a direct result of the male with whom she is socially connected. Davis (1983) notes that in the United States, as with most capitalist countries, rape laws were originally introduced to our social context for the protection of men in the upper classes whose daughters and wives could be victims of sexual assault. Specifically, a rapist was defined as “a man who unlawfully and carnally know any white woman against her will or consent” (Sommerville, 2004, p. 148)

This false equivalency connecting a woman’s social worth to that of her male counterpart can still be seen in our social sphere through bystander intervention programs targeted towards educating young men. These programs typically seek to work with people (predominantly those who occupy the most dominant social positions of being men, white, and heterosexual) and teach them to see those around them as “friends, family members, teammates, classmates, colleagues, and co-workers of women who are or might one day be abused, or men who are abusive or perhaps going down the wrong path” (Katz, 2011, n.p.). This type of bystander engagement is problematic in that it calls upon individuals to situate women, or potential victims in these scenarios, as people close to them to convince them to want to intervene in a situation that appears to be harmful. In this context, women are not seen as worthy of help based solely on their humanity; they are objectified and deemed valuable only in their relation to the man, or the bystander.

Without an understanding of how race and other social categories influence sexual assault, it is impossible to recognize how implicit bias may play a role in a survivor’s willingness to disclose about their assault. Implicit bias refers to “the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner” (Kirwan Institute for the Study of Race and Ethnicity, 2015). Implicit bias is associated with people’s social characteristics such as race, ethnicity, age, and appearance. In the case of Black women who have experienced sexual assault, the implicit bias that they may receive when disclosing about their assault could be directly connected to the historically negative stereotypes of Black women’s sexuality. Trachtenberg (2017) suggests that it is important to study the effects of implicit bias for both the perpetrator and the survivor based on the sociohistorical intersection of rape and race. Namely, institutions of higher education must become cognizant of this intersection and its perception of implicit bias in how their administration treats sexual assault perpetrators and survivors. Survivors of sexual assault who do not believe that they receive appropriate responses from their colleges and universities become at risk for leaving school or having their experience pose a threat to their educational attainment (Trachtenberg, 2017).

Most sexual violence on college campuses goes unreported despite the physical and mental health consequences and the implementation of prevention programs on campus (Fisher, Daigle,
Cullen, and Turner, 2003). The number of unreported cases of sexual assaults against Black women college students are thought to be even greater (Tillman et al., 2010), though the lack of contemporary research on women of color and sexual violence makes this concept challenging to identify accurately (Harris & Linder, 2017). Harris and Linder (2017), however, note that some scholars report Black women students report experiences with sexual violence at higher rates than white students (36% to 26.3%, respectively) (Gross, 2006). Other scholars report that Black women who attended predominantly white institutions (PWIs) reported more frequently (13.7%) than those who attended historically Black colleges or universities (9.7%) (Krebs et al., 2011). While these statistics do counter one another, furthering the notion that Black women’s reporting methods differ amongst the literature, these statistics do maintain that race, gender, and other social categories are especially relevant in sexual violence research.

In 1983, Angela Davis noted that an “awesome fact has come to light: appallingly few women can claim that they [Black women] have not been victims, at one time in their lives, of either attempted or accomplished sexual attacks” (p. 172). Davis’ statement exemplifies how pervasive of an issue sexual violence was for Black women. Unfortunately, studies examining Black women’s experiences with sexual assault typically employ a comparative analysis (Reid & Kelly, 1994), comparing Black women’s experiences to that of white women. Comparative analysis, however, makes it difficult to parse which experiences are specific to which specific identity characteristics. It is important to contextualize the sociocultural and sociohistorical factors of a population of interest when attempting to understand their experience. Fostering this clarity can be accomplished by centering that population of interest in social research.

Sexual assault survivors of color may have different needs to feel appropriately supported after an assault, and it is important for institutions of higher education to acknowledge and reasons appropriately to this. Between 40-60% of Black women report having experienced coercive sexual contact by age 18 (Black Women’s Blueprint, 2012). The National Intimate Partner and Sexual Violence Survey (2010) found that 41% of Black women experienced sexual coercion and other types of unwanted sexual contact, which equals about 3.1 million Black rape survivors and 5.9 million Black survivors of other forms of sexual violence. Krebs, Lindquist, & Barrick (2011) found that 91.7% of Black college women reported being raped by Black men when studying the effects of sexual violence at historically Black colleges and universities (HBCUs). And for Black college women, perpetrators were classmates, 37%), acquaintances (29%), and friends (26%) (Krebs et al., 2011).

Women of color tend to be at the bottom of the social hierarchy, which Zinn & Thornton Dill (1996) attribute to the patterns of hierarchy, domination, and oppression based on race, class, gender, and sexual orientation that are built into the structure of our American society. The narrative around sexual violence largely focuses on a particular subset of people: heterosexual, cisgender, white women (Madkins in Rosenblatt, 2017), so for sexual violence survivors who fall outside of that category, they may not as easily identify themselves as a victim since they do not fit the popular narrative. Women students who do not acknowledge their sexual assaults often blame themselves or minimize the situation (Cleere & Lynn, 2013; Edwards, Probst, Tansill, Dixon, Bennett, & Gicyz, 2014). This is especially true if their experiences do not match the
popular narrative or they do not match the characteristics of a rape survivor based on our societal rape script or rape myth (Orchowski, Untied, & Gidycz, 2013; Turchik, Probst, Irvin, Chau, & Gidycz, 2009). Black women feel the brunt of this cognitive dissonance the most (Harris & Linder, 2017). They often respond to a sexual assault with self-blame whereas white women students respond with feelings of isolation (Littleton & Dodd, 2016). Black women survivors are less likely to report or seek help after an assault due to shame and a desire to protect members of their community for fear of perpetuating negative stereotypes of Black men (Francis-Favilla, 2017; Haskins, 2017). It is important that colleges and universities across the nation do not overlook this very pertinent aspect of sexual violence: race and oppression.

These civil rights activists protested to center Black women in the national narrative about sexual assault in the places where they were: their communities, on public transportation, and within white households where they worked as domestic servants (West & Johnson, 2013; McGuire, 2010). For example, the 1955 Montgomery bus boycott in Montgomery, Alabama was the result of Black women’s historical activism to protect Black women from sexual assault (McGuire, 2007). One story that consistently remains excluded from the national narrative about campus sexual violence is that of Betty Jean Owens.

On Saturday, May 2, 1959, a group of four white men in Tallahassee, Florida who made a pact too “go out and get a nigger girl” with whom they would have an “all night party” (McGuire, 2004, p. 906). These men found Betty Jean Owens and three of her classmates from Florida A&M University (an HBCU), dressed in formal attire as they were coming home from a school dance. The four white men held guns to the two Black men, forced them to leave the two women they were with. Betty Jean was eventually left alone after her friend, another Black woman, broke free from the men’s grip and got away. Through the night, the men proceeded to rape Betty Jean seven times. Shortly after, the white men were arrested, held on trial, and convicted of raping Owens by an all-white jury. McGuire (2004) notes that this case was a dramatic shift in setting precedence at the time based on the historical oppression of white supremacy and sexual domination. What resulted from this story was the first ever campus demonstration against sexual violence. This demonstration included over one thousand students gathering in the university’s outdoor quad space holding signs asking for justice, singing hymns, and reciting prayers towards the media (McGuire, 2004). The Florida A&M University demonstration featured the first student protest of its kind, and yet, white feminist over a decade later ultimately received the credit for raising awareness about sexual violence on college campuses.

During the 1970s, the feminist movement began to establish sexual violence as a ‘gender-based’ social problem (Donat & Emilio, 1992). Despite Betty Jean Owen’s case resulting in the first on-campus demonstrations against sexual violence, white feminists are largely given credit for highlighting the impact of sexual assault on college campuses during the 1980s (Belknap & Sharma, 2014). It started with an article submitted to Ms. Magazine (a widely published feminist magazine) by Karen Barrett titled “Date Rape: A Campus Epidemic” (Barrett, 1982). Barrett’s article served as white feminists first public acknowledgment of rape occurring by someone known to the survivor.
At the time, campus rape was largely credited as a movement bred from white feminist praxis (Harris & Linder, 2017). Scholars agree, however, that the discourse surrounding our current understanding of sexual violence and its prevalence can be traced back to Black women in slavery and the power and control wielded by white abusive slave owners (McGuire, 2010; hooks, 1995). Wanzo (2009) notes that Black women’s lack of recognition as the original activists working against sexual violence is due in part of their “affective agency.” A woman’s affective agency is based on their historical power to produce public outrage based on their stories and shared suffering (Wanzo, 2009). Though Black women’s suffering through slavery and the Jim Crow era as the least protected victims of sexual abuse by white men, once white women began to see themselves as the recipients of sexual violence by white men, therein began the social acceptance of campus sexual violence by white men as a societal issue.

Sexual violence prevention efforts in higher education presently operate using a race-neutral approach towards policy and programming (Wooten, 2017). This approach does not account for cultural distinctions of sexual assault nor does it encompass how historical accounts of sexual assault may impact a social group’s response mechanisms. For instance, as previously stated, Black women’s history with sexual violence is multi-faceted and directly ties to their present resistance to engaging with legal systems to address their violence (Wooten, 2017; Crenshaw, 1989). As Wooten (2017) notes, the legal system was not designed to protect Black women from rape from white men. She writes that “policy presently renders the victim of sexual violence a neutral figure, but we are never neutral actors. Our histories are written onto our bodies, and our encounters with one another draw upon these histories” (Wooten, 2017, p. 408). Wooten argues that instead of parsing apart Black and white women’s experiences with sexual assault, they are instead considered to be a homogenous group of women. Because of this lack of justification for differing needs and supports, Black women are at an increased risk of being blamed for their assault and less likely to report their assaults (Donovan & Williams, 2002).

Wooten (2017) goes on to argue that race-neutral approaches to sexual violence prevention stem from a mentality that to ‘see’ race is to ‘be racist,’ whereas the exact opposite is the truth. To ‘see’ race is to understand the need for services to be culturally competent to provide the most appropriate types of support. Wooten posits that race-neutral policy favors whiteness. When a program purports to apply to all what it typically means, Wooten (2017) notes, in the context of sexual violence prevention efforts specifically, is that the efforts are generally in response to the sociocultural context of white women’s experience with sexual violence. Wooten refers to this as “colour-blind or race-neutral policies and programming [that] normalizes Whiteness while masquerading as the equalisation of all races” (2017, p. 406). Miller & Cross (2006) offer that research that includes race and ethnicity is vital as it helps to identify biases related to race/ethnicity, it assists in the development of more culturally appropriate interventions, and it creates more of a focus on race/ethnicity. This need is expressly pertinent to the discourse that we use to describe sexual violence.

There are several federal laws in place to provide guidelines and requirements for sexual violence prevention strategies and policymaking for university administration. Title IX, the Clery Act, Campus SaVE Act, and the 2011 Dear Colleague Letter (Harris & Linder, 2017; Cantalupo,
2009; Duncan, 2014) are recognized federal policy guidelines related to sexual violence prevention on campuses. Scholars note that these policies focus on responses to sexual violence (typically referred to as sexual misconduct on campuses) as opposed to prevention (Silbaugh, 2015). In 2011, the U.S. Department of Education issued the Dear Colleague Letter which served as notice for colleges and universities that receive federal funding through student loans that they must exercise Title IX compliance. Per the guidelines, institutions of higher education are required to “address and prohibit sexual harassment and discrimination” (Harris & Linder, 2017). To assist with compliance specifically focused on sexual violence prevention, the National Institute for Justice provided an additional model to help increase college and university’s compliance efforts with Title IX (McMahon, 2008).

The White House Task Force to Protect Students from Sexual Assault released a report in 2014 titled Not Alone (White House Task Force to Protect Students from Sexual Assault, 2014). This report was the first comprehensive document released by the task force that President Obama developed to address concerns from student survivors of campus sexual assault. Wooten’s (2017) critique of this document included several problematic factors that limit its attempts to address campus sexual assault. First, while the document calls for sexual violence prevention efforts to be effective to ensure that survivors get the support they need, the document makes no mention of cultural competency based on racial or ethnic differences outside of the Office for Victim Assistance’s [campus] climate survey guidelines. The lack of focus on cultural competence is problematic because when policy excludes the impact of race, it typically centers whiteness and white responses to sexual violence as the norm (Wooten, 2017).

Wooten (2017) furthers this notion, stating that responses to victim blaming are also typically racially charged. White women, she argues, are typically the only survivors given victim-blaming protections. The White House Task Force to Protect Students from Sexual Assault, part of the President Obama’s first response after the 2011 Dear Colleague, has made great strides towards bridging the gap between the legal mandates and students. The task force has made a concerted effort to assist students in understanding their legal rights to receive support and protection from sexual violence at their colleges and universities. The glaring oversight of not including race/ethnicity as a specific component of sexual violence prevention efforts is disheartening. Trachtenberg (2017) posits that in an effort to become compliant with changing Title IX regulations, some colleges and universities have amplified their efforts to investigate these matters while simultaneously amplifying their efforts to become more diverse and inclusive of students of all races. Trachtenberg cautions that in their efforts to be diverse, it is possible that colleges and universities may also be inadvertently maintaining prejudice and discriminatory behavior by deflecting sexual predation on racially minoritized students (2017; Lieberwitz et al., 2016).

Conclusion
The social realities of these students and the extent to which they may or may not feel the repercussions of these prejudices is wholly dependent on the intersections of race, gender, class, and sexuality that they occupy. For Black women, specifically, who have experienced a sexual assault there is significant racial oppression that they face as they are often not as readily believed as white survivors. If a Black woman discloses about her sexual assault and does not feel supported, there are unique circumstances that might impact her level of comfort and connection to her college or university. This woman faces potential ostracization on her predominantly white campus because of her positionality as a Black woman in a largely white campus community. If the perpetrator also happens to be Black, more specifically a Black man (as they hold more social power than Black women), then this survivor simultaneously runs the risk of being ostracized within the Black community on campus as it tends to be smaller and more close-knit. For a Black women sexual assault survivor, reporting their assault to authorities or disclosing to anyone in their social network could result in the loss of a large part of their social systems on campus and their support systems on campus. For some Black women, the threat of losing these intraracial connections could be enough to make her want to try to move beyond their assault and force themselves to believe that it is not as big of a deal as it truly is.

Young (1986) and Dorr (2004) contextualize the racial factors that contribute to sexual assault; they note specifically that Black women survivors are treated more harshly than white survivors. White survivors are often considered more legitimate victims as their experiences tend to align with the mainstream narratives about sexual assault. We now know that this is because contemporary sexual assault policy is based primarily on the experiences of white women (Wooten, 2017). Wooten argues that survivors are never contextualized by their sociocultural, historical positions regarding their race or ethnicity which is problematic as it pushes sexual violence prevention efforts towards a race-neutral stance. Wooten goes on to mention that when programming ignores both race and gender, Black women are unfairly placed in a homogeneous position with all women and therefore never receive direct attention as it is not specific to their sociocultural histories. This disparity is especially poignant when it comes to institutional support.

Black women scholars who have written about the sexual violence experienced by Black women refer to it as such, broadening what constitutes as violence. Similarly, the Black women scholars who founded Black feminist thought make a clear delineation between how sexual violence should contextualize Black women’s experiences. They argue that Black women’s oppression exists intersectionality, or at convergence points rather than in one particular category (Crenshaw, 1989). For example, white women feminists view sexual violence as a gendered issue related to oppression based on a patriarchal context while Black women experience the ramifications of both gender-based oppression and racial oppression where Black men’s experience are centered in conversations about race (Collins, 1990). Given this positionality, Black women’s voices are erased in both conversations on gendered oppression and racial oppression. Theories such as Black Feminist thought, Intersectionality, Critical Race Theory, and Feminist theory are so important in centering the experiences of Black women with an understanding of how oppression and the dominant narratives are contextualized in the discourse about Black women’s experience with sexual violence.
This study is structured to centralize Black women’s experiences and contextualize them within the larger power structure of higher education, which calls for a specific method that will allow for a level of engagement with real-life experience and human dynamics (Wang & Geale, 2015). Narrative inquiry works to contextualize participant’s rich responses in a way that moves beyond theory and connects them to a larger social context, bridging the gap between individual and culture (Clandinin & Connelly, 2000; Dewey, 1938). For the purposes of this study, people who self-identify as Black and a woman will embody the standpoint for this research study. This study will focus on contextualizing their experiences with sexual assault, centering their voices within higher education, and exploring their stories as told directly by them.

References


71. Duncan, S. H. (2014). The devil is in the details: Will the Campus SaVE act provide more or less protection to victims of campus assaults. JC & UL, 40, 443.


**Leatra B. Tate**

Leatra B. Tate is a Ph.D. candidate at Point Park University. Leatra has been at Point Park since 2013 where she obtained her master’s degree in clinical-community psychology, worked as a graduate assistant and adjunct faculty member, and is currently completing her doctoral degree in the inaugural cohort for the community engagement program. Leatra’s research focuses on sexual violence and survivor support, particularly for marginalized populations in higher education. Outside of academia, Leatra works full-time as a Health Advocate at Allies for Health + Wellbeing, located in East Liberty, where she provides comprehensive sexual education for youth around Allegheny County as well as case management and free HIV/STI testing.
Freedom Dreams: Cultural Work as Resistance in the Hill District of Pittsburgh

Kendra J. Ross
Doctoral Candidate, Community Engagement, Point Park University

Abstract

This paper consists of a portion of the author’s preliminary dissertation research on the role that cultural workers in Pittsburgh’s Hill District play in mitigating issues confronting the community, such as growing economic inequality and the threat of gentrification and displacement. Using feminist qualitative research methods, this study attempts to: 1) deconstruct dominant definitions of cultural work and 2) contest prevailing notions of “resiliency” often used to ascertain the development needs of marginalized communities. The ultimate aim of this research project is to illuminate the everyday acts of resistance that cultural workers embody and deploy, which work to challenge neoliberal development, help maintain the Hill District (a predominately Black community) as a social space; and dislodge the primacy of economic return on investment as an indicator of the community’s value and vitality.

Keywords

Critical Geography, Black Feminist Thought, Gentrification, Community Development, Cultural Work

Introduction

The city of Pittsburgh has been undergoing a massive transformation which has thrust it into the national spotlight in recent years. In particular, it has been highlighted by national media outlets as one of the United States’ “most livable” cities due to its renowned public and private sector investment in the arts and technology, nationally and globally-ranked universities, rich cultural landscape, unique topography, and affordable cost of living (Visit Pittsburgh, n.d.; Russo, 2017). However, due in part to this newfound admiration and attention as well as other political and economic factors, such as globalization and the proliferation of neoliberal development, affordability is waning while the most vulnerable of Pittsburgh’s citizens are bearing the brunt of these growing pains (Russo, 2017). This is particularly true of residents located in communities such as the historic Hill District, a predominately Black neighborhood which is geographically adjacent to many of the city’s key cultural and business districts; yet isolated from these neighboring areas by decades of federally-funded urban renewal. The after effects of this renewal, which began during the middle part of the 20th century, are still being felt today (Koelsch, Bennett, and Goldberg, 2017).

Many predominately Black communities, like the Hill District of Pittsburgh, are striving to improve their neighborhoods while at the same time trying to mitigate the risk of further displacement and gentrification in the midst of a global economy which has created unprecedented levels of economic inequality and precarity (Cain, 2014). This study will illustrate the role that cultural workers in a community play in helping to abate some of the impact of these
issues. More specifically, this study will uncover the everyday acts of resistance that cultural workers embody and deploy, which challenge neoliberal development and help maintain the Hill District (a predominately Black community in Pittsburgh, Pennsylvania) as a social space. Furthermore, this study seeks to expose hegemonic attempts at social erasure through racialized policies, discourse, and development practices and explore the ways in which Hill District cultural workers push back against these forces, (re)define the preservation and development of their community; and dislodge the primacy of economic return on investment as an indicator of its value and vitality (Cain, 2014).

Statement of the Problem

Once a thriving community that was home to hundreds of businesses, a nationally recognized newspaper, Negro League baseball team, and vibrant jazz scene, the Hill District of Pittsburgh was swept up in the wave of urban improvement and renewal projects that began to occur across the nation in the 1950s. As a result of this renewal, thousands of residents were displaced from the neighborhood and/or crammed into government housing projects which became crime-ridden and led to the further decline of the community. The decimation of the already overburdened community and the hopelessness it engendered set the stage for further destruction as a result of the riots of 1968 which came about due to the Dr. Martin Luther King, Jr. assassination (Goldberg and O’Connor, 2017).

Over the last several decades following this series of events, a story began to take shape about the Hill District as a community suffering from what urbanist/psychiatrist Mindy Fullilove calls “root shock”; which is essentially, the inability to psychologically recover from all of the trauma it had faced in prior years (Fullilove, 2016 as cited in Goldberg and O’Connor, 2017). However, this narrative had also begun to center the social pathologies (i.e. crime, drug addiction, blight, etc.) that were symptoms of these traumatic events rather than the events and their devastating effects themselves. This is especially true of mainstream media and popular discourse throughout the Pittsburgh region and beyond, which tend to paint the Hill District as a hotbed for poverty and all of the ills that come with it within inner cities across the nation (Klein, 2017).

Now some sixty plus years after the first devastating blow of what writer James Baldwin referred to as “Negro Removal”, the residents of the Hill District (and other predominately Black neighborhoods around the city) are bearing witness to a new renaissance of technological innovation and creative productivity that has emerged throughout the city and within close proximity to their community (as cited in Goldberg and O’Connor, 2017). Still, the opportunities and hope that have come with these transformations at the city level, seem far from most Hill District residents’ reach. From their point of view, the only promise these changes have offered their community thus far are greater economic anxieties, more expansive racialized development projects, and a perpetual fear of displacement. Nonetheless, residents and workers of this tenacious community persist in fighting for their neighborhood and the promise of its’ future (Klein, 2017).

Many of these residents and cultural workers are artists, culture producers, laborers, worshipers, homemakers, barbers, and others who have made it their business to offer a counter-narrative to the Hill District as a downtrodden and distressed community. Through their cultural work, discourse, and mere presence in the community, they continue to stake a claim to the community as a predominately Black social space with a storied past, complicated, but meaningful present,
and a bright future which should and will include those who have lived, worked, and toiled there for years. Unlike the real estate developers and regional retailers who are lured into the community with incentives and tax credits by the government in exchange for the possibility of an economic return on investment, these unsung community warriors, who for the purpose of this study are referred to as cultural workers, continue to embody the Hill District, labor in the shadows of the development occurring all around them, and strive towards justice at the margins of a transforming city to demonstrate the value of their community and its residents outside the boundaries of neoliberal development practices and capitalist calculations (Belko, 2012). Still, much of the work of these cultural workers goes unnoticed because they do not neatly fit into popularized, narrow perceptions of what a cultural worker is and what they do (Dávila, 2012).

**Purpose of the Study**

The purpose of this study is two-fold: first, to deconstruct dominant definitions of cultural work which often fail to recognize the contributions of those working at the margins of a city’s cultural economy, particularly in “distressed and predominately African-American communities”; and, second, to contest prevailing notions of “resilience” and “value” as it relates to these communities through the lens of cultural workers embedded within them (Urban Redevelopment Authority, n.d.). More specifically, this study investigates what it means to be a cultural worker in a predominately Black community, the Hill District in Pittsburgh, and the social, cultural, and political value this works brings to the community as well as its development and preservation.

**Research Questions**

The research method selected for this inquiry is a qualitative case study. Through in-depth interviews, focus groups, and archival and document analysis, the researcher will explore the nuanced particularities of cultural work in the Hill District as a form of resistance against neoliberal development.

The following research questions will be addressed:

How do Hill District cultural workers embody the Hill District?
What are the everyday acts and articulations they perform as cultural workers in the Hill District?

**Theoretical Framework**

The theoretical frameworks which will guide this study on cultural workers resisting in the Hill District of Pittsburgh are: Black Feminist Thought/Standpoint Theory (Davis, 1981; hooks, 1981; hooks, 1984; Lorde, 1984; Crenshaw, 1991; Collins, 2000) and Critical Feminist Geography (Rose, 1993; Massey, 1994; Gilmore, 2002; McKittrick, 2006; Wright, 2008). In concert, these theoretical frames provide a rigorous, intersectional lens for exploring the relationship between contested spaces/places and marginalized bodies without losing sight of the specificity of the cultural context. Likewise, inherent to these theoretical projects is an acknowledgement of the value of bringing together theory, praxis, and activism in pursuit of examining social phenomena through engaged scholarship, while maintaining a level of transparency about the researcher’s positionality and relationship to the site and/or phenomena being studied (Coogan-Gehr, 2011). Finally, by integrating these theoretical frames in this way
the researcher hopes to uncover the nuance inherent to the ways in which the Hill District is maintained as a social space by its local residents and cultural workers.

**Black Feminist Thought/Standpoint Theory**

In the seminal text *Black Feminist Thought*, sociologist Hill-Collins (2000) examines the “situated, subjugated standpoint of African-American women in order to understand Black feminist thought as a partial perspective on domination” (269). She works to clarify the relationship between race and gender from this perspective which she identifies as “analytically distinct, but in Black women’s everyday lives, they work together” (269). Her focus here is not so much on how a Black women’s shared knowledge differs from other groups, but on the ways in which the experiences of Black women “serve as one specific social location for examining points of connection among multiple epistemologies” (270). Collins argues against the claim that a Black women’s standpoint is necessary for the reason that black women face greater oppression than other groups. Instead, she insists that such a standpoint exists for the purpose of “calling into question” that which “currently passes as truth” and disrupts the means by which one arrives at the truth (271). In her view, Black feminist epistemology is born of a “connection between experience and consciousness that shapes the everyday lives of individual African-American women” (24).

Collins is careful to point out that a homogenous Black women’s standpoint does not exist. Still, she does speak to the historical context in which a collective standpoint was made possible as a result of the “racial segregation in housing, education and employment,” which “fostered group commonalities” (28). In the end, Collins works to convey the need for Black feminist thought to both wrestle with Black women’s “lived experiences and aim to better those experiences in some fashion” (31).

**Critical Feminist Geography**

In her groundbreaking text, *Space, Place, and Gender*, Massey (1994) explores the connection between personal identities such as gender and the “social relations of space” (3). More specifically, the author uncovers the myriad of ways in which spaces and places are gendered and gender is, in turn, constructed in relation to particular spaces and places. In a similar vein, McKittrick & Woods (2007) suggest the need for giving voice to marginalized communities in geographic scholarship and draw attention to the intersections in which these groups “have struggled, resisted, and significantly contributed to the production of space” (6). McLean (2014) contends that feminist research is useful in grappling with the gendered and racialized dimensions of space and place as it consists of “work that acknowledges and decenters intersectional inequalities and hierarchies” (675). Similarly, Wright (2008) presents critical feminist geography as a space that allows for the “unification of research and activism” in so far as it is often concerned with both “making ‘activism count’ within the academy” as well as “making women’s politics ‘count’ within activist networks” (379).

**Significance of the Study**

The impetus for this feminist case study comes out of the researchers own experience cultural organizing in the Hill District of Pittsburgh which has consisted of work centered around supporting the community’s benefit agreement with the city and local business leaders known as
the Hill District Master Plan. One of the main tenets of this plan is to mark the Hill District as a space for African-American arts and culture (Hill Community Development Corporation, 2011). In doing this work over the past two plus years, the researcher began to witness her research interests take shape on the ground as she worked alongside and listened to the stories of artists, activists, community organizers, and cultural workers in the community.

While the local media, governmental entities, academic institutions, and Pittsburgh residents and organizations in and outside of the neighborhood sometimes paint a negative picture of the neighborhood and point to its decline and/or lack of substantial economic progress, local artists and cultural workers often hold a different vision for the community: one that celebrates the past accomplishments of local cultural workers and looks hopefully to the future. This study is motivated by the “freedom dreams” of these Hill District cultural workers who, through their everyday actions and discourse, are able to see beyond the trauma, displacement, and accompanying pathology and resist the forces that work to create these negative conditions, to imagine the Hill District as a beacon of culture and community in the region and beyond (Kelley, 2002; Dávila, 2012).

Definition of Terms

For the purposes of this study, the following definitions will be used for key terms throughout this paper:

**Cultural work** – This work includes “activities that on a daily basis provide the ‘cultural’ content in communities” (Dávila, 2012, 78). Examples include but are not limited to: hair styling and barbering, art making, crafting, street vending, preaching/ministering, storytelling, guiding neighborhood tours, cultural organizing, and cooking.

**Cultural worker** – Individuals who “make their living from culture” and/or “provide the ‘cultural’ content that shapes a neighborhood's culturally specific ethnoscape” (Dávila, 2012, 199; 78). Moreover, this definition of cultural worker is meant “to debunk the myth of artists working in isolation from the community”, makes space for both the informal and formal; amateur and professional; and includes community members who work “closely with marginalized communities, and in many ways, are ‘popular educators’ and ‘organic intellectuals’” (Leano, 2014).

**The arts** - Include, but are not limited to: “performing arts (e.g. dance, drama, music, etc.), visual arts (e.g. painting, sculpture, etc.) and/or media arts (digital photography, filming, etc)” (Wright, 2007, page 123).

**Creative placemaking** – a process in which “partners from public, private, non-profit, and community sectors strategically shape the physical and social character of a neighborhood, town, city, or region around arts and cultural activities” (Markusen and Gadwa, 2010, page 3).

**Neoliberalism** – “the economic and social philosophy that imposes free-market fundamentalist values on all human interactions” (Hamer and Lang, 2006, p. 899).

**Resistance** – “…actions that reject subordination by challenging the ideologies that support subordination” (Weitz, 2001, 667).

**Social space(s)** – The space through which human beings as “biological beings and social agents” are constituted and “take place,” exist, and are located in relation to other locations and social agents” (Bourdieu, 1996).
Review of the Literature

With these definitions in mind, this study will briefly touch upon some of the key literature aimed at supporting the proposed research questions. The purpose of this literature review is to frame this study within the context of existing research on cultural work, geography, and development, and to demonstrate the ways in which this inquiry can contribute to this existing body of literature and the burgeoning field of Community Engagement scholarship.

This review of the literature will consist of four major themes:

An examination of literature centered around issues of race and space drawn primarily from Critical Geography (Massey, 1994; Delaney, 2002; McKittrick, 2006; McKittrick and Woods, 2007) in an effort to establish some context for the ways in which social space is constructed and embodied by cultural workers in the Hill District.

A deconstruction of popularized meanings of cultural work (and cultural workers) (West, 1990; Giroux, 1995; McCoy, 2012) and a Black feminist reimagining of the term grounded in the context of predominately Black communities like the Hill District; as well as an historical analysis of the way this study’s conception of cultural work is taken up in and derives from social movements and other culturally-specific forms of resistance (Scott, 1985; Kelley, 2002; Dávila, 2012).

A critical analysis of literature on neoliberal development (Brenner and Theodore, 2002; Harvey, 2005; Brown, 2015) and its relationship to spatialized racism as a key target of resistance by Hill District cultural workers.

A survey of key literature and tenets of this study’s primary theoretical frames: Black Feminist Thought/Standpoint Theory and Critical Feminist Geography.

The illustration above (Figure 1) outlines the way in which the theoretical frameworks taken up in this study support the bodies of literature explored in the first three subsections of this chapter. More specifically, this figure illustrates the fact that cultural workers (examined here through the

![Figure 1](image-url)
lens of Black Feminist Thought/Standpoint Theory) are the core of this study and their work is contextualized through an exploration of social space (investigated vis-à-vis Critical Geography). By mapping out the relationship between these bodies of literature and their theoretical underpinnings in this way, the researcher hopes to demonstrate how the cultural workers and the social space(s) in which they work and co-create are mutually constitutive phenomena which, in concert, uncover new and productive sites for inquiry around community development and preservation.

For the purpose of this brief summation of the final research study, two of the four bodies of literature will be discussed: 1) Race and Space and 2) Deconstructing Cultural Work.

**On Race and Space: Towards New Black Geographies**

Since the latter part of the 20th century, scholars have been exploring space as a key analytical site for understanding how power works to privilege certain groups and subjugate others (Rose, 1993; Massey, 1994). More recently, geographers—particularly those studying sites in the United States—have begun to wrestle more intentionally with questions of how race and space converge (Delaney, 2002; McKittrick and Woods, 2007). This turn towards an intersecting analysis of race and space finally acknowledges the fact that, as Toni Morrison purports, our world is a “wholly racialized” one and should be analyzed as such (Morrison as cited in Delaney, 2002, p. 6). Moreover, this realization has opened up space for geographers and other researchers to observe the ways in which race (as well as other social phenomena such as gender, class, and so on) and space are mutually constitutive as they inform and shape each other, and together help shape the identities of those who exist in particular spaces and give them meaning (Massey, 1994; Delaney, 2002; Gilmore 2002; McKittrick, 2006). Within the boundaries of this mode of analysis, Delaney (2002) poses a probing question which will guide this section of the study, which is “how does the racial formation shape space, give meanings to places, and condition the experience of embodied subjects emplaced in and moving through the material world” (p. 7)?

Scholars working at the intersection of race and geography shed light on the role that power plays in shaping the way space is constructed and comprehended and how that, in turn, works to shape the identities and experiences of those within those spaces. Delaney (2002) posits that by engaging with race, geographers have learned more about the way that “space works to condition the operation of power and the constitution of relational identities” (p. 6). Conversely, Gilmore (2002) suggests that an understanding of “the territoriality of power is key to understanding racism” (p. 22). Thus, conversations about race and space are not only instructive, but germane to understandings of how power operates in and orders our social world. Moreover, as Tickamyer (2000) concludes, “spatial arrangements are both products and sources” of power differentials and inequalities such as racism, sexism, and the like (p. 806). To that end, to grapple with discourse in American culture around race, racism and other forms of inequality, one must also wrestle with “the formation and revision of all American spatialities at all scales of reference” in order to gain a comprehensive perspective on how power functions in American society (Delaney, 2002, p. 7).

In *Black Geographies and the Politics of Place* (2007), scholars of geography and black studies situate this discourse on race, space, and power in a Black context. The authors suggest that at the core of this discussion—as it relates to geography as a discipline—is the problem of how Black geographies are often consigned “to bodily, economic/materialist, or metaphorical categories of
analysis” (McKittrick and Woods, 2007, p. 6). The editors of the collection caution that far too often discussions of Black spaces are centered around statistics and not the ways in which communities of color “have struggled, resisted, and significantly, contributed to the production” of these Black spaces (p. 6). While the text goes on to suggest that this misrecognition is not true of all scholars who analyze these phenomena, they stress the “need to recognize the ease with which race and space are two themes in social theory that are fundamentally essentialized” and taken for granted (p. 7). Approached with this in mind, researchers may be inclined to shift away “from singling out the body, the culture of poverty, or the material ‘lack’ implied by spatial metaphors,” and move towards “reimagining the subject and place of black geographies” in ways that recognize the fact that “there are always many ways of producing and perceiving space” (p. 7).

In *Demonic Grounds: Black Women and the Cartographies of Struggle* (2006), McKittrick advises that “Black matters are spatial matters” (p. xii). The author goes on to discuss the ways in which “space and place give black lives meaning in a world that has, for the most part, incorrectly deemed black populations and their attendant geographies as ‘ungeographic’ and/or philosophically undeveloped” (p. xiii). Throughout this manuscript, McKittrick attends to a Black feminist geographic reading of the ways in which “black women are shaped by, and challenge, traditional geographical arrangements” (p., xvi). Thus, in the same way that acts of subjugation are spatial, the means by which Black women negotiate their positionality and critique the social world are spatial or perform what McKittrick calls a kind of “respatialization” (p. xix). This way of thinking about the way Black women embody, articulate, and/or think about their place in spaces is instructive, as it points to a form of everyday resistance that can be performed by not only contesting one’s subjugation in dominant spaces, but by simply moving through and taking up space in a particular kind of way.

In “*Defend the Ghetto*: Space and the Urban Politics of the Black Panther Party” (2006), Tyner explores the way space has factored into the black radical intellectual tradition. The author recalls that groups like the Black Panther Party employed “geographic strategies” which were “contextually specific” (p. 105). Often misconstrued as singularly motivated by separatism, the primary focus for groups coming out of the Black Power Movement was the empowerment of Black communities and spaces. In short, the political motivation and work carried out by the Panthers and others were decidedly territorial and occurred in public spaces. These “scalar territorial politics”, as Tyner calls them, were meant to not only end the oppression of black communities, but to elevate the culture and “generate a new black ethos” (p. 106-107).

In *“Sittin’ on Top of the World”: The Challenges of Blues and Hip Hop Geography* (2007), Woods explores the role that the blues tradition has played in crafting indigenous yet mobile geographic understandings of black and working class communities. The author goes on to coin the term “blues geography” to describe an ethos intent upon addressing and overcoming the plight of “marginalized people in marginalized places” (p. 60; 69). Woods aptly marks his argument in this way for the reason that, as he suggests, “the blues has a highly developed geographic critique embedded within it,” therefore, the further development of a blues geography might address and inform “the creation and preservation of stable and sustainable black working-class communities as one of the highest and best uses of land” (p. 73; 75).
The discourse surrounding the relationship between race and space would be grossly incomplete if it only addressed Black communities and other groups who are primarily subjugated by spatialized hegemony. Thus, geographers interested in race also address the way whiteness dominates spatial considerations and is naturalized and normalized in geographic theory and in praxis (Delany, 2002; McKittrick, 2006; Lipsitz, 2011). As Lipsitz (2011) points out, “the racial meaning of place makes American whiteness one of the most systematically subsidized identities in the world” (6). Space, then, works as a crucial site of inquiry for wrestling with the constitutive work that hegemonic power does to subjugate and marginalize particular bodies and privilege others in ways that appear to follow the natural order of things (McKittrick, 2006).

Scholarly discourse about how space is racialized and conversely race is spatialized helps illuminate our understanding of each phenomena, how they are constructed and how they play out in the social world. Geographers who engage questions of race point to the fact that space, like race itself, is socially constructed and ladened with value. Space is not an inanimate thing or state that “just is” (McKittrick and Woods, 2007). Instead, as Tyner (2007) suggests, it comes about “through interactions of ideas (or discourses) and practices” (p. 218). As such, race helps us understand the ways in which physical spaces become particular kinds of social spaces and take on different meanings. Moreover, examining space through a racial lens shows us that there are myriad of ways to produce and perceive space.

As it relates the subject of this study and the analysis of the union between race and space, the next section will direct this inquiry toward an understanding of how cultural workers indigenous to Black communities help construct these kinds of geographic counter-narratives and allow for new ways of knowing and being in these spaces through their everyday praxis.

Deconstructing Cultural Work

Scholars, cultural critics, artists, and practitioners from various fields concerned with culture as an object of study and social practice have offered insights into what the function of cultural work and role of cultural workers are in society (West, 1990; Giroux, 1995; Primorac, 2006; McCoy, 2012; Leano, 2014). The most popular definitions of cultural work agree that at its core, cultural work is that which is done by artists and other creatives “who work to combine political and pedagogical practices into their work” (Giroux, 1992 as cited in Tho-Biaz, 2013, p. 1). A seminal figure in the debate, Henry Giroux (1995), describes cultural workers as “border intellectuals” who serve as mediators and translators between communities/groups and dominant institutions/structures and invert the relationship between these actors so that power can flow “from the base of society” upwards as opposed to the reverse (p. 12). For Giroux, cultural work is a form of “self-management” born out of a vision of “radical democracy” which is a project tasked with engaging a diverse set of actors in order to tackle “issues such as racism, sexism, homophobia, and class inequality” (p. 8; 12). Moreover, cultural work is concerned with expanding notions of “the public, solidarity, and democratic struggle” and helping to make space and share power with those at or near the margins of society (Giroux, 1995, p. 13).

Speaking specifically within the context of cultural workers coming from and working in Black communities in the United States, West (1990) takes a similar stance as Giroux to describe cultural work as a kind of political project and cultural workers as those who produce “unsettling” work in order to “demystify power relations that incorporate class, patriarchal, and
homophobic biases” (p. 13-14; 105). More specifically, Black cultural workers are tasked with articulating “the complexity and diversity of Black practices” and deconstructing previous “Black strategies for identity formation” in an effort to reinvigorate “democratic public life” (p. 105). Similarly, Leano (2014) posits a conception of cultural work coming from an array of art forms that serves as a kind of reclamation and rearticulation “of culture that has been smothered by the avalanche of Western imperialism” (p. 25).

These and other definitions coming out of the US academy point to cultural work as creative work at the intersection of liberatory practice where a concern for popularity is overcome by an interest in the communities being served (Tho-Biaz, 2013). Still, the notion of cultural work continues to shift as some have begun to point to the professionalization of creative work and the proliferation of those working in creative industries. For instance, Primorac (2006) explores the role of cultural workers in the south-eastern European context and describes them as those working in creative industries and involved in the “production of symbolic goods” (11).

Whether described as “organic” or “border” intellectuals, educators, activists, community organizers, or creative professionals, all of the definitions of cultural work presented thus far point to at least one of two distinct attributes: 1) the possession of a particular kind of credential or skill set and 2) being set apart from not only the upper echelon of society, but also positioned beyond the margins and communities in which they work (West, 1990; Giroux, 1995; Primorac, 2006). In recognition of the fact that the creation, curation, and circulation of culture occurs in the everyday and within marginalized communities and groups, this study proposes that these definitions of cultural work which center particular voices and limit the scope of their work to mainstream notions of art and cultural production which are legible to those at the top are insufficient. Nowhere is this more evident than in discussions around cultural workers in marginalized communities in U.S. cities.

For the purpose of this study, cultural work is more broadly defined to not only include artists, intellectuals, and cultural producers who negotiate relations between the haves and have nots or who are ostensibly contributing to a particular industry or economy, but those whose work is rooted in and marks the indigenous culture of the existing residents of that community. In Cultural Works: Space, Value, and Mobility Across the Neoliberal Americas, Dávila (2012) makes a compelling case for this conceptual expansiveness in her work on cultural workers in New York City, Puerto Rico, and Buenos Aires. Throughout Cultural Works, she critiques popular notions of cultural work as they either undervalue or wholly exclude an entire cross-section of cultural contributors in these communities. Dávila calls these unsung workers “barrio creatives” who she contends are the “easily dismissed” and “increasingly displaced”, but who also provide the “cultural content that shapes a neighborhood’s culturally specific ethnoscape” (Dávila, 2012, p. 5; 73; 79). Here she points to “barrio creatives” as the artists and “cultural entrepreneurs” who may not possess the professionalized skills and cache that more popularized types of cultural workers have, but who add value to their communities by creating the culture that helps mark and define them as social spaces (p. 78). She goes on to suggest that while these workers are not valued for their contributions since they do not fit neatly “into dominant neoliberal business models that are structurally partial to artists and cultural workers with the education and cultural capital and with the public and business contacts to thrive”, these “barrio creatives” are not only assets to their communities but to the cultural life of the cities and towns in which these communities are situated (Dávila, 2012, p. 5; 195). Unfortunately, the
significance of the contributions that cultural workers offer society go largely unnoticed as their work is so engrained into the everyday life of their communities.

**Conclusion**

In the midst of growing economic inequality and the threat of gentrification and displacement, the researcher suggests that the cultural workers who are the subject of this study embody and deploy everyday acts of resistance, which challenge neoliberal development and help maintain the Hill District (a predominately Black community in Pittsburgh, Pennsylvania) as a social space. However, as the researcher will argue, many who do this cultural work in the Hill District and other Black communities go unrecognized as cultural workers as their value is not associated with mainstream notions of productivity and economic return on investment. For this reason, the researcher suggests that popular definitions be revisited and rendered more expansive in an effort to include the work of those working at the margins of society. Through the lens of Black Feminist Thought/Standpoint Theory and Critical Feminist Geography, this feminist qualitative case study will engage in-depth interviews, focus groups, and archival and document analysis to illustrate the ways in which cultural workers in the Hill District push back against the forces of racialized policymaking, discourse, and development, (re)define the preservation and development of their community, and dislodge the primacy of economic return on investment as an indicator of its value and vitality.

The literature under review for this study is centered around four major themes: race and space; the meaning and function of cultural work; neoliberal development and spatialized racism as key targets of cultural workers’ resistance; and the theoretical frames for the study: Black Feminist Thought and Critical Feminist Geography. Though a prolific body of research has been identified in each of these areas of study, Black feminist analyses of the way these elements intersect are few. Therefore, the aim of this study is to identify some fruitful synergies that might emerge from this literature which might serve as a point of entry for this and future studies on the role of cultural workers and resistance in the development of Black feminist geographies.

**References**

and Society, 44, 169-180.


Kendra J. Ross

Kendra J. Ross is a doctoral candidate in the Community Engagement Ph.D. Program at Point Park University. She holds Masters’ degrees in Liberal Studies and Anthropology from Brooklyn College and The New School for Social Research, respectively and received her Bachelor’s degree in Music Business and Technology from New York University. Kendra has presented her academic work at the James Baldwin International Conference at the American University in Paris, Tulane University, Columbia University, and is preparing to present her latest project at the International Symposium on Electronic Art in Durban, South Africa this coming June.
Utilization of artificial intelligence & smart supply chain management in the offline/online e-commerce marketplace

Dixit Pratiksha
Graduate Student, Engineering Management, Point Park University

Abstract

Digitization of e-commerce industry has divulged new realms and opportunities for the retailers globally. Over time shopping has evolved drastically and is no longer just a utility of negotiating money for a product. This paper focuses on the ongoing crisis of offline and online retail industry and the best industry practices to overcome it. AI is redefining the shopping experience for millions of online shoppers and merchants. Popular AI applications respond to customer questions, provide voice commands, help to analyze their behavior and using algorithms predict what products may appeal to them. In this paper, we also propose an approach towards smart supply chain management for intelligently balancing the order fulfillment, inventory management, and deliver accordingly when consumers/buyers shop online. The case of Ali Smart Supply Chain implementation and its effect on the balanced offline/online retail market is also investigated in this paper and solutions for implementation of such system is discussed.

Keywords
Artificial intelligence, e-commerce, retail, Business to Business, Business to Customer, Automated Collaborative Filtering, Smart supply chain

Introduction

The retail industry is one of the largest and most spread operations in the world. Digitization of retail industry has divulged new realms and opportunities for the retailers across the globe. Over time shopping has evolved drastically and is no longer just a utility of negotiating money for a product. A massive disruption occurred between the year 2009 and 2014 where the big box and department store retailers' annual growth dropped by roughly four percent while the annual growth of online retailers grew ten percent. Lately, we have seen that with an impact of online IT based retail services, the demand for physical store shopping has been drastically impacted. The closing of 100 Macy's, Sear's and other stores in 2016 is a direct result of this shift in consumer behavior. 60% of customers say they shop at their favorite retailer because of price and 52% of consumers prefer shopping at a physical store, despite an uptick in online research of certain products (particularly electronics and computers). Figure 1 demonstrates the steady growth of retail sales in the United States from the year (2015 to 2020). Every year there is a significant increase of % which keeps on growing faster.
It's no secret that artificial intelligence is poised to disrupt the entire e-commerce industry. Artificial Intelligence (AI) has a unique methodology to make machines learn from user experience and perform human-like tasks. The term ‘artificial intelligence’ thus means ‘investigating intelligent problem-solving behavior, techniques and creating intelligent computer programs which can either duplicate or automate human effort.

There are two kinds of artificial intelligence:

- **Weak artificial intelligence**: The computer/machine is just an instrument for inspecting cognitive processes – the computer simulates intelligence.

- **Strong artificial intelligence**: The processes in the computer are intellectual, self-learning processes. However, the machines and computers do understand by means of the right software/programming which helps us to optimize the process via adopting the behavior and problem-solving approach. Furthermore, this also includes automatic networking with other machines, which leads to a dramatic scaling effect. At current starting from speech recognition to machine vision from chat bots to collaborative robotics artificial intelligence has all of it. The advantages of this technology lie in efficiency and precision beyond the reach of human capabilities, which also creates questions about its potential implications to take over future work. Various businesses that require to collect and analyze lots of structured and unstructured data can benefit from artificial intelligence and its ability to support faster and smarter decision making. By all means, the supply chain is, therefore, a natural fit for artificial intelligence. The overall aim is to enable quick business response to the rapid demand change and shift of customer's taste, prediction, movement and allowing merchants to balance supply with right demand and more efficiently coordinate the flow of merchandise–hence reducing costs and lost sales due to out-of-stock items. Technology plays as an integral game changer for retailing that can simultaneously benefit consumers and retailers. In one the recent articles of IBM's Watson, IBM has recently launched Watson Supply Chain which is aimed to create supply chain visibility and gaining supply risk insights. The system uses cognitive technology to track and predict supply chain disruptions based on gathering and correlating external data from disparate sources such as social media, news feeds, weather forecasts and historical data. Smart supply chain technique also helps
to coordinate and facilitate the activities of service providers to better manage product design, manufacturing, inventory, and delivery. Some of the e-commerce giants who have a bigger impact towards online presence are Amazon, eBay, Ali Baba. Not only they have successfully captured the market growth but also they have acquired several offline businesses because of low stock movement and death of offline presence. Figure 2 represents the market value of Amazon with respect to other existing retail giants. The overall change was never anticipated to be that promising, it took some 10 years for the e-commerce giant Amazon to justify their presence in the online retail world downsizing other existing retail platforms (Online and offline).

Technology has uplifted the online retail growth but damaged the counterpart. Retailers those who all are able to connect with their customers by providing targeted information and offering value stand apart have the potential to create deep customer engagement. However, the certain percentage of people still prefer to visit malls and feel the presence of products before they buy.

![Market Value of Amazon vs other retail giants](image)

**Figure 2: Market Value of Amazon vs other retail giants**

To further understand the evolving issue how by AI & smart supply chain management can be successfully utilized in the offline/online e-commerce marketplace, the following research questions are posed:

1. What do potential vendors and merchandizers consider as an appropriate online and offline mechanism to balance the gap of offline buyers?
2. What do potential buyers consider as an appropriate ecommerce shopping platform (offline or online)?
3. How can offline stores use AI and Smart Supply chain management techniques to win the war?

**Literature review**

**Artificial Intelligence in Different Types of E-Commerce**

AI plays an integral role towards the development of Business to Customer (B2C) and Business to Business (B2B) e-commerce systems. Business to Business (B2B) e-commerce has around 80% share of the total e-commerce market, and B2C has the rest. However, the bigger attention
in AI for e-commerce development has focused on B2C transactions. In B2C e-commerce, AI is used primarily for product selection, visibility, capturing experience, generating automated responses, and decision making on bundling and pricing of goods. AI further develops software algorithms that enable computers and mobile held devices to reach correct conclusions by being fed huge numbers of examples, building up a base of "experiences", customer insight, behavior and feedback that can be applied to recognize patterns and solve problems in new conditions. There are various types of product selection and recommendation approaches using AI algorithms. One example of these approaches is Automated Collaborative Filtering (ACF).

ACF approach: This approach is based on "word-of-mouth" recommendations. This process will help to capture customer's experiences, recommendations/feedback on the products they have already purchased, and furthermore, use those feedback in endorsing same products to potential new customers via sharing their experiences. For example, in figure 3, assume that users 2 and 3 are past customers and user 1 is new. All the users have the common interest in features A, B, and C. Customers 2 & 3 purchased products D and E in the past. Due to the common interest, the products D and E are recommended to user 1 now. This formula is used to calculate the difference between two persons U and J, in terms of their interests on a product. One of the major drawbacks with ACF approach is that it is not effective until a large number of users enter their profiles, and an adequate amount of rating items are available in the database.

Figure 3: An example to explain ACF

AI in generating automated responses, bundling and pricing goods

AI is used in recommending and guiding the users on the items they want to examine or purchase through the Internet. Various e-commerce systems are developed, configured, and are being currently used to facilitate several business purposes. Generating automated responses, building and pricing goods are some of the features. In the store, we don't find customer representatives to answer our questions. However, there are no real persons to advise the customers on the Internet. Therefore it is highly recommended that automated responses generator plays an integral part to hold the interest of online buyers and provide the answers and guidance in a very proficient manner. According to IBM, by 2020, 85% of all customer interactions will be handled without a human agent. AI, chatbots and automated, self-service technologies free up call center employees from routine tier-1 support requests so they can focus on more complex tasks. In order to attract right consumers, a manufacturer must make decisions regarding which goods are a right fit for the customers, how they should be priced, and how they should be bundled together. These decisions are based on the manufacturer's beliefs about consumer preferences/choices, information gained from a particular offering and most importantly understanding the
noise and traffic of customers, their behavior, and obsession. Proper pricing and bundling decisions are vital to expand the customer base and also increase the profit. For Example, if a manufacturer has diverse products then he/she can bundle and price them in different ways, such as per article pricing, pure or mixed bundling, etc. To attract more customers, the producer has to make decisions regarding what goods he can offer, how to offer, and how the goods should be bundled together and so on. For example, technology enables consumers to make more informed decisions, receive more targeted and beneficial offers, and obtain faster service. For instance, Amazon's total RM leadership is rooted in pricing models that rely heavily on automated algorithms to deliver real-time, customized pricing. Proper pricing and bundling decisions are vital to expand the customer base and also to increase profits. Traditionally human beings take these decisions. AI can increase revenues through a deeper understanding of consumer behavior while saving costs associated with supply chain optimization. Automated decision-making ease human beings from this complex task of a decision-making process. Classification methods are extensively used for these tasks. Decision-theoretic approaches are also helpful in making suitable decisions. It also assists retailers in reaching suitable consumers at lower costs, due to technologically created efficiencies. Inman and Nikolova draw attention to how technologies can benefit both consumers and businesses, which ultimately enhance the businesses' profitability.

AI and Alibaba

One of the basic aims of AI is to build systems that can mimic human behavior. By adding AI components, an e-commerce system should behave more "natural" to its users. Alibaba is one of the tech giants who has integrated AI to improve the efficiency of its e-commerce and payment services and it is also working to integrate various urban services, such as traffic control and transportation billing into its AI ecosystem by building the "City Brain". While developing and integrating the AI path, Alibaba is applying numerous complex machine-learning methods and disciplines, such as online machine learning, transfer learning, deep learning, artificial neural networks and reinforcement learning.

The latter mimics the way the human brain learns through experience. Basically, the computer learns to recognize patterns in data that lead to productive results. It is an iterative process, similar to the way a child learns by trial-and-error to throw a ball. This technology depends on the creation of software algorithms that enable computers to reach correct conclusions by being fed huge numbers of examples, building up a base of "experiences" that can be applied to recognize patterns and solve problems in new situations. Once customer experience and insight, behavior data is captured, all those information is entered into the system to perform various analysis such as predictive, forecasting and pricing. All these learning machines become smarter and more accurate as they are provided more and more data. Alibaba, with its vast computer resources and access to online data from hundreds of millions of consumers, is well positioned to introduce practical, real-world AI applications into everyday use. The company over the last 17 years has built up one of the world's largest distributed-computing networks, allowing it to the computational horsepower necessary for AI. Alibaba's cloud computing subsidiary, one of the world's top 5 public cloud providers, has developed an operating system called Apsara that organizes data centers into a computational engine that can process more than 175,000 transactions a second. Alibaba Group, embedded into the digital infrastructure powering the
world's largest retail commerce company, AI has redefined the shopping experience for millions of China's online shoppers and merchants. To users, some of these enhancements may seem subtle: product search results that have become uncannily precise; prescient search engines that draw attention to goods and services consumers might not have even realized they wanted; virtual storefronts that display information tailored to individual shoppers based on their unique characteristics and preferences; customer-service chatbots that can resolve consumer complaints without human intervention: orders that are delivered in hours instead of days. In addition, Alibaba's websites—including market-leading C2C site Taobao Marketplace and leading B2C site Tmall.com—as well as mobile apps have some 500 million active users and garner millions of visits a day. Furthermore, this offers a source of big data on consumer behavior—shopping habits, payment and credit history, demographics, search preferences, social networks, personal interests and other information—that is fodder for learning machines. Alibaba's core business resembles that of eBay. It completely differs from Amazon. Alibaba acts as a middleman between buyers and sellers online and facilitates the sale of goods between the two parties through its extensive network of websites. Unlike Amazon, Alibaba.com does not hold inventory or participate in logistics such as sourcing, storage, or shipping. Alibaba strongly supports the offline vendors and merchandisers while facilitating their online buyer's request towards the registered stores. Alibaba business model helps to maintain a healthy ecosystem where technology doesn't completely dominate the economy. Figure 4 displays the technology available in the offline stores which allow a customer to browse products visually via monitor as well with the physical presence.

Figure 4: Fashion AI: Alibaba’s shopping store and sites

Smart Product Search and Recommendation

The visual Search engine is one of the most exciting trends of Artificial Intelligence in the e-commerce industry. It is an AI-driven technology that enables users to discover what customers want with just single snap or click. Figure 5, displays the unique feature which helps to simply click an image and find the relevant product. Some search and recommendation engines use only historical data on what you've bought in the past to determine what products you might be wanting today. To make search and recommendation more relevant and holistic, Alibaba has developed software it calls the “E-commerce Brain”. This system uses real-time online data to
build models for predicting what consumers want, models that through AI are constantly updated for each individual to reflect not only past and recent purchases but also a range of online activities such as browsing, bookmarking, commenting and other actions. Visual search reads images to find color, size, proportions and shapes, even text to identify product names and brands. Crunched by algorithms, this data allows the E-commerce Brain to determine correlations between content consumption and purchasing behavior. Also, this data helps to generate a wider range of recommendations for not only products that consumers have shown an interest in previously, but also for related products and other information. The Brain can home in on a consumer's predilections for different categories of products, price ranges, brands, product specifications and other key parameters. AI technology here very skillfully acts to capture all the human behavior on the website and try to showcase same content on a regular basis since those items were either browsed several times, bought or liked. AI also offers a convenience over keyword matched search, in which results are provided on the basis of searcher's ability to describe a product. With keyword search, keywords must exist in both the query and product description. It should match with the database which depends on the description of the product in the same or similar way. More often than not, this does not go as planned. Product recommendation is extensively practiced by e-commerce companies to help their customers find the best of what they are looking for. Figure 6 displays the varied option of personalized product recommendation powered by AI platform. The customers often give the signals about what they are looking for or what they like.

In addition to the features mentioned above the voice-powered technology which also acts as a shopping assistant works great. Although the technology is still growing, once it will be developed optimally, it can make the shopping experience for the customers more interactive and pleasant. It will enable them to have a real-time smooth voice conversation with a virtual Shopping assistant on the e-commerce platform. This will give more personal and human touch to the online shopping experience, which may increase customer's engagement and retention.
Smart Supply Chain

To upgrade supply chain management, Alibaba has developed what it calls the Ali Smart Supply Chain (ASSC), which applies AI to help online and offline merchants forecast product demand; prepare, replenish and allocate inventory for optimal turnover; determine the right products to offer, and choose appropriate pricing strategies. Smart supply chain technology can help retailers target appropriate consumers. It also enables consumers to make better-informed decisions about which products or services to consume. While not all consumer decisions rely on extensive information searches and detailed decision processes. Some decisions are spontaneous, produced quickly while shopping online or in stores, often prompted by strategic visual presentations and merchandise assortments crafted by the retailer.

The overall objective is to enable quick business response for shifting consumer tastes based on trends sniffed out of transactional data, allowing merchants to balance supply with demand and more efficiently coordinate the flow of merchandise—hence reducing costs and lost sales due to out-of-stock items. The system also helps synchronize and coordinate the activities of service providers to better manage product design, manufacturing, inventory, and delivery. Alibaba has a very interesting business model which works with B2B to deliver the requested products faster and quicker. Alibaba has an excellent marketing engine for suppliers, but new vendors should keep in mind that it can take years rise to the top of Alibaba’s search results and account for this expense. It is to help sellers meet buyers. More specifically, it provides an Internet-based B2B platform where sellers (suppliers/manufactures) can meet buyers (outsourcers/wholesalers) on a global scale. The company offers two platforms, one in Chinese for Chinese businesses, and another in English for the other international customers. Customers are both the sellers and the buyers, who are able to post "storefronts" to advertise their products or needs. ASSC uses an AI predictive model to forecast demand for newly introduced products as well as demand for different types of products during large promotional events. The model processes a range of historical and real-time data, including seasonal and regional variations as well as consumer preferences and behaviors. Another important aspect to balance offline/online commerce systems is to update supply chain management approaches and balance between different platforms. To this end, Alibaba has developed what it calls the ASSC, which utilizes Artificial Intelligence to help online and offline merchants forecast product demand; prepare, replenish and allocate inventory for optimal turnover; determine the right products to offer, and choose appropriate pricing strategies.
Smart Logistics

Cainiao Network, Alibaba's logistics affiliate, was founded in 2013 with a group of shipping and delivery companies to create a logistics information platform that links a network of partners, warehouses and distribution centers. As of August 2016, Cainiao was processing data for 70 percent of parcel deliveries in China, an average of 42 million a day, while connecting more than 90 domestic and international partners. These feats are made possible by Cainiao's big data and smart technologies that power an intelligent warehouse management system, digital waybill system, and computerized parcel sorting and dispatch at distribution centers. Cainiao also uses AI technology to predict the size of boxes that should be used to efficiently pack orders consisting of items of various sizes and weights. The company mentioned that its solution reduces the use of packing materials by more than 10%.

Interview-based Research of Retail Experience

This study also assessed online buyers and sellers perception of utilization of AI & smart supply chain management in the offline/online e-commerce marketplace. Online shoppers were interviewed to assess their experiences in the use of technology efforts and the respective appropriateness towards its results. Offline vendors/sellers were interviewed to assess their perception towards changes occurring in the offline/online e-commerce marketplace.

Participants:

Data for the study was gathered utilizing two focus groups. Focus group best practices suggest that the optimal size for focus groups should consist of 5-8 participants, though fewer or more participants can also be effective. The first focus group targeted online buyers who have official accounts of Amazon, eBay and Alibaba and represented a variety of features to it. The second focus group consisted of potential offline vendors and sellers from a variety of industries, product franchisees. The focus groups study were conducted in a public mall in the State of Pennsylvania. Focus group members were asked about their awareness of appropriate and in appropriate usage of technology towards balancing the online and offline market. Potential buyers’ were questioned about their presence of social media/ecommerce profiles. To address the proposed questions, this article reports the results of the two focus groups. The data analysis contains the summary of outcomes of both focus groups. Detailed data analysis and major reasons behind the purchases are summarized in Figures 7 and 8.

Study Design

The researcher collected information to answers above research questions regarding the utilization of AI and smart supply chain management in the offline/online e-commerce marketplace. To participate in this descriptive study, the sampling frame requires participants to be preexisting members of at least one ecommerce platform. The research questions were explained to the two focus groups.

Instrumentation:

Two focus groups one of online buyers and another of potential sellers and vendors were selected to establish an insight into differences in perceptions of what utilization of AI and smart
supply chain management in the offline/online e-commerce marketplace. The information collected from the each focus groups was positioned and produced.

**Study Results**

There were mixed results that came out of the focus study group. Both the groups strongly agree that there is certainly a high demand of technology (AI, ML etc.) to facilitate the right requirement with pace and quality. However the vendors mentioned that they also strongly agree that a platform which would balance marketplace online and offline presence would be highly recommendable. Also meeting the customer satisfaction is highly important in order to encourage them to return to the store and maintain a profitable relationship with the retailer. Reinartz, Thomas, and Kumar \(^{15}\) have found that it is profitable for firms to allocate higher resources for customer retention than acquisition. Such claims make retailers work harder towards satisfying their current customers so that they can retain those customers for a longer period. In the future, customer satisfaction can be increased when retailers offer customized product pricing promotions to customers across different channels. This can be accomplished by developing data-driven strategies.

![Reason's likely to purchase an item in-store](image)

Figure 6: Data representing offline buyer’s reason
Conclusion

One of the basic aims of AI is to build systems that can mimic the behavior of human beings. By adding AI components, an e-commerce system should behave more "natural" to its users. For example, recommender systems. Like any other technology, AI should also enhance the efficiency/performance of an e-commerce system. This paper presents some important AI aspects and techniques that are useful in the development of e-commerce and retail systems. AI techniques have been divided into 2 categories: those used in B2C e-commerce and those used in B2B e-commerce systems. I hope that in future, AI plays a greater role in the development of e-commerce systems. Like any other technology, AI should also enhance the efficiency/performance of an e-commerce system. Efficiency is in terms of producing fast and elegant solutions and consumption of fewer system resources. On contract to balance the online and offline marketplace one certainly needs to utilize right business model as utilized by Alibaba and eBay. They just not only use the brightest and tested technology but also make sure that their disruptive business model doesn't hamper or damage the offline business platform. As lately, we have been with the growth and high impact of online e-commerce platform people stop visiting malls and store which resulted in massive store shut down and misbalance in the economic ecosystem. For example, the recent closure of Toys"R" Us stores across the United States because of low sales and bankruptcy. I expect more research and development take place in applying AI to B2B e-commerce to again stable and balance both the industries. For the rest of the conclusions focuses on how future AI and Smart supply chain management applications to e-commerce can be evaluated and create wonders which make the buyer's life easy and smoother.
In conclusion, quality, efficiency, and providing a better interface (i.e., better interaction facilities) are some important dimensions that can be used in assessing and evaluating future AI applications to e-commerce.

**Limitations and future Studies**

In many ways this study highlighted a number of different areas for future research. Future studies should examine whether the content of one’s ecommerce profile is predictive of on the shopping behavior. The study presented in this article reported on the difference in utilization of artificial intelligence & smart supply chain management in the offline/online e-commerce marketplace. This study is to be considered a foundation for future quantitative research with a more in depth data analysis and a larger number of online/offline ecommerce users and vendors, merchants from around the country.

**References**

PWC (2016), “Total Retail Survey”.
Erickson and Wang (June 7,2017), Inside Retail Asia, “How Alibaba uses artificial intelligence to change the way we shop”
PWC (2016), “Total Retail Survey”.

Pratiksha Dixit

Pratiksha Dixit is currently pursuing her Master’s Masters of Science, Engineering Management. She also has a Bachelor of Business Administration at from the School of Fashion Designing Clothing technology, India. Prior to joining Point Park University, she was a project and program manager in a retail MNC firm. She is a certified Lean Six Sigma and Scrum Master professional. She is also an active business strategist, and entrepreneur.
Opportunities and Barriers to Female Leadership in Secondary Education: A Qualitative Analysis

Stephanie White
Point Park University

Abstract

Although 76% of teachers in the US are women (Superville, 2016), only 55% of suburban principals are (Bitterman, Golding, & Grey, 2013). This number decreases at the secondary level; only 30% are female. This qualitative research study is designed to describe the lived experiences of females in formal leadership positions at the high school level in suburban school districts in Allegheny County to identify their experienced barriers and opportunities. Interviews are used to glean information about the phenomenon of female leadership. The findings of this study will increase awareness of opportunities and barriers for female teachers who desire leadership positions and school districts interested in attaining female leaders.

Introduction

Across the United States, seventy-six percent of teachers are female (Superville, 2016), but only fifty-five percent of suburban public school administrators are female (Bitterman, Goldman, & Gray, 2013). There are even less females in the highest leadership position in a school district, that of the superintendent. Less than 25% of school superintendents are women (Superville, 2016). Although some progress has been made, the number of females who rise to leadership positions from the field of education does not match the number of available applicants for said positions, even though they have been in the teaching field in large numbers for quite some time. This disparity causes concern, particularly for school districts looking to adequately serve both male and female students. Female students, in their formative years, as well as teachers are missing the opportunity to see female role models in leadership positions.

There is a considerable difference between the number of females in principal and assistant principal positions at the high school level in the United States. 64% of primary school, 42% of middle school, and 30% of high school administrators are female (Bitterman, Golding, & Gray, 2013). There is some reason for this difference. Generally speaking, the elementary or primary schools usually contain more female teachers than do middle or high schools. The Bureau of Labor Statistics (2015) found that 19% of men teach at the elementary or middle school level compared to 40% at the high school level. However, that reason alone does not fully explain why only some females are advancing to formal leadership positions like the assistant principal and principal at the high school level.

Some female teachers have progressed in their careers to become principals. According to Ingersoll, Merrill, and Stuckey (2014), the number of female principals at the secondary level specifically has increased to over fifty-two percent from thirty-one percent in the 1987-1988 school year. This could account for one reason why there is an increase in the number of female teachers. The field of education administration is now open to females in a way it was not before. Before, the “recruitment and retention of capable males” required opportunities for advancement and elevation of careers (Ingersoll, Merrill, & Stuckey, 2014). Now, women have access to that
same career ladder. The figure below presents the percentage of female school teachers and principals by school level in the 2011-2012 school year across the United States.

![Figure 1. Percent Female School Teachers and Principals, by School Level, 2011-12](image)

**Problem Statement**

Although women have occupied a large percentage of the teaching force for quite some time, they have not yet obtained a comparable number of leadership positions. Because women are not rising to leadership positions to the same degree as men, even though they significantly occupy more of the available pool of applicants, critics assert that the school systems in the United States are not taking advantage of a potential asset – the leadership talent of women already existing in organizations (Tarica, 2010). Although some could assert that women are not interested in these positions, as many as 84%, as evidenced by a MetLife 2013 survey, (Riggs, 2013), the number of women pursuing advanced degrees is higher than the number of men pursuing advanced degrees. Women actually outnumber men in educational leadership development programs and yet are still not advancing to positions like the principalship (Kruse & Krumm, 2016). Title II, a program designed to increase student achievement through ameliorating both teachers and principals, publishes annual reports on the number of teachers enrolled in principal preparation programs. According to the most recent Title II report, women outnumber men in the majority of the principal preparation programs around the country (U.S. Department of Education. *Title*, 2017).

**Significance of the Study**

Because females comprise such a high percentage of teachers in the k-12 school systems across the United States (Superville, 2016), it would follow that they constitute a similar percentage of available leadership positions. However, that is not always the case. This is not to say that female administrators are more qualified than male administrators, and therefore the implementation of female administrators will automatically result in an increase in student achievement. Rather, the disproportionate number of female teachers advancing to leadership positions could be having potentially negative impacts on current female teachers, especially those with leadership
potential, self-identified or otherwise. It could also have potentially negative impacts on future teachers (Yaffe, 2016); females can benefit from seeing similar individuals in places of authority in the hierarchy of the school system.

Some research has been published on the perceived barriers to advancement that female educators face. Barriers to the advancement of females to leadership roles include: females not currently in positions that promote advancement, females not preparing for the superintendency or the administrative positions they want, females not as experienced or interested in fiscal responsibilities that would be associated with the job, the personal relationships of females, school boards not willing to hire women as superintendents, women entering the field of education for different reasons, and women entering the field of education at an older age (Glass, Bjork, & Brunner, 2000). Little current published research has been conducted on both the barriers and opportunities experienced by women at the secondary level – female assistant principals and principals – both transitioning to leadership positions and currently experiencing as part of their leadership positions. Additionally, little published research has been done on the similarities and differences experienced by female leaders at two distinct levels of the school system. Gaining insight into the experiences of these leaders will shed light as to why the number of female leaders in secondary education is disproportionate to the number of available potential leaders. It could also potentially help mitigate negative consequences that are currently the result of the disproportion such as the marginalization of women by the school system. Both female students and female teachers, as well as male students and male teachers, can benefit from having someone who looks like them be in a position of authority.

**Research Questions**

The researcher seeks to understand the experiences of females in two to three distinct leadership positions (assistant principals v. associate principals v. principals) in secondary school districts in Allegheny County and the process by which they attained those positions. This study is designed to answer the following questions:

What are the lived experiences of females in leadership positions, specifically in assistant principal and principal positions, in secondary education in terms of opportunities and barriers?
What are the common themes across assistant principals and principals regarding the identified opportunities and barriers?
What are the similarities and differences in the perceptions of the opportunities and barriers between the assistant principal and principal positions?

This study fills a gap that exists in the literature, expanding current knowledge by identifying not only barriers to leadership, but also opportunities to leadership. Additionally, this study looks at two different levels of the secondary school system, the assistant principal position and the principal position, for the purpose of comparing the effects of one’s position in terms of barriers and opportunities to advancement by female teachers. This study can provide models of behavior for females in education to follow and ideas for possible supports that can be put into place in secondary schools for the promotion of female teacher leadership.
Gender and Leadership

Gender and leadership were not often spoken of together until the 1970s (Chemers, 1997). Since then, the world has seen outstanding examples of women leaders including: Eleanor Roosevelt, Maya Angelou, Jacqueline Kennedy Onassis, and Margaret Thatcher, just to name a few. In the education realm, women such as Diane Ravitch, an outspoken activist against the No Child Left Behind act, charter, schools, and accountability, and test-based accountability, Cami Anderson, the superintendent of New York City’s District 79, and Wendy Kopp, the founder of Teach for America, have gained national prominence not only as educators, but as leaders in the field, advocating for students across the nation.

Benefits of Female Administrators

Both genders can contribute in unique ways to aide in the functioning of a school building. In a study done by the Pew Research Center, 1,835 males and females were asked the question “Which Leadership Traits Matter Most?” Eight of ten participating adults rated honesty, intelligence, and decisiveness as “absolutely essential” qualities leaders should possess. According to the adults in this study, women were seen to be more compassionate, organized, and honest, compared to their male counterparts (Suh, 2015). Eagly and Carli16 (2007) findings echo that sentiment; women are associated with communal qualities such as being helpful, kind, friendly, and sympathetic. Men, on the other hand, were perceived to be more decisive, as well as ambitious, dominant, and self-confident (Eagly & Carli, 2007; Suh, 2015). These findings support the fact that together, males and females possess the traits deemed necessary for successful leadership.

There are many benefits to school districts employing specifically female assistant principals and principals. For one, female leaders have been found by many researchers to be more transformational leaders than their male counterparts (Bycio, Hackett, & Allen, 1995; Yammarino et al., 1997). This has since further been confirmed by a meta-analysis done by Eagly, Jogannesen-Schmidt, and Van Engen17 (2003). In their study, males were found to be both more transactional and laissez-fair leaders. Another researcher, Hunt25 (1997) found the communal and democratic aspects ingrained in transformational leadership more present in female than male leaders. Foster18 (1989) describes transformation leaders as leaders who are able to build positive relationships with all members of the school community so that each individual member feels engaged in the mission, vision, and goals of the school. Principals who practice transformational leadership as well as instructional leadership have been found to lead more successful schools, particularly in terms of school climate and buy-in from stakeholders (Aydin et al., 2013; Gray & Lewis, 2013). It follows that, because transformational leaders champion support from their constituents and foster a more positive environment, they are also associated with increased student achievement. Along with teacher leadership, transformation leadership is a significant factor for student achievement (Robinson, Llyod, & Rowe, 2008). Given the studies that support the fact that transformational leaders are more effective for the modern organization, women leadership approaches are necessary for effective leadership.

Additionally, similar to female teachers, female administrators come from a subordinate place in terms of their gender and therefore are perhaps better equipped to combat injustice (Hughes, 2013). Because many female leaders in education are able to articulate what injustice feels like because they have perhaps experienced stereotypical behavior and encountered barriers to their
leadership progression, they can relate to and identify with the perspectives of nonminority groups of students, parents, and other members of the community. Women were found to be “less hierarchical, more cooperative and collaborative, and more willing to enhance the self-esteem of others” according to a Commonwealth Secretariat report. Role Increasing women leaders can also increase the amount of diverse perspectives in positions of power in an organization. These diverse perspectives can bring divergent ways of thinking, creative ideas, and unique problem-solving capabilities to organizations (Boatman et al, 2011).

Furthermore, female teachers and other school system professionals would benefit from seeing more females in leadership positions. Female educational leaders could be mental models of goals that could actually be attainable and therefore they could inspire future leaders. Employee satisfaction is closely related to relationship with supervisor (Tillman & Tillman, 2008). Therefore, personality characteristics aside, female teachers could benefit from seeing females in leadership roles.

Other researchers have confirmed additional strengths of female educational leaders, strengths that tend to be gender-specific. Female administrators are said to be perceived by teachers to be more active and involved in the classrooms of the schools, as compared to male administrators (Lee, Smith, & Cioci, 1993). Furthermore, when working for female principals, both male and female teachers responded highly to females’ more “participatory style” of leadership (Lee, Smith, & Cioci, 1993). Hoyt & Simon (2011) also confirm a slight advantage. Andrews (2017) found that there are a few gender-specific patterns that emerge through testing emotional intelligence, specifically that women typically score higher than men in empathy, social responsibility, and interpersonal relationships, while men typically score higher in areas of self-confidence, assertiveness, and stress tolerance. A Zenger Folkman study comparing men and women in 16 leadership competencies found that women are more often associated with the soft skills of leadership such as relationship building, communication, and emotional intelligence. They also scored higher than their male counterparts in traditionally male-associated traits “taking initiative” and “driving for results” (McLaughlin, 2015).

There are also a few studies that point to the successes that women can bring to organizations, and how much they are valued by their subordinates. In a study of Fortune 500 companies complete by Catalyst (2007), the number of women on their boards was compared to the performance of the companies. When women, particularly a minimum of three, served on the boards of these companies, the companies’ return on equity, profit margin, and return on investment capital all increased by 40-60%. McKinsey (2007) supports these findings; the teams with the highest gender diversity have a much higher return on equity, among other findings. Furthermore, Wilson & Atlantar (2009) found that companies with women on their boards help decrease bankruptcy.

These studies support the argument that leaders of both genders are necessary to help the school system function at its optimal level and support the success of all of its students and employees, no matter the level in the system.

Although a large percentage of women enter the education field, the women who move into leadership positions is not consistently proportional across the United States, meaning that
school communities do not have access to all of the benefits that the female perspective provides. Overall, school districts across the country employ 76% of female teachers compared to 24% of male teachers (Goldring, Gray, & Bitterman, 2013). The number of female education administrators is almost proportional; as of 2015, 65.7% of all education administrators were female, up from 52% in 2011-2012. However, this is not distributed equally across public elementary, middle, and high schools. 64% of principals in primary schools are women, compared to 42% in middle schools and 30% in high schools and high school principals report the highest salaries. This could explain why, as of 2015, the median weekly earnings for women in the field of education administration were 21% lower than for men (“School”, 2017; U.S. Department of Education, 2013). According to the Department for Professional Employees Fact Sheet for 2016, this is a significant improvement, compared to 20 years ago (Adams & Hambright, 2014). That significant improvement is not being seen consistently across the country. In a study done by Kerr, Kerr, and Miller (2014), in a sample of 1,250 school districts, the researchers found that less than half (46% of upper administrators, 46% of principals, and 41% of assistant principals) were female. Furthermore, some scholars are predicting a leadership shortage which, generally due to retirement, a leadership shortage will occur (Watson, Hodgins, & Brooks, 2016).

That number decreases substantially in terms of superintendents and assistant principals. Only 24% of superintendents in the United States are female and the position of the superintendent is the “most male-dominated executive position of any profession” (Bjork, 2000; Kowalski et al. 2011; Sharp et al. 2000). The data on assistant principals is not much better. Kerr, Kerr, and Miller’s (2014) study found females most significantly underrepresented in the assistant principal position, perhaps because assistant principals traditionally primarily handle discipline in schools, which is a gendered task. Grogan & Brunner (2005) found that 8% of female superintendents identified as a person of color, and only 1% identifying as Latina. Watson, Hodgins, and Brooks’ (2016) research supports this; there is simply a lack of similar gains in the offices of both the high school principal and the superintendent. Hartmann et al (2006) asserts that, with that number in mind, at this rate, it will take women 30 years to reach the numbers of their male counterparts in the superintendency. This phenomenon is known as sex segregation, which means that the number of females and males is not roughly equal in occupations (Powell, 1988).

Of those female candidates who do attain assistant principal positions, many do not stay. In a study compiled by Fuller and Young (2009) in which principal retention rates were studied, roughly 50% of newly hired principals stay for three years and less than 30% stay for five years. Female upper secondary school principals have the lowest retention rates of any other group. 90% of the principals who leave the principalship remove themselves from the profession altogether (Fuller & Young, 2009). Factors that played into a decision to leave include student achievement (lower student achievement leads to shorter tenure), percentage of economically disadvantaged students (the higher the level of poverty, the shorter the tenure), and the location of the school (rural and small town districts tend to have higher principal turnover rates). Additionally, Fuller and Young (2009) found several anecdotal reasons why principals leave the principalship: accountability pressures, complexity and intensity of the job, lack of support from central office, and compensation.
The lack of female representation in leadership positions in education, specifically the assistant principal and principal position in secondary schools, can be considered surprising because of how many women have completed master and doctoral work. Women outnumber males in these programs by over 50% (Bjork, 2000; Glass et al, 2000; Grogan and Brunner, 2005). According to the National Center for Education Statistics, females were awarded 136, 880 masters degrees in education and men only 41, 180; females were awarded 6,775 doctoral degrees and men only 3,215 (U.S. Department of Education, 2012). The concern is that women are seeking opportunities to advance their careers through obtaining more education, but are not obtaining promotions at work even though they have the necessary qualifications.

Based on the above information, researchers have concluded that there are barriers to women accessing leadership positions in education. Despite being well prepared for the task of superintendency, as an example, Brunner & Kim (2010) found that long-established bias is still present in terms of the selection process for the superintendency as well as for other administrative positions in education.

Research Design
This qualitative study consists of the researcher conducting semi-structured interviews of female assistant principals and female principals in suburban school districts about their journeys to becoming educational leaders. The barriers and opportunities they encountered on the journey to the position as well as in the position are explored. Purposeful sampling is used by the researcher in order to ensure that all participants can be used to understand the phenomenon under examination (Creswell, 2014). Because participants must agree to be interviewed, self-selection is an appropriate sampling method (Alsaawi, 2014). For the purpose of this phenomenological qualitative study, criterion sampling, a sampling strategy in which participants are selected because they meet specific criteria, will also be employed for quality assurance purposes (Creswell, 2014). The number of participants in phenomenological studies is usually about ten (Creswell, 2014), so the researcher will interview five assistant principals and five principals, or continue to interview until saturation is reached.

The researcher identified the female assistant principals and principals at all of the suburban school districts in Allegheny County using the Pennsylvania Department of Education’s 2016-2017 Professional Staff Summary Report, the Allegheny Intermediate Unit’s list of suburban public schools in Allegheny County, and the districts’ web sites to identify female assistant principals and principals at the high school level. In Allegheny County, there are 42 public school districts. In those 42 districts, there are 43 principals and associate principals employed and 48 assistant principals employed. 11 of the principals are female – corresponding to about 26% - and 20 of the assistant principals are females – corresponding to roughly 42%. Combined, 31 administrators at the high school level (or in the case of some districts in which the middle and high school levels are combined, the junior/senior high level) are female. That means that 34% of high school administrators are females, which corresponds with the national data. As of December 2017, there are 13 assistant principals who meet the selection criteria and 7 principals who meet the selection criteria. The researcher will reach out to superintendents of those school districts, requesting permission to access their high school principals who meet the above stated criteria. Upon receiving permission, the researcher will contact the assistant principals and principals via email and/or phone to request an interview. “Maximum variation” will be used so that the sample is indicative of the larger population (Seidman, 2012), so assistant principals and
principals will be in leadership positions in suburban school districts in and around Allegheny County.

The researcher designed the interview questions keeping in mind the leadership trajectory in education. The first questions ask the participants about their journey to their current position. They are straightforward questions, requiring a little reflection on the facts of the participants’ journeys. Most of the remaining eight questions are centered around both the barriers and opportunities encountered by the participants on their journeys, both in attaining the position and in the position. One question asks participants to consider what the future looks like for them and the last two questions ask the participants to provide some advice for school systems and female teachers. Together, these questions create a picture of each participant’s individual journey thus far and also provides them the opportunity to pass along knowledge of that journey that they think others, specifically female leaders in secondary education, will find helpful as they continue on their own journeys.

The researcher designed the structure of the interview by employing Robson’s (2011) five phases of the interview: the introduction, warm-up, main body, cool-off, and closure. The introduction part of the interview will include the researcher introducing herself, thanking the participant for her willingness to participate, and asking the following four demographic questions:

What is your current position within your school district?
How long have you been in this current position?
What position(s) did you have before you attained this position?
At what point in your career did you consider moving into this position? What steps did you take to achieve your goal?

The demographic questions also connect to research question 3: What are the similarities and differences in the perceptions of the opportunities and barriers between the assistant principal and principal positions? Asking these questions will allow the researcher to connect the information gathered from the remaining eight questions that address research questions one and two to the position of the female leader in the school system. The body of the interview will consist of those eight questions being answered. The closing of the interview will consist of the researcher thanking the participant for her participation, informing the participant of her confidentiality, and offering the opportunity to review the notes from the interview once the themes are identified.

Once research questions one and two are answered, the researcher will use that information to compare the assistant principal group with the principal group to see if there are any similarities and/or differences between the groups. Similarities and differences between levels of the system will help the researcher answer research question number 3.

The table below coordinates the interview questions with the research questions.
<table>
<thead>
<tr>
<th>Research Question 1:</th>
<th>Research Question 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the lived experiences of females in leadership positions, specifically in assistant principal and principal positions, in secondary education in terms of opportunities and barriers?</td>
<td>What are the similarities and differences in the perceptions of the opportunities and barriers between the assistant principal and principal positions?</td>
</tr>
<tr>
<td>Research Question 2:</td>
<td></td>
</tr>
<tr>
<td>What are the common themes across assistant principals and principals regarding the identified opportunities and barriers?</td>
<td></td>
</tr>
<tr>
<td>What was it like applying for and attaining this position? What difficulties did you face personally and/or professionally? What opportunities did you encounter personally and/or professionally?</td>
<td>What is your current position within your school district?</td>
</tr>
<tr>
<td>Out of all the difficulties you faced, which was the most challenging? Why?</td>
<td>How long have you been in this position?</td>
</tr>
<tr>
<td>Out of all of the opportunities you encountered, which was the most beneficial and why?</td>
<td>What position(s) did you have before you attained this position? How long did you spend in each of those positions?</td>
</tr>
<tr>
<td>What is it like to be a woman in an assistant principal or principal in your school setting?</td>
<td>At what point in your career did you consider moving into this position? What steps did you take to achieve your goal?</td>
</tr>
<tr>
<td>What difficulties do you face personally and/or professionally? What opportunities do you encounter personally and/or professionally?</td>
<td></td>
</tr>
<tr>
<td>What does your career path look like moving forward?</td>
<td></td>
</tr>
<tr>
<td>What do you think school systems can do to assist more teachers with the process of attaining leadership positions?</td>
<td></td>
</tr>
<tr>
<td>What is something you wish female teachers knew about attaining leadership positions in the secondary school setting?</td>
<td></td>
</tr>
</tbody>
</table>

*Table 1.* Interview questions organized by related research question.
Results
12 participants, including female assistant principals, associate/co-principals, and principals in suburban school in Allegheny County were interviewed for this research study. Of the 12 participants, four are assistant principals, three are associate principals, and five are principals. The majority of the participants have multiple years of leadership experience in at least two school districts and before that, roughly eight years of teaching experience. The following are the themes the researcher discovered:

Theme 1: Gender positively impacts the hiring process.
Theme 2: Because of the amount of time required at the high school level and stress induced, a supportive significant other is advantageous to female principals.
Theme 3: The most identified barrier faced in the leadership position is the lack of respect from male colleagues and at times, other members of the school community, including parents.
Theme 4: Adopting male characteristics, or possessing male characteristics, is a strategy women use to overcome barriers faced in leadership positions due to gender.
Theme 5: Being a female presents school leaders with opportunities to better serve students.
Theme 6: The career paths of these female leaders is linear, with people spending less than five years in each leadership role.
Theme 7: Mentoring female teachers is the most beneficial act school systems can complete to assist more female teachers with the process of attaining leadership positions.
Theme 8: If leadership qualities are present, promotion opportunities from within school districts are common.
Theme 9: Most assistant principals still handle discipline, but some school districts divide tasks by strength and not gender.

The first theme the researcher uncovered was that gender positively impacts the hiring process. 7 of the 12 participants indicated that their gender had a positive impact on the fact that they were able to attain their position. Joining an all-male team of principals was a common experience, so in some school districts, the number of females in leadership positions was significantly lacking. The participants stated that their school districts were looking to hire a female because they wanted a balance of administrators. “There were jobs that I probably had a better chance at because all of the administrators were already men…the job I ended up getting, the head principal is male. The other associate principal is a male, and I feel that they kind of had in the back of their minds that they wanted a female” (Interview 5). This finding makes sense. The underrepresentation of females in administrative positions at the secondary level means that school districts will look favorably on those female candidates, especially given the skills that female candidates possess, which will be discussed with a subsequent theme. Across the country, 55% of suburban principals are female; Allegheny County’s ration of female to male principals is approximately the same at 53%.

The second theme the researcher discovered was that because of the amount of time required at the high school level and stress induced, a supportive significant other is advantageous to female assistant principals, associate principals, and principals. As stated in chapter four, the researcher is defining ‘significant other’ as a person the interviewee depends on for emotional support, such as a spouse or partner. 8 of the 12 participants indicated that the amount of time necessary for them to carry out their job responsibilities required the support of a
significant other. Speaking of her husband, one participant commented, “He’d be the stay-at-home dad and work part-time because we knew we weren’t able to have any more kids. So, at that moment – and I thought honestly, ‘This will last for six months,’ – I don’t know if you’re married. But you know your husband’s personality, but I thought there’s no way my husband’s going to do this, but we’ll give it a shot. Actually it was the best decision for our family at the time we ever made. My husband was a stay-at-home dad” (Interview 8). Having a supportive significant other allowed these participants to take on these demanding positions, knowing that their significant other would be taking care of responsibilities related to caring for the home or children. These findings contradict current research, which supports the fact that having a family hindered career advancement (Greenhill et al, 2009; Smith, 2011). 8 of the 12 participants have children; six did not feel their children were impacted in any way by their leadership position; however, all but two have children who are high school age or above. This seems to support the research done by McGee35 (2010) who found that women tend to delay their careers in order to have a family. More research is necessary to discover the role that a supportive significant other plays in attaining leadership positions because of the emphasize these participants placed on the support they received at home, making it possible for them to perform the demanding responsibilities of their jobs.

The third theme the researcher identified concerned the most commonly identified barrier. The most identified barrier faced in the leadership position is the lack of respect from male colleagues and at times, other members of the school community, including parents. This could be due to the fact that the male colleagues of these participants are not used to working with female counterparts, and could go as far as to show that they either do not feel as though females can perform their job responsibilities adequately or perhaps are threatened by females who are outperforming them. Participants’ comments concerning this apparent lack of respect include: “I feel like sometimes our voices weren’t necessarily heard” (Interview 1), “In fact, the term was… ‘hysterical female’ being a ‘hysterical female.’ Even if it was jokingly said I don’t think it was a joke” (Interview 10), “I was referred to as a bitch because I disciplined a student. I was referred to as a bitch by a male superior” (Interview 2). These interactions demonstrate the quick judgment and dismissal of female voices in leadership by male colleagues or superiors. This is supported by research; Eagly and Carli14 (2007) found that women who maintain characteristics typically associated with females are seen as overly emotional or lacking assertiveness. At best, the male dominated culture of the school system can be said to exclude females; at its worst, the examples above can be considered examples of bullying. Howe-Walsh and Turnbull (2016) found similar results in their qualitative study concerning higher education. In their study, this bullying behavior led to a lack of self-confidence in women leaders. This unconscious or conscious gender bias has also been confirmed by behavioral science researchers Joseph Grenny and David Maxfield whose study proved that gender bias is a real phenomenon; when women are perceived as being forceful, their perceived competency falls by 35%; for men in a similar situation, that number is only 22% (Caprino, 2017). Gender bias remains present in school leadership today.

The fourth theme the researcher discovered was that adopting or possessing male characteristics is a strategy women use to overcome barriers faced in leadership positions due to gender. Five of the 12 participants described either adopting or already possessing traits commonly associated with males. “I think that for the most part, I almost tend to act more like a man when it comes to
certain things. I don’t know how to explain that because it sounds very sexist. But I think I try to not… I specifically try to look at details, and look at data, and not let my heartstrings tug at things. I may almost due it to a fault because I’m trying to not allow those typical female stereotypes to play into what I do” (Interview 9). This supports the research that identifies acting like a man as a coping strategy (Denissen, 2010; Mavin, 2008; Singh & Vinnicombe, 2004). These findings support the idea that women who desire these leadership positions already possess traits commonly associated with males and so attaining their leadership roles and having to relate to men already existing in those roles with established routines and beliefs, only reinforces the researched but not quite believed practice of the soft skills, which are very important to leadership. If women are downplaying the skills that they have that are part of the reason they are good leaders, even they are reinforcing the stereotypes about women in leadership.

The fifth theme the researcher discovered is that being a female presents school leaders with opportunities to better serve students. So, school districts should not be looking to hire females simply to keep up with the times or meet a quota, but should desire female leadership because of the opportunities they bring to the school. The women leaders recognize that as well; when asked about what opportunities they’ve encountered, only two of the participants mentioned opportunities relating to personal gain, like being able to afford a new car. Instead, four participants described how they are able to serve the needs of their students as well as teachers better because of their gender. This service includes managing dress code violations, but they also bring a different perspective to the table.

“I think the fact that I think about kids not eating affecting their day…I don’t know if that’s a gender thing; I think it is. I think mothers think more about making sure their kids all have food, all those things. I went to a female…women in leadership conference one time. There was a woman that was a CEO, and she said, ‘It will never be equal until a man has to worry about having toilet paper at home.’ It fully hit into me because my husband, as much as he…he never… I’m the one who goes grocery shopping. I’m the one to make sure we have everything, you know what I mean? That really hit home. It was a small thing, but I still think about it ten years later.” (Interview 3)

This is supported by research completed by Andrews (2017) who found women to possess more emotional intelligence than men, specifically in terms of empathy, social responsibility, and interpersonal relationships. The participants expressed a desire to better serve students and they are able to do so using specific skill sets acquired not just while performing job-related responsibilities, but also while caring for their households.

The sixth theme the researcher discovered is that the career paths of these participants is linear, with participants spending less than five years in each leadership role. These women achieved success in moving from teacher to leadership role in their own district, then moved on to other districts and all have a desire to move to a new leadership position from here. 9 of the participants expressed an interest in moving to a leadership position with increased responsibilities; only two participants expressed a desire to remain assistant principals and one participant is retired. This is contradictory of research which states that women take more circular routes to leadership (Eckman, 2004); however, this contradiction could be due to the fact
that only assistant principals, associate principals, and principals were interviewed for this study. Of the participants still working, 10 of them have achieved doctoral degrees or are currently pursuing a doctoral degree. Two participants mentioned that most leaders do not stay in one position for a great length of time. This is supported by research completed by Fuller and Young (2009) which found that about 50% of new principals stay for three years and less than 30% stay for five years. Although the participants expressed desires to move positions, none expressed a desire to leave the profession altogether. The researcher posits the theory that although there are some negatives associated with the job, causing principals to seek a change in job responsibilities, those negatives are not enough to force the principals to leave the profession altogether.

The seventh theme the researcher discovered is that mentoring female teachers is the most beneficial act school systems can complete to assist more female teachers with the process of attaining leadership positions. 7 of the 12 participants in the study received encouragement from building level leaders or others they identified as mentors; they had not considered becoming administrators, but were instead “mentored that way” (interview 12). This same participant believed she was “abnormal” (interview 12) because she was mentored into leadership; however, the interview results are instead consistent with the fact that many participants had outside voices, an equal number of male and female, encouraging them to pursue leadership opportunities. This is supported by the research; Watson, Hodgins, & Brooks (2016) confirm that women are set up for failure without mentors and women with children are the group that benefits the most from having a mentor. The fact that the participants have both male and female mentors is not surprising; research by McGee35 (2010) found that women need both male and female mentors; Dana and Bourisaw14 (2006) and Lane-Washington and Wilson-Jones33 (2010) found that male mentors can actually be more beneficial mentors because they can endorse female leaders in the organization. Without a mentor providing validation for leadership abilities, these women may never have left the classroom environment. Interestingly, only two of the participants spoke in specifics about what they themselves or their school districts do to mentor future leaders in their buildings. Perhaps because of all of the existing responsibilities of the job, mentoring becomes a nice thought, rather than a necessary action. Many of the participants expressed the thought of mentoring, but not many talked of what they specifically do to encourage female leaders in their own school districts, perhaps because of all of the demands of the position already.

The eighth theme the researcher discovered is that if leadership qualities are present, promotion opportunities from within districts is common. 8 of the 12 participants were promoted from teacher or counselor to their first administrative position within their school districts. “As far as the middle school, I had been there teaching, so I knew some of the folks there, which I think helped more than anything else. One thing about going in your building is there are a lot of things you can’t teach somebody. They’ll learn, but where does this group eat? What are the dynamics of this department?” (Interview 7). More research is needed to determine to what extent this occurs across the country. Because the majority of the participants were promoted from within the district, it follows that if someone possesses leadership potential and a position opens within her district, she has a good chance of attaining the position not only because of the leadership potential, but also because of the intangible knowledge that person already possesses that a candidate from outside the organization does not possess. This could say something about
what districts value – they value the already established culture and the fact that they don’t have to train a completely new person for the role. However, because many principals only stay in a leadership position for 3-5 years, these districts may lose these principals to other school districts for a variety of reasons.

The ninth theme the researcher discovered was that most of the assistant principals interviewed still handle any discipline issues, but some school districts divide tasks by strength of the administrator and not by gender. All but one of the participants who referenced discipline as a task were assistant principals, or were referring to a time when she served as an assistant principal. “Yup. Absolutely. Myself and the other assistant both handle all of the discipline. If there is a situation where we need to suspend a student, or it’s one of those higher level offenses, we will talk it over, or whatever we want to do, with the building principal and get that stamp of approval” (Interview 6). Because discipline is still a task associated with the assistant principal and principal position, that could be a deterrent for hiring a female principal who may not be seen as much of a disciplinarian, or if she is seen as a disciplinarian, she is also seen as a “bitch” (interview 2). Additionally, because the principals in this study all followed a linear career progression thus far, teacher leaders who desire leadership positions but do not see themselves as disciplinarians could be deterred from pursuing leadership opportunities altogether. More research including teachers with identified leadership potential who do not end up pursuing leadership opportunities would need to be completed.

Implications for Practice
Female teachers who aspire to be leaders at the secondary level, specifically assistant principals, associate principals, and principals possess advantages. For one, school districts desire female leaders because many districts do not employ females at the secondary level currently and so aspiring female leaders have an advantage depending on the existing make-up of the leadership team. However, once hired, those advantages transfer to the school districts, not necessarily to the female leaders, who identify barriers related to gender bias that hinder their abilities to perform their job responsibilities and opportunities to better serve the district because of their gender. In order to combat those barriers, female leaders can adopt, if they do not already possess, typically male-dominated traits. Because of the male-dominated environment that is school leadership, female leaders have found success through possessing self-confidence and an authoritative nature, even if they do encounter a lack of respect from male colleagues. Both female teachers who aspire to be leaders and female leaders should find, if they don’t already have, a support system at both work (a mentor) and home (a significant other).

School districts, especially at the secondary level and with a majority of male leaders, should be cognizant of unconscious gender bias that may exist, particularly in an environment that has not previously included female leadership. That bias may come from males in leadership, or parents who have not had female leadership in school districts when they were growing up. This is one reason why it is important that female leaders exist in schools, as models that show young adults of both sexes that females can be leaders. Additionally, school districts can look into the specific tasks assigned to assistant principals, associate principals, and principals and divide them according to strength instead of position to not discourage women from applying to the assistant principal position or not attaining the position due to not being perceived as being a disciplinarian. Finally, because many school leaders do not stay in positions very long, school
districts should be cultivating teacher leaders so that many available leaders exist within their school district and district office can promote from within.

**Recommendations for Further Research**

To increase validity and reliability, further research can be done using the same interview questions with more participants of the same demographics in counties surrounding Allegheny in order to better understand the lived experiences of female principals. Additionally, more research can be done to study mentoring in school districts. More research could follow about the degree to which administrators feel they have mentors; some of the participants spoke of having supportive mentors currently, while others cautioned that it is “lonely at the top” (Interview 11). Related to this topic is the idea of networking; the researcher did not explicitly ask participants about their networking opportunities and not one mentioned it, even when asked about next steps in their careers. More research specifically pertaining to mentors could include the degree to which female leaders feel they mentor female teachers. Female leaders could be surveyed and those results could be compared with female teachers to see specifically what mentoring actions are helping to cultivate leaders and which are not. Many of the participants expressed a desire to mentor others, but did not speak to whether they were actually engaging in that behavior or not. Further research could also be done on the hiring processes of school districts. At the time of the interview, many of the participants had held at least one leadership position prior to this one; only one participant was new to an administrative position. Furthermore, all of the participants who had held prior leadership positions have done so outside of their current district, although they may have started in the district which had formerly employed them as teachers. More research is needed on why principals move districts multiple times as well as how often districts promote from within versus hiring from outside. Finally, the researcher is curious about the personality traits of leadership; many of the women in this study seem to possess naturally “male” traits and found them to be an advantage in their leadership positions. More research is necessary to determine what led them to become interested in the position in the first place and then actually follow through and take an administrative role.

**Conclusion**

The researcher reached two main conclusions which are as follows:

The most significant barrier faced by women in leadership positions is unconscious or conscious gender bias, experienced in interactions with male colleagues and/or superiors and to combat that gender bias, the most significant coping strategy is adopting or already possessing typical male characteristics.

Women, especially women with children, benefit from mentors within the organization who can encourage them to take leadership positions and they benefit from supportive significant others who can take on additional responsibilities in the home.

**References**


3 Andrews, S. “Leveling the playing field: What the talent development can do to prepare, promote, and develop women in leadership.” *TD Magazine*, 71(3), 30-35.


54 Yaffe, D. “Tackling the teacher shortage.” Education Digest. 81(8), 11-15.
Death Experiences as Mortality Salience priming, personality traits, and Schizotypal Personalities

William Harper, Brent Robbins, and Ming Yuan
Point Park University

Abstract
Having been exposed to or having endured a personal death of another person can be a difficult experience may be related to some personality traits, as research suggests. Research on death exposure or experience exists, but much of is limited in scope only to nuclear family members. The present research establishes a wider, more comprehensive and efficient Death Assessment Questionnaire (DAQ), or a death experiences questionnaire, to assess the frequency of loss and emotional significance (ES) of each loss endured; the present research extends prior research in this regard. We studied the relationships between experiencing death, and the emotional significance of each loss, college major choice, magical ideation/schizotypal personality, sensation seeking, materialistic values, abstracted thinking, openness to change, and rule-consciousness. Also, the research has an experimental component to assess whether recounting deaths experienced operates as morality salience (MS) priming, which foster’s death awareness, to identify if the variable influences personality trait scores. Other MS research identifies that personality can be effected when death is made salient; the present study investigates if recounting deaths experienced, and ES of each loss, induces MS personality effects to establish a new method of MS through completing the DAQ. In the DAQ, ES was operationally defined by combing the core themes found in 5 common grief and bereavement questionnaires. 209 students completed the questionnaires, with 105 students in the MS condition. Those who experienced more significant deaths and a greater frequency of deaths scored higher in schizotypy (magical thinking), were more likely to be psychology majors compared to other majors, and more interested in philosophy and psychology. Implications for the research are discussed.

Keywords
Experiences of death, magical ideation, schizotypy, mortality salience, personality

Introduction
Death as a topic of research in psychology has gained and has also been largely written about by many philosophers, and as influenced its own branch philosophy, and has influenced existentialism. Many philosophers posited about the power and impact of death, and how thinking about the topic can bring about changes to lifestyle; being toward death would be one example (Heidegger, 1962). Some philosophers have lived through great tragedies and experienced copious amounts of death, like Soren Kierkegaard, who experienced the death of 5 siblings, a mother, in a quick succession, and the death of his wife and father, and largely wrote about existential and abstract themes (Kaufman, n.d.; Westphal Merold, 2017). Also, Kierkegaard also was nonconforming and iconoclastic during his lifetime for opposing the strict dogmas that were ubiquitous in his day (McDonad, n.d.). The current study investigates if encountering more instances of death, and the tumult related to experiencing more significant losses, relates to abstracted philosophical thinking and rule-consciousness; in the Kierkegaard vignette, he emerged with a propensity toward deep abstracted philosophical thinking and wrote
about a non-conformist thought which criticized the established Danish church. The present study also investigates other variables that will be explained and conducts and experiment and evaluates correlations. In the following sections, we will describe relevant scholarship, explore the importance of the problem, and address why research is warranted, present hypothesis, and describe our research and designs.

Experiencing the death of another person or pensively reflecting upon the possibilities of one’s own death can influence internal states, alterations in personality alter views about different groups of people, subject individuals to distress, mental disorders, and even thought patterns. In contemporary psychology research, numerous death related research topics have emerged, and various ones will be explained. Investigators have begun examining how death, personality, mental disorders, self-esteem, cognitive abilities, belief systems, and world views are often enmeshed.

Death is the inevitable conclusion to ephemeral life, and just as common as birthing experiences occur, death may also be as abundant, if not more. It is palpable that as permeating as death is, that most people have experienced the death of somebody they know or the death of a pet somewhere in life. To illustrate this notion, one-eighth of the American population is 65 or older, and this statistic was anticipated to increase to one-quarter in 2015 (Schneider, 1999; Administration on Aging, as cited in Feldman, 2015). With the presence of older Americans already ubiquitous, it is palpable that many people have already experienced a death of another person, some more than others, as the older population resides closer to death due to finitude and old age. Yet, not all experiences of death are pertinent to old age, as some may have experienced death in another person unexpectedly. One report found that annually, more than two million children and adolescents will experience the death of a parent or close relative, while findings revealed that 48.2% of adolescents reported the death of family member or a close friend, as 8.1% had experienced deaths in both categories, and 40% of college students reported the death of a peer in adolescence (U.S. Bureau of the Census, 1990; Rheingold et al., 2004; Ringer & Hayden, 200). Experiencing death also extends to the pets that have died over the course of life. Experiencing the death of a pet is often an early life experience of loss, as 68% of children ages one to three have experienced pet death Speece found (as cited in Hunter & Smith, 2008). We experience death when other people’s live reach cessation and they become deceased; death may arguably be experienced more by those still living than the person who died, as death is post-existence and an absence of experience, generally speaking.

For the present research, experiences of death or death experiences will be used to reflect the phenomenon of suffering a loss. Death may fall into most individual lives as early as adolescents and childhood and may us with having experienced various types of hardship in the aftermath. The impacts that experiencing death has on people is worth receiving some elucidation.

Primarily, the research on experiencing death has generally been conducted on one to two of the following topics: early parental loss, loss of peers in adolescence, familial loss, or pets, as the studies are often limited due to only merging any two or three of these categories. A holistic analysis of loss combining multifaceted features have not yet been established examining diverse relationship categories, so a comprehensive analysis of death is warranted. These studies will be further explained. Other studies often apply timespan ramifications that limit the assessment of deaths experienced to within the last year and only to the categories of parental or close friend death, while less overall attention is given to deaths of friends or to extended relatives (Rheingold et al., 2004). The present work applies no excluding criteria based and values the significance of any death, whether a friend, family member, or pet. These studies will be
discussed further throughout. The present study seeks to expand and combine these categories of loss to generate a thorough questionnaire for assessment of loss.

Exposure to death and suicide have been shown to instill survivors with psychological tumult, distress, and have significant implications to those who have experienced the loss. Ostensibly, a 1999 study by Worden, Davies, and McCown indicated that the loss of a close relative (i.e., parent or sibling) was related to experiencing substantial distress in adolescence (as cited in Rheingold et al., 2004). Furthermore, the theme of distress extends to a finding from experiences of death includes a finding by Oshman; college students who experienced the death of a father between the ages of 5 and 12 reported psychosocial deficits, and Jacobson and Ryder supported a link between early parent death and inabilities to sustain intimacy, and ineptitudes to express and resolve anger (as cited in Finkelstein, 1988). Experiencing a loss has been shown to have significant impact on individuals through adolescence and for college people. Finally, individuals who have experienced more death were more likely to attempt suicide, while overall research on this finding is obfuscating as other research presents contrary findings (Pirelli & Jeglic, 2009). However, a finding emerged that people who have experienced the death or suicide of a friend, by Gutierrez, King, and Ghaziuddin, to experience a greater attraction toward death (as cited in Pirelli & Jeglic, 2009). Clearly, the experience of death may have a pernicious toll on some or may be distressful.

Experiencing loss also has been shown as a factor related to mental illness. Jacobson and Ryder (1969) also demonstrated that early parental loss was associated with suicide, alcoholism and drug addiction, schizophrenia, depressive disorders, anxiety, an inability to trust the marriage partner, sociopathy, criminal behavior, and poor employment. More findings and implications that pertain to experiencing loss depression and mental illness will be further elucidated.

Depression has also been found to be a theme affiliated with death exposure. Having experienced early mother death, a replicated finding, was identified as a factor related to major depressive disorders, as this correlation also was maintained for those who have known a suicide victim (Finkelstein, 1988; Pirelli & Jeglic, 2009). Additionally, Dietrich found that those who have experienced early parent death demonstrated higher MMPI clinical scale scores in the abnormal range (as cited in Finkelstein, 1988). Related to this finding, psychiatric patient populations showed a greater frequency of early parent death (Finkelstein, 1988). Psychological disturbance as a result of loss can also be reflected by Raphael, as death of a relative during childhood or adolescence is associated with increased likelihood of experiencing mental illness (as cited in Rheingold et al., 2004). Additionally, and more specifically, the Diagnostic and Statistical manual of Mental Disorders (DSM) recognizes that environmental factors like physical and sexual abuse, experiencing loss or death, or witnessing violence, have been heavily studied or found to be implicated in various mental disorders which include personality disorders, borderline personality disorder, antisocial personality disorder and violence (Kitamura & Fujihara, 2003). As loss has been found to be related to criminal behavior and antisocial personality, the current study investigates if loss may be correlated with lower levels of rule-consciousness. The pronounced impact that death can have on people in relation to mental illness continues to scaffold. Rheingold et al. (2004) found correlations between post-traumatic stress disorder (PTSD), major depressive episodes, and death experienced, with more debilitating effects present for having experienced a death violent in nature as the related distress takes longer to subside, and that experiencing death in adolescence is tied to a greater risk for substance use and associated problems. Psychological disturbances and death experiences continue to present a patterned case for psychological tumult and significant distress.
Having experienced death has been linked to certain personality traits, beliefs, and it may have hidden benefits, as supported by various studies. A twin study by Kendler et al. linked child parental loss with low perceived parental warmth and elevated neurotic qualities (as cited in Kitamura & Fujihara, 2003), while Kitamura and Fujihara (2003) presented that early loss of a mother and sibling death were correlated positively with introversion, and that death may impact boys making them reticent in initiating new relationships. Exposure to death seemingly influences numerous types of personality across the spectrum. Berlinsky and Biller (as cited in Finkelstein 1988) found links between early parent mortality and future emotional disruptions, delinquency and crime, external locus of control, neurotic personalities, introversion, dependent personalities, and cognitive deficits, diminished constructive creative engagement, and influenced antisocial behavior. Yet, the research for cognitive deficits varies. Other research has identified that IQ, as reported by Albert (as cited in Finkelstein, 1988), tended to exceed a score of 155 at a rate of at least three times the normal population, when unexpected parent death was experienced. Henceforth, exposure or having experienced death has been shown to hold some additional benefits for cognitive abilities. Reilly, Hasazi, and Bond (1983) identified that death-experienced children better understood personal morality, universality (that all living things must die), and irreversibility, and this this understanding of mortality was related to the level of cognitive development and to experiences of death. Also, children better understood death having experienced pet death at a younger age (Hunter & Smith, 2008).

Other positive outcomes relate to coping skills, valuing others, creativity, need for cognition, as these qualities have also been linked with experiencing death and near-death experiences. Martinson, Davies, and McClowry found that having experienced a sibling death was associated with better coping skills and valuing others more after loss, while Garmezy and Rutter found that creativity and resilience increased with more exposure to death (as cited in Oltjenbruns, 2001). Creativity again lies at the positive side of the death experience research spectrum lies creativity. Premature parent death and the idealizing of a lost person, or thinking about the death, influenced a manifestation of creative development, in the research by Albert (as cited in Finkelstein, 1988). The finding on creativity has been replicated by Aldwin, who found that creativity increased with more exposure to death and psychosocial skills later in life (as cited in Oltjenbruns, 2001). Other positive outcomes have been documented; not all finding are lugubrious. Furthermore, near-death experiences (NDE), as presented by Sutherland, correlated with an insatiable search for knowledge (Groth-Marnat & Summer, 1998). It is palpable that these findings, representing a constructive angle for deaths experienced research, perhaps illustrate some related variables in the case of Kierkegaard’s astuteness. The present study expands this research by examining if abstractedness was correlated with frequency of death or with having more significant losses.

Favorable outcomes also related to NDE. Groth-Marnat and Summer (1998) identified that a NDE cultivated new emphasis on prosocial concerns for others, augmented beliefs in the afterlife, beliefs in paranormal phenomena, amounts transcendental experiences, increased veneration for nature, while NDE decreased death anxiety and materialistic values. Seemingly enough, these transcendental experiences and paranormal beliefs are features idiosyncratic magical ideation (MI), also known as schizotypy or magical thinking, which is a set of personality characteristics on a continuum that are correlated to the traits tied to schizophrenia (Pricard & Christman, 2016). The MI trait will be discussed in the following section, before returning to the Terror Management Theory (TMT) and mortality salience (MS).
The MI personality trait represents unusual perceptual beliefs. This personality trait has been used as a predictor of onset for psychotic illness, to evaluate the susceptibility, and to assess genetic propensities to develop psychotic illness (McClenon, 2012). Experiencing spiritual transcendental involves elements of illusion, delusion, and auditory components; Moreover, MI qualities include aberrant beliefs, visual and passivity experiences, transmission of thoughts, and thought withdrawal, while paranormal beliefs have been found to be correlated with MI (Kwapil, Miller, Zinser, Chapman, & Chapman, 1997; Christman, Henning, Geers, Proper, & Niebauer, 2008). These atypical qualities are comparable and akin due to the aberrant nature, similarities, are closely related, and nearly representative of one another. However, from a reference point of a fully dimensional conception of mental health, MI has also been argued to have adaptive, healthy personality features and suggest the likelihood of healthy schizotypy for individuals who are more magically ideated with no evidence of illness (Claridge & Davis, 2003). Experiencing death shows some evidence as a correlate with MI. Exposure to death and MI were found by Bernbaum et al. to be linked with childhood trauma and childhood difficulty, which comprises experiences of loss and death, and schizotypal experiences or schizophrenia, (as cited in McCleonon, 2012; McCleonon, 2012). The present study broadens this area as it focuses on deaths and MI together. Even as early as age 4 MI has been shown to kick in, as the expression of MI has been linked with grief relating to responses to loss (Oltjenbruns, 2001), which may operate as an illusion of control. Another topic regarding research related to death and personality, often studies conjointly, is that MS and death awareness.

**Terror Management Theory and Mortality Salience**

MS involved death awareness priming exercises and is a concept subsumed within the TMT. TMT was established by Sheldon Solomon, Tom Pyszczynski, Jeff Greenberg, who discovered and expanded the work of anthropologist Ernest Becker. The concept caught on and was permeated by other researchers over the years. The core propositions of TMT are founded upon the existential thought of Becker who postulated that awareness of death is intimately amalgamated in the human experience, and people curtail death anxiety by adopting arbitrary cultural world views, ideologies, character traits, identities, and cultural beliefs in order to ascribe one’s meaning, belongingness, self-esteem, and symbolic immortality investment (Becker, 1973; Greenberg & Arndt, 2012). By establishing a symbolic self, heroism, social character, or identifying with a cultural worldview, religion, or social group, one could transcend the restraints of the human condition that is tied to experiencing death anxiety, to establish a consistent value system with others, which engenders self-esteem, for the shared cultural worldview a means of reaching a symbolic immortality; this phenomenon has been referred to as an *immortality project* (Keen, 1974; Becker, 1973). Overall, Becker’s central assertion was that people subsist through symbolic identities to bolster self-esteem, which buffers the death anxiety that is inherent with the human condition, and by eschewing ruminations about ones death and alternative cultural worldviews for existential security.

For some people, pondering about one’s death may be a fearsome thought experiment which can instill people with negative thoughts, and may be related to xenophobia. This exercise related to thoughts of death or deathly cues has been shown to uphold Becker’s principles by a panoply of empirical research. The worldview harnessing self-esteem generating apparatus of the TMT that makes death more mentally recondite makes people distinct from animals for this reason (Greenberg & Arndt, 2012). However, Friedman and Rholes (2007) found that when individuals are primed for their animal conditions, condemned for their worldviews, self-esteem becomes threatened and death related thoughts and negative thoughts intensify (as cited in Greenberg &
Negative thoughts and not only are present when worldviews are reprobated, but the thoughts also extend to those who diverge from the subject worldview. When mortality is primed or threatened, people place conviction in their worldviews to foster self-esteem, and defensiveness increases; individuals affiliate more with those who validate the same worldviews, interact with these individuals more favorably, and espouse hostility and negative reactions for those challenging the worldview or nonconforming groups (Greenberg & Arndt, 2012; Grant & Wade-Benzoni, 2009). Becker’s theory and TMT have been maintained in other ways too; these core ideas which have been supported by investigators will be discussed.

The following research discusses materialistic values and neuroticism in relation to MS and will recap the premise of TMT. Related to materialistic values, Kasser and Sheldon found that MS induction increased materialistic values, consumption ratings, and expectations to spend more money on luxurious goods, and feelings of greed, and instills people with overconfidence about future financial worth or expectations. (as cited in Grant & Wade-Bensoni, 2009; as cited in McCabe, Spina, & Arndt, 2016; Kasser and Sheldon, 2000). One adverse finding about MS found results which illustrated that individuals presented higher levels of neuroticism through using the NEO-FFI 3 personality inventory (Ycaza, Hyman, & Behbahani, 2012). The dread that arises in consciousness when considering one’s finitude instills a sense of dismay, or death anxiety, as mental defense. This terror needs to be attenuated to submerge death-related thoughts from consciousness via the self-esteem revitalization process, to hinder death anxiety and to make death seem like a distant event, through validating arbitrary cultural worldviews and subsuming with the immortality project; this is the general premise of TMT (Greenberg & Arndt, 2012). Together, this collection of research presented, and many other pieces of research conducted on the ideas of Becker and TMT, uphold the basic hypothesis of TMT model. While MS has been shown to lead people to view people who represent alternative cultural world views unfavorably and foster extrinsically oriented goals such as status-oriented desires with wealth, there are also some auspicious findings.

On a more positive note, MS induction also possesses some embellishing qualities as there are some hidden benefits relating to creativity, prosocial qualities, explorative thought, openness to experience, and open-mindedness. Grant identified that MS can increase intrinsically motivated prosocial orientations, which include generative behaviors and desires to give, contribute, establish positive interpersonal relationships, help, mentor, make a difference in the community, and protect/promote the welfare of others, and other genuinely positive outcomes (as cited in Grant & Wade-Bensoni, 2009; Vail et al., 2012). Death awareness can increase subservient and obsequious qualities, but this finding raises obfuscation as it does not say whether or not it applies to all groups or only in-groups. Also, it was revealed that creativity and explorative thought are bolstered when a personal death is primed for individuals in general, and specifically for people low in personal need for structure (PNS), or when a behavioral task was interconnected with the broader cultural context (Routledge & Juhl, 2012). Other personality traits effected by MS immediately reflect an influence on personality traits like explorative and intellectual thought, preferences for novel experiences, which may be related to openness to change and abstractedness can receive a boost (Routledge & Juhl, 2012; Rietzschel, Slijkhuis, & Van Yperen, 2014; Vess, Routledge, Landau, & Arndt, 2009; Routledge, Juhl, & Vess, 2010; Kasser & Sheldon, 2000). However, inconsistencies emerge in the research: MS influences on attitude rigidity, conformity, defensiveness, and obedience to cultural worldviews may contradict explorative thought, open-mindedness, and preferences for novel experience, while creativity has been shown to both diminish and receive a boost after MS (Pyszczynski, Soloman, & Greenberg,
2003; Routledge & Juhl, 2012). Just as mixed research has emerged regarding relationships between MS and creativity, it is notable that abstract thinking (i.e. abstractedness) and creativity have been found to be correlated (Joy & Hicks, 2004), low PNS was correlated with creativity (Rietzschel, Slijkhuis, & Van Yperen, 2014), as well as abstractedness (Joy & Hicks, 2004) and Neuberg and Newsom found that these correlations exist for openness to experience (as cited in Zhang, Schimel, & Faucher, 2014). These findings present some positive light on the topic of MS, yet they also raise some questions and inconsistencies in research. The other correlates with creativity, abstract thinking, and openness suggest that perhaps MS priming would trend in this direction.

Additional more cognitive aspects relating to MS will now be described regarding PNS and divergent thinking. Participants with low PNS prefer cognitively complex material, novelty, novel social, intellectual, and environmental stimuli, as well as divergent thinking, open-mindedness, creativity, uncertainty; after MS these qualities increased, and they became more open to those with outgroup worldviews but saw life as more meaningless afterward (Routledge & Juhl, 2012; Rietzschel, Slijkhuis, & Van Yperen, 2014). On the other hand, those with high PNS prefer clear, simple, certain, orderly, unambiguous knowledge, and predictable functions (Routledge & Juhl, 2012). MS induction for those with higher PNS decreased openness, creativity, intellectual exploration (Rietzschel, Slijkhuis, & Van Yperen, 2014; Vess, Routledge, Landau, & Arndt, 2009; Routledge, Juhl, & Vess, 2010). PNS has been shown to possess variations in relation the result of MS, depending on level of the quality. Related and comparable to PNS and abstract thinking is divergent thinking. Divergent thinking, PNS, and creativity, have been shown to plummet when MS induction for people high in PNS (Routledge & Juhl, 2012). The qualities just presented may relate to abstractedness due to overlap in similarities. The present study expands work related to these concepts through exploring abstractedness and MS, to extend the research relating to MS and intellectuality, while abstractedness seemed like a good option to measure philosophical qualities.

The concept of MS, TMT, and related findings have been described, so following article segment will now describe the traditional methodology relating to MS/death awareness research. Death awareness research has utilized various methods to manipulate MS; investigators have used situation cues, had individuals write about emotions experienced when contemplating one’s own death, answer questions about what happens after death, view videos of fatal car crashes, walk past a cemetery, utilized subliminal priming of death-related words, while this form of priming has been shown strong imperial evidence to influence psychological states, behavioral affects, and motivations of individuals (Grant & Wade-Bonsen, 2009; Routledge & Juhl, 2012; Pyszczynski, Soloman, & Greenberg, 2003). Then, participants typically are subjected to a filler-distractor phase between the manipulation and the dependent variable, where they may fill out nonrelated surveys about financial status in 15 years (Kasser & Sheldon, 2000), innocuous word searches (Pyszczynski, Greenberg, & Soloman, 1999), or listing hobbies (Ycaza et al., 2012) to divert participants away from death related thoughts.

The current research aims to establish a new methodology style of MS priming to identify if thinking about all the deaths that have occurred around a person throughout life, by filling out the questions which ask participants about losses for specific categories on friends, family members, pets, and etc., and identifying how significant each loss was. Traditionally, MS was induced by having a participant write something about one’s own death (Greenberg & Arndt, 2012), as well as other ways previously mentioned.
This potential method of MS induction operates on the principles illustrated in the death awareness research pertaining to *vicarious mortality cues*, a MS priming method which facilitates death awareness by orienting a person toward those who are dead or in danger, as opposed to self-relevance personal cues (Grant & Wade-Benzoni, 2009). Instead of becoming aware of one’s own death, it attempts to make you aware of the death of others. Although MS research has grown quite exponentially, after an exhaustive literature review the topics of MS and deaths experienced as a pair received sparse consideration, along with the other variables being used. A panoply of research exists on near-death experience and parental loss, while loss in the extended social network of an individual’s social gamut and personality escape frequent aims of research; Ycaza et al. (2012) proposed that research on death awareness and personality characters have not been widely established. The present research attempts to expand on this premise.

**The Death Assessment questionnaire (DAQ)**

The purpose of this study was conducted for a master’s thesis, and it possesses both correlational and experimental aspects, includes details regarding the development and establishment of the DAQ, and investigates if recounting prior deaths induces any MS effects. The creation of the DAQ is similar to other death assessment research as it provides categories for participants to answer; Pirelli and Jeglic (2009) had participants estimate the losses experienced for general categories in the categories of immediate family, non-immediate family, friends, and acquaintances. The present study extends prior research on this topic by work by individually addressing each possible category of loss through a more comprehensive or systematic assessment of loss to reduce potential over or underestimating, which was an implication of the Pirelli and Jeglic study (2009). The DAQ also included pet death as a loss category to as other researchers have included it as a category of potential cumulative loss. Hunter and Smith (2008) operationalized death experienced by parent report of loss in immediate family, extended family, and pet death. Witnessing death was included as loss category to comprehensively assess the diverse facets of death experiences; this expands research on death experiences by including this category as we found that no other study in the death experiences literature included this topic in tandem with family, friends, teachers, work colleagues, grade school classmates, pet categories, etc. Arguably, witnessing a death could be included as a death exposure or experience relating to death, and has impacting results on people as illustrated through grief and bereavement literature on the topic. The current study and DAQ included these categories but expands this work as specific questions were used to ask participants to rate the quality of impact or significance of each loss for the relationship categories that they have experienced. By asking about each category specifically one by one, the idea was that asking for about each type relationship category specifically would provide a more comprehensive assessment, as research utilizing a systematic assessment of all loss is sparse and limited. Participants were also instructed to also count the deaths of family members that have occurred before they were born. To date, no study has tested the notion of cumulative death (death of persons, pets, or having witnessed one). The current study included deaths occurring prior to birth for several reasons. One existential premise of this is that perhaps people have a greater conception of death or existential psyche (having experienced more loss or related hardship may engender a propensity live to the fullest vivaciously or openly - i.e. reflecting a rich, energetic, lively mode of being, as measured by sensation seeking and openness to change) if they have endured more death or any related hardships. To this end, from the 16PF variable of openness to change, and rule-consciousness and a sensation seeking questionnaire were utilized.

Having dealt with death more may predispose one to having more familiarity the concept death. Even in the instance of familial deaths occurring before birth, familial narratives about that person are passed on to the young child, and that child can idealize about death and ponder the complexities of the concept and has to deal with the loss indirectly through an absence of a family position. For instance, Hunter and Smith (2008) identified that significant relationships exist between death experiences and understandings of death in the formats of universality, that all living things must die; finality, that death is final; and
nonfunctionality, once something dies it is no more (Kenyon, 2001). Perhaps this phenomenon of understanding death, or cognitive development in general, reflected through the current studies measure of abstract thinking, even extend to losses occurring before one’s birth. Including familial deaths in which a birth occurred posthumously a loss reflected situations where, for example, a person’s grandmothers had perished prior to born, it is palpable that they have a greater conception of death or a representation of a death, through indirect familial exposure and narratives, like when a father telling stories of his mom. Compared to the individual who has intact grandparents, deaths prior to birth seem worth of reporting, Perhaps this phenomenon identified by Hunter and Smith may relate be relevant for people that had deaths which occurred before one was born, as that a person may postulate about death as death has made an impression on one’s life, or may become relevant when one engages in social comparison with other friends who still have all their grandparents. Deaths occurring prior to one’s birth have already been shown to produce psychological implications in other forms. Prenatal bereavement has been shown be adversely correlated with intelligence, and prenatal stress at a general level with autism, schizophrenia, emotional/behavioral problems, and diminished cognitive abilities in the offspring (Virk, Obel, Li, & Olsen, 2014). No research on death experienced has shown to include deaths occurring before birth, yet few studies have been conducted on the topic in general, so this study would expand this field. Most death history research assess certain family members and do not permeate throughout one’s life or include deaths occurring prior to birth.

The Present Research
Potential correlations between personality variables (materialistic values, magical ideation, sensation seeking, and from Catell’s 16 Personality Factor Questionnaire (16PF; openness to change, rule-consciousness, abstractedness, and sensation seeking), major choice but specifically psychology, the number of deaths one has experienced across life, and the emotional significance (ES) for each loss incurred totaled, were assessed. Generally speaking, ES refers to how difficult each death was for the participant, although the concept was derived through rigorous research. For example, the death of grandmother that you never got to meet who died prior to birth or an aunt who you never met may be reported as a one, while an impacting death of family favorite who was a causality of combat may evoke a score of a 5. More about the DAQ devised will be revealed at the end of this section and in the methods section. The leading hypothesis is that those who have experienced more death or ES of loss across life will tend to be psychology majors, and will not be business majors, present greater interests in philosophy or psychology by indicating so or scoring high in abstractedness, score higher in materialistic values, magical ideation (schizotypal personality), openness to change, sensation seeking, and lower in rule-consciousness. The hypothesis investigating if psychology majors experienced more loss than other majors extends the finding by Black, Jeffreys, and Hartley (1993) that early life psychological trauma, which included death of significant others or of a parent, correlated with a propensity for individuals to undertake helping professions. Furthermore, this study can identify correlations between majors, personality, and loss.

The experimental segment of the study pertains to whether or not counting or recollecting the deaths experienced and ES of each loss operates as a MS independent variable in effecting the personality variables. By giving half of the participants the death assessment questionnaire before the personality measures and the other half after, experimental manipulation was induced. The hypothesis here is to see if this introductory style of MS induction will elicit the same response as prior MS research in regard to participants scoring higher in materialistic values (Kasser & Sheldon, 2000), increase MI scores, sensation seeking, abstractedness, openness to change, and lower rule-consciousness. Some of this research is exploratory in nature as some topics have not yet been explored in the TMT literature, it attempts to identify a new form of MS
priming, assess a wider gamut of losses experienced than what prior research has explored, while a new death assessment questionnaire was developed for this research.

**Method**

**Participants and Procedures**

Institutional review board approval was granted prior to conducting research and informed consent was attained prior to data collection. Participants for this study consiste of two-hundred eighteen (N=218), ranging from ages 18 to 47, introduction to psychology students at an urban liberal arts university, 18 years of age or older. Class extra credit was assertive for participation, while an alternative reading assignment for the same credit was also made available. Prior to completing the survey all students were instructed to read the informed consent form on the cover of the packet, which entailed a passage warning students that this survey could possibly trigger grief or bring up difficult feelings. Then, phone numbers were provided if any crisis situations to emerge and were instructed to call the school counseling center or a local behavioral crisis center if individuals felt discontented. Packets were coded with numbers and letters to ensure anonymity, and only to represent the order of questionnaires in the packet. Participants were informed that the study was on personality, that they did not have to participate, the data collection would take approximately 15 minutes to complete, and then debriefed about the research after data collection.

This study used a between subjects design method as participants; through simple randomization, participants were either randomly assigned to either a control group or a death salience condition (N=105). Participants in the MS induction condition received the death assessment form before the personality questionnaires while the control group received it after the personality assessments. For purposes of counterbalancing to reduce order effects, the questionnaire packets for both the control and experimental groups will consist of even distributions of all order combinations of personality instruments. For example, the experimental group will always receive the death assessment first, but all other personality instruments will be prepared in different ways so that there are even amounts of all combinations in the packets, using combinations formulas. The packets were numbered and lettered esoterically to represent whether it was part of the experimental or control group, and to identify the specific order that the questionnaires were placed in that packet, for data entry purposes. Due to time constraint purposes during data collection and to reduce attrition, the filler distractor phase commonplace in MS was averted.

**Instruments**

*Death Assessment Questionnaire (DAQ)*

The DAQ was developed for the purposes of this study, and for future research, to efficiently and accurately capture the number of deaths a person has experienced and the ES of each loss. The questionnaire will be attached to the end of this paper. It begins with simple demographic information like sex, gender, college major, and GPA. It then asks participants to write the number of deaths experienced in each of the relationship/family/pet loss/witnessed death categories, to count each death only once in the questionnaire, and to rate the ES for each loss experienced for that question on the line underneath. For instance, participants were asked ‘how many uncles have you experienced the loss of,’ and were asked to rate the ‘emotional significance rating of each death.’ A response of 4 on the first line would elicit that same number of individual ES scores on the line underneath, one for each individual loss (4 different scores total). To more effectively prompt a correct response for the ES line of a question, and after having ran a trial sample to ensure the questionnaire was effective at capturing its aims of receiving scores for each loss experienced an example box was established to illustrate the correct way to respond to a question and lines were created after the questing titled ‘Death #1_____ Death #2_____ Death #3_____,’ with instructions for the situation of having experienced more than 3 deaths to just write in the additional
ES ratings to the right of “Death #3____.” (See Appendix A). In the DAQ, death and ES of loss were quantified distinctively for data analysis purposes, which lead to four different scores. One score summated the deaths of persons, and the second totaled an ES value of persons lost, while a second category was established to account for a death total; the quantity of human death, pet death, and having witnessed a death together comprise the third score, while the fourth score reflected ES total (ES total score for people and pet death).

It is necessary to note that the ES portion of the Death Assessment Questionnaire was operationally defined by reflecting upon the reoccurring core themes of the qualities identified that are associated with grief and bereavement. The key terms and qualities associated within the core subset themes involved in the Grief Measurement Scale, Hogan Grief Reaction Checklist, Brief Greif Questionnaire, Prolonged Grief 13 Scale, and Texas Inventory of Greif questionnaires were used to define ES; additional grief and bereavement literature definitions surrounding grief and bereavement were considered in defining emotional significance. Each of these questionnaires assesses the grief or bereavement of a single death, so for purposes of this study it was important to create a method to assess the impact of numerous deaths quickly and efficiently for each death experienced; a 5-point Likert scale (from 1= low ES to 5= great ES) was derived from using reliable and valid scales previously mentioned. The themes of having experienced sadness, emotional, cognitive, or behavioral distress were borrowed from the Hogan Grief Reaction Checklist (HGRG; Hogan, Greenfield & Schmidt, 2001). Social isolation and despair were borrowed from the Grief Experience Inventory (GEI; Sanders, Mauger, & Strong, 1985). Distress, numbness, social isolation, and cognitive, emotional, and behavioral distress were borrowed from the Prolonged Grief 13 Checklist (PG13, Prigerson et al., 2009). Numbness, sadness, distress, and disbelief were borrowed from the Grief Measurement Scale (GMS; Jacobs et al., 1986). These qualities were used to define emotional significance for each loss and were integrated into a Likert format for efficacy purposes of this study, to be consistent with the grief measurement instruments, and have been shown to be reliable and valid (HGRG, 2001; GEI, 1985; GMS, 1986). ES of loss became an important aspect of this research, as indicated by Kitamura and Fujihara (2003) that significance of loss was a more prominent factor rather than just the loss itself, for the mental health of children.

Cattell’s 16 PF Questionnaire- Abstractedness, Openness to Change, and Rule-Consciousness (16PF; Cattell, Cattell, & Cattell, 1993). The 16PF Fifth Edition, a well-researched, norm referenced, empirically validated, commercial personality instrument is used to test normal-range personality features. The 16PF has the capacity to measure 16 distinct bipolar personality variables, but for the purposes of this study and for succinctness, participants were only given a modified version which included the subscales of Rule-Consciousness (Factor G), Openness to Change (Factor Q1), and Abstractedness (Factor M; Cattell, Cattell, & Cattell, 1993). All other personality measures were removed from the test, and participants were only given these three subscales in the same order in which these questions originally occurred in the questionnaire. Rule-consciousness entails qualities of non-conformity and expediency at the low spectrum end and dutifulness, rule-conformity, regulation emphasizing, and less likely to adhere to externally imposed rules (Cattell & Mead, 2008). Openness to change reflects being experimental, more open to new experiences, while seeking and welcoming change on the high side and traditional, attached to familiar, less open or interested in new experiences or ideas (Cattell & Mead, 2008; Cattell et al., 1993). The abstractedness factor denotes being practically minded, grounded, or solution-oriented at the low end and imaginative, absorbed in ideas, showing greater interests on abstract concepts (Cattell & Mead, 2008). The questionnaire response format presents three possible choices per question. Either choice “a” or “c” will give the participant two points for that subscale, while choice “b” (“?”) represents uncertainty for when neither “a” or “c” fits better for the participant and is always one point. The test has been reported to be reliable and valid by the manufacturer (Cattell et al., 1993; Institute for Personality and Ability Testing, 2009).
Magical Ideation Scale (MIS; Eckblad & Chapman, 1983)
The MIS is a 30 item Likert scale format self-report questionnaire that measures beliefs in astrology, superstitions, and other non-related causal inferences which are typically conventionally invalid (Eckblad & Chapman, 1983). The scoring range is from “30” (very low magical ideation) to “150” (very high magical ideation). Example questions are: “Numbers like 7 and 13 have special powers” and “I have sometimes sensed an evil presence around me, although I could not see it.” The MIS has been shown demonstrate good reliability and validity (Eckblad & Chapman, 1983).

Brief Sensation Seeking Scale (BSSS; Hoyle, Stephenson, Palmgreen, Lorch, & Donohew, 2002)
Our sensation seeking questionnaire consisted of an 8-item Likert scale self-report instrument, established by Hoyle et al. (2002), and demonstrated good construct validity. The responses ranged from “1” (strongly disagree) to “5” (strongly agree), and the measure has been shown to be reliable and valid (Hoyle et al., 2002). The scale included questions relating to themes of adventurousness, spontaneity, and thrilling activities, as it asks about enjoying exciting experiences even if they are illegal. Enjoying wild parties, leaving home on an unplanned trip, or doing frightening things.

Material Values Scale (MVS; Richins & Dawson, 1992).
This 18-item scale operates under a 5-point Likert and utilizes a self-report formant. Where responses range from strongly disagree to strongly agree. Material values are operationally defined in this questionnaire as a personal orientation toward stressing the importance of material possessions through the three categories of happiness, success, and centrality, which reflect the notions that happiness is obtained through possessions, what we own relates to a personal sense of success, and that the emphasis should be placed in possessions should be a common goal throughout life, respectively (Ahuvia & Wong, 2002). Sample questions include “The things I own aren’t all that important to me” and “I like a lot of luxury in my life.” Reliability has been established (Richins & Dawson, 1992).

Results
218 participants volunteered and consented to participation in the study. The mean age of participants was 20.39 (M = 20.39, SD = 3.95). When asked to report sex, 66 identified as male and 131 participants identified as female. When asked to report gender, 73 reported female and 132 identified as male. Participant scores for number of deaths experienced and the ES of death were skewed. Log transformations were performed to change the distributions into normal curves in order to prepare for Pearson r correlational coefficient analyses.

The following were key findings. The ES of death was related to the number of deaths experienced by participants (r = .85, p = .00), magical thinking (r = .25, p = .00), and age (r = .16, p = .03). A One-Way ANOVA was performed to examine the relationship between major and the experience of death. Psychology majors reported more experiences with death [F(2,12) = 0.067, p = 0.003] and higher emotional significance of deaths experienced [F(2,12) = 3.592, p = 0.062]. Choice of major was significantly related to materialistic values, with business majors ranking higher in materialistic values than other majors [F(2,12) = 2.293, p = 0.006].

Participant scores for an interest in psychology and philosophy were also skewed, and the data were normalized through log transformations. Pearson correlations found that an interest in psychology was positively related to an interest in philosophy (r= .61, p = .000), openness to change (r = .28, p. 000), and MI (r = .15, p = .035). Interest in philosophy was positively associated with number of deaths experienced (r = .16, p = .025), the emotional significance of
deaths ($r = .17$, $p = .017$), abstractedness ($r = .17$, $p = .018$), openness to change ($r = .40$, $p = .000$), sensation seeking ($r = .18$, $p = .012$), and magical thinking ($r = .30$, $p = .000$). Interest in philosophy was negatively related to rule-conscientiousness ($r = -.14$, $p = .047$).

The number of deaths witnessed was related to the emotional significance of the deaths ($r = .40$, $p = .000$) and sensation seeking ($r = .18$, $p = .013$). The emotional significance of witnessed deaths was related to sensation seeking ($r = .17$, $p = .018$) and interest in philosophy ($r = 1.4$, $p = .039$).

Role-conscientiousness was significantly and negatively related to abstractedness ($r = -.37$, $p = .000$), openness to change ($- .32$, $p = .000$), magical ideation ($- .16$, $p = .030$), and sensation seeking ($- .36$, $p = .000$). Abstractedness was significantly and positively associated with openness to change ($- .29$, $p = .000$), sensation seeking ($-.36$, $p = .000$), and magical ideation ($-.25$, $p = .000$). Openness to change was significantly and positive related to sensation seeking ($- .36$, $p = .000$), magical ideation ($-.22$, $p = .003$), abstractedness ($-.29$, $p = .029$), and negatively related to material values ($-.26$, $p = .000$). Magical ideation with significantly and positively related to sensation seeking ($r = .32$, $p = .000$).

Discussion

Overall, the study’s research questions were to identify if experiencing more death or ES related to each loss were correlated with certain personality variables, and to identify if recollecting loss catalyzed MS effects to influence personality. Several of the hypothesis were upheld and will be discussed, while others were not supported empirically. These findings will be discussed and explored.

A key finding in the present study revealed, as expected, that ES of losses totaled (EST) correlated significantly with MI/schizotypy, while the total number of deaths was not linked. Further examination of the data illustrated that witnessing death had a positive relationship with sensation seeking, while the ES of witnessing death correlated with greater interest in philosophy. These two findings were not primary hypothesizes and were exploratory findings. Conclusions relating to age exhibited that older individuals have experienced more death and ES of losses as people age, while age was negatively correlated with materialistic values.

Inconsistent with the initial hypothesis, abstractedness was not correlated with more deaths experienced or greater emotional significance of loss. Furthermore, rule-consciousness was inversely correlated with abstractedness, openness to change, and magical ideation, and sensation seeking. In the current sample, Abstractedness was positively correlated with openness to change, sensation seeking, and MI, openness to change was found to have positive significant relationships with sensation seeking and MI, while a negative relationship was found with openness and materialistic values. Finally, positive significant relationship existed between MI and sensation seeking. Gender analysis revealed that males were more likely to be sensations seeking than females. As for college major, psychology students experienced more death and ES of losses when compared to all other majors. This affirms the hypothesis for psychology majors and death experiences, and it refines the Black et al. (1993) study that indicated psychological trauma early in life for helping majors by addressing death experiences as a primary area of investigation rather than surveying general categories of psychological trauma category.

No findings concerning businesses majors and personality were found, they did not experience significant amounts of death, and participants in majors in the humanities were found to be more materialistic than psychology students. Finally, interest in psychology was correlated positively with interest in philosophy, openness to change, and MI. This verifies the initial hypothesis, but the hypothesizes for interest in psychology and materialistic values, sensation seeking, and rule-consciousness miss the mark. On the other hand, interest in philosophy was correlated positively...
with the frequency of deaths, ES of losses, abstractedness, openness, sensations seeking, MI, and negatively with rule-consciousness. This finding validates almost all the hypothesizes, minus materialistic values. The study’s experimental section investigated if taking the DAQ activates MS effects on personality, and the results showed that it had no effect on any of the responses for any variable; the null was accepted.

The results concerning MI and ES of loss could reflect how the affliction resulting from death can be more impacting, leaving one psychological vulnerability, compared to simply the number of deaths experienced. The clinical implications associated with finding are relevant to psychopathology, may provide direction in clinical settings, and progresses understandings of human behavior. A clinical benefit is that clinicians could use the DAQ to screen client’s demographics and loss history to create a fuller profile for a patient and to reference findings on schizotypy, to entertain the notion of schizotypal experience is tied to ones external environment.

This finding supports Bernbaum et al. when it was found that childhood trauma/difficulty, a broad term which includes experiences loss and death subsumed under a more general term of trauma/difficulty, was associated with schizotypal personality and phenomena like schizophrenia (as cited in McCleonon 2012, Jacobson & Ryder, 1969). Just as NDE was related to near MI qualities discussed earlier (Groth-Marnat & Summer, 1998), the present study supports that notion by discovering that greater amounts of ES accrued experiences is also tied to MI. Previous studies were also supported in this study; Bernbaum et al. found that death exposure and MI were linked with childhood trauma and difficulty (which includes death, loss, and trauma), schizotypal experiences, and schizophrenia (as cited in McCleonon, 2012; McCleonon, 2012). With this prior research, loss and difficulty were generally correlated with schizophrenia and schizotypy, but the present study introduces that the ES of death experiences was correlated with MI, thus expanding this division of research. It is conceivable that experiencing more death may be related to schizotypy/schizophrenia, but ES may be a more prominent indicating quality within one of the more indicative or specific prominent qualities related to MI, compared to the broader terms used to investigate loss prior.

Researching experiences of death refines several prior research projects and findings. Unanticipated findings availed that witnessing death was related to sensation seeking, while the ES of witnessing a death was correlated with interest in philosophy. Previous investigation shows that high sensation seekers prefer to demonstrate low regard for rules, and vice versa (Heyardi, Mohammadi, & Rostami, 2013). Other research supports that early parental loss was tied to criminal behavior (Jacobson & Ryder, 1969), and that witnessing violence or experiencing death has been tied to antisocial personality disorder (Kikamura & Fujihara, 2003). The study’s findings relate to the same themes in those studies, but it also may facilitate or suggest that witnessing death may be tied to other similar constructs like rule-consciousness. However, they are not indicative of the same thing, so future research could illuminate these quandaries. The ES of witnessing death does relate to the general hypothesis between abstracted philosophical thinking and death experiences. The ES of witnessing death and interest in philosophy may be relevant in the example of Kierkegaard, if he had ever actually witnessed some of the many of the deaths in his proximity. However, construct validity may be an implication when asking participants if they have an interest in philosophy, as a simple question may not measure one’s actual interest in philosophy and may be susceptible to self-report response bias.

Abstractedness and death experience did not materialize findings that support relevant hypothesizes, which runs counter to the work trending in the direction that associates fortitude
with experiences of death. For example, Albert found that IQ was reported to be at least three times higher the instances of unexpected parent death (as cited in Finkelstein, 1988), and that NDE was tied to an insatiable search for knowledge (Groth-Marnat & Summer, 1998). This finding generally runs contrary to these, although NDE may not specifically apply to Kierkegaard. Prior findings about death and intellect may be applicable for Kierkegaard’s astuteness over the findings of this study which accepts the null hypothesis when abstractedness was examined. Also, no finding emerged for openness and death. This null finding undermines the existential theme of this study, that is wanting to live more vivaciously if one has more encounters with death. Although abstractedness and death were not correlated, abstractedness was correlated with openness to change, magical ideation, and sensation seeking, and inversely with rule-consciousness. This finding mirrors other findings showing that abstractedness and openness are correlated, and that they are good indicators of intellect (Oleynick et al., 2017). However, another potential explanation to offer why death and abstractedness were not correlated may include the possibility of PNS as a moderator. Research shows that people with low PNS increase in explorative thought and open-minded openness after MS (Routledge & Juhl, 2012). If my sample were serendipitously a sample on the high PNS spectrum this would suggest, based on prior research, that these participants typically are deprived of MS effects for a construct akin to abstractedness. The project did not find any MS effects on the personality variables, but if sampling error produced a sample of participants high in PNS, no finding regarding MS and abstractedness would emerge based on prior research. Age was found to be an indicator of declining materialistic values has been documented in this study and in prior research. However, previous research indicated that materialistic values and compulsive buying was mediated by age (Dittrmar, 2005). In the current study, age and death were negatively correlated, age and materialistic values were negatively correlated, but material values and death were not correlated. It is sensible that people experience more death with age, but with the findings just presented additional research can explore these areas and inconsistencies. The attempt to elicit MS priming through administration of the DAQ did not validate the desired hypothesizes and effects on personality. MS priming has been shown to increase defenseless (Greenberg & Arndt, 2012), which could have reduced openness if MS effects were present, increase materialistic values (Kasser & Sheldon, 2009), although the current study did not foster any MS effects derived from taking the DAQ. MS has been shown to increase intellectual thought (reflecting abstractedness) and preference for novel experience (openness to change; Routledge & Juhl, 2012), and increase rigid and rule conforming propensities (Pyszczynski Soloman, & Greenger, 2003). Perhaps using a similar personality questionnaire or a different and verified MS priming techniques would reflect the findings identified in the past. The DAQ was ineffective in heeding MS effects, and this is one critical reason the similar findings were not attained in this study. Alternative explanations, reflected by Lykins research, include that the DAQ did not evoke significant MS priming effects as death reflection is a slow process, compared to the quicker response time of death anxiety MS priming, which produces impacting responses without the need for prolonged deliberation time (as cited in Grant & Wade-Benzoni, 2009). However, it is also possible that abstractedness was hindered by reflecting on past deaths, as this can produce anxiety that activates the experiential system and halts the cognitive processing systems, which further slows reflection (Grant & Wade-Benzoni, 2009). Also, Arndt et al. found that the vicarious MS priming is often easily dismissible compared to MS priming that hypotactically places one’s self in the center of a thought exercise to induce death anxiety, as
thoughts about reclaiming one’s own salubriousness and longevity are more easily attainable (Grant & Wade-Benzi, 2009). Taken together, there are many possible explanations as to why this MS priming did not evoke the same effects that other MS priming workouts have. Future research can whittle down these nuances across the research to identify new findings and combine new and past studies to arrive at new research plateaus in this field.

Implications and Limitations
The external validity of this study is limited due to the student participants and the number of students representing categories of each major. The urban school setting that was sampled had an ethnically diverse population, and this may hinder the study’s external validity. Later studies could attend to the issue of generalizability. Also, response bias may be a caveat due to possibilities of over and underestimating, as well as abilities to recall events. However, Bramson, Dirkzwager, and van Esch et al. indicated that retrospective self-reporting of traumatic events has been shown to be accurate (as cited in Pirelli & Jeglic, 2009). A strength of this study is that is asks participants to explicitly write the number of persons lost in specific categories, to reduce over or underestimating for larger, more general categories that were typically used in death experiences research like family and friends. Perhaps the over or underestimation may be more applicable to the scoring of ES, but it is arguable that this could still be considered trauma recall, so it may be still applicable and accurate.

The implications for the DAQ as MS priming will be further elucidated here. Firstly, other research uses a filler-distractor phrase for MS priming. For time constraints and to reduce attrition, the filler task was averted. This may also be one challenge the study faced as MS priming operates outside of conscious awareness and takes time to mentally percolate (Grant & Wade-Benzi, 2009), before MS effects can emerge in questionnaires. The demographic information could have been more comprehensive and inclusive of some more commonly captured demographics like religion, ethnicity, family socioeconomic status, political orientation, and marital status of parents. Furthermore, participants could have reported the same deaths for different categories, despite the instructions prohibiting it, so it is possible that scores could have been reported more than once.

This study created a new questionnaire to adequately survey deaths experienced across one’s milieu and developed an efficient scoring system to quantitatively capture the bereavement and grieving distress experienced by operationalizing the behaviors and qualities associated with bereavement and grieving to fit a format efficient in reporting multiple deaths. Although the DAQ did not elicit any MS effect on the variables, it progressed the evolution of questionnaires surveying death and the research topic that is experiences of death. It examined philosophical mindedness to investigate if experiencing death is related to a proclivity toward that mode of thought using a vignette of Kierkegaard, and investigated existential themes relating to presenting a fuller appreciation of ‘living’ when it is contrasted against death by investigating sensation seeking, openness to change, rule-consciousness, and material values. These variables relate to qualities of liveliness and deemphasize material success as a significant factor which puts meaning in the lives of some. Finally, the study validated that schizotypy/magical thinking was tied to the totality of immense hardship that was experienced in the instance of experiencing a death.

References


Heidegger, M., Macquarrie, J., & Robinson, E. S. (1962). *Being and time*


Preference of Type of Music in College Students


Global Economic Inequality:
Forces at work, and Policies to Reverse the Problem

Ana Cecilia Houser  Point Park University, United States
Stephen Schuchert  Point Park University, United States
Zachary Snowden  Point Park University, United States

Abstract

In this paper we will discuss global economic inequality and the forces which have contributed to that. We will argue that globalization and international trade have increased global economic inequality. Economic forces both at the domestic and the international levels underlie the growth of income inequality. Globalization and De-Unionization have brought tough competition to American workers who have seen jobs move overseas, wages stagnate, and unions decline. Maskin theorizes that while average income has been rising as a result of more trade and global production, so has inequality within countries. Stiglitz argues that marginal production theory and neoclassical trade theory do not fully explain what is occurring. We need to better understand the role of institutions in creating and in shaping markets. We will look carefully at the literature and make policy recommendations which may enable us to deal effectively with the said issue and which may assist us in reversing the global inequality problem.

Keywords

Income equality, Globalization, Policies, Forces, Solutions

Inequality in Modern Nations

Richard Wilkinson has argued that the global inequality which exists today is socially corrosive and divisive. He elaborates by comparing the Gross National Income (GNI) of countries to their life expectancy as reported by the OECD. What this shows it that there is no clear correlation between the wealth of the country to the overall wellbeing of their populations. Comparing the GNI of countries to their life expectancy rates will clearly show no correlation between the two, but also raises some key questions. If wealthy countries with high ratings of GNI have lower life expectancy rates than countries with lower GNI ratings, what could be the underlying factors?

We reviewed data from the OECD which shows that the United States, Canada, and United Kingdom all have higher GNI levels than Sweden, Spain, and Israel, yet the latter all experienced longer life expectancy rates than the former. This is telling us exactly what Richard Wilkinson was believed to be a paradox. How can countries with higher average incomes have a lower life expectancy than countries with lower average incomes? The answer should be to look at each individual country, and determine what social factors are driving the life expectancy.

Following suit with Wilkinson’s research, we reviewed the income gaps between the most of the world’s modern nations. The United States, United Kingdom, and Canada all scored relatively
high when it came to income dispersion. On the other end of the spectrum, we found Japan, Finland, and Sweden all scored relatively low on their income dispersion rankings. These rankings show the differences within each country, and display how much richer the top twenty percent of the population is over the bottom twenty percent. The results were staggering, with the USA and United Kingdom well over two to three times the income dispersion as other successful democracies. When looking at the data from this perspective, we may be able to dig deeper into the root cause of why GNI has very little influence on the wellbeing of the country’s population.

Next, we compared the income dispersion to the overall index of life expectancy and material wellbeing. What we discovered is that the life expectancy statistics provided by the World Health Organization show that Japan, Finland, and Sweden all scored higher on the ranking when compared to the United States, United Kingdom, and Canada. This data further supports Wilkinson’s argument that there is no correlation between the country’s GNI and health wellbeing. Additional data tables from the WHO also showed that the countries which ranked higher on income dispersion, also scored higher on substance abuse and violence per capita. Overall, Wilkinson believed that compiling an index composed of life expectancy, literacy, infant mortality, homicides, imprisonment, obesity, substance abuse, and other would be a stunning visual to show the contrast between countries when compared to the income disparity. All of the data we found on the OECD and WHO were in line with Wilkinson’s findings.

The Health and Inequality Project has shown that the wealthiest men and women in the United States live on average ten to fifteen years longer than the poorest. If a modern, industrialized nation such as the United States is able to have that large of a gap between its citizens, it is time to change the way we look at inequality on the global scale. What we have discovered is that the main focus needs to be directed within our own societies, not between them. We need to focus on the social positions and the size of the gaps between the wealthiest and poorest individuals. The gap between the richest and poorest individuals within the United States clearly shows that income disparity is a major driver between the overall wellbeing of the individuals.

**Unearned Income**

Joseph Stiglitz, Nobel Prize winner and former chief economist of the World Bank, has written about theories which favor alternative explanations to inequality. Rent-seeking behavior, as well as political factors have become influential to the current environment and weaken overall economic performance. His work is also focused on the policies necessary to help reduce inequality, as well as reforms required by institutions and politicians.

Rent-seeking behavior is one of the alternative arguments which Stiglitz uses to provide an explanation to the rising wealth-to-income ratio. What this means is the value of assets is increasing, such as land, houses, and intellectual property. This allows the rent owners to collect income on these assets, but does not necessarily lead to an increase in economic capacity. This rent-seeking behavior also does not contribute to the increase in average wages of the working class. As a result, wages may actually decrease due to the appreciation of the assets occurring at the expense of the wages. The assets which are contributing most to the increase in wealth may not even be capital goods. Stiglitz argues that these assets may not even be related.
to the production of goods or services, and in many cases do not increase the productivity of the economy. Political policies and interest rates will also play a major role in the rent-seeking behavior argument of Stiglitz. These assets which do not necessarily contribute to increased economic capacity, also benefit by these policies and interest rates. The policies put in place by politicians can have a direct impact on rent-seeking behavior, especially in the housing market. Paired with low interest rates, a bubble can be created to provide a large boost in the wealth simply due to owning the assets. In addition to seeing appreciation of their fixed assets, those with the means to borrow against these assets can get additional credit by using them as collateral. As the bubble grows, the wealth of the assets grow which deepens the social inequality. Not only will the appreciation help increase this income gap, but favorable monetary policies will also disproportionately benefit the wealthy. A recent example is the increase in the basic exclusion amount for the estate tax. Political policies allow for those with the assets, to retain those assets and shield themselves from losing value.

**Politics and Income Distribution**

Large corporations and political policies have a large influence on the distribution of wealth and income. Stiglitz argues that this income and wealth comes at the expense of others, which lowers the real income of the average worker. To support this, Stiglitz notes that over the past thirty years, wages have stagnated while productivity has grown substantially. This indicates that the worker’s bargaining power has decreased, and indicates a level of exploitation by corporations. He also notes that political factors play a significant role in shaping the distribution of labor and capital, and the low wages of average workers over the past few decades indicates the level of inequality faced by the working class.

Globalization and a decline in union membership also play a major role in the diminished bargaining power of the average worker. With the current global environment firms have become highly mobile, and are almost incentivized to relocate in order to reduce operating costs. This mobility places downward pressure on wages, since the firm can choose to close the operations in the current location and relocate to an area which will cost less to operate. The workers are left with a choice, accept a lower wage or lose their employment. The firm in this instance is operating in the best interests of the stakeholders, and not necessarily the best interest of the workers. A mindset of cutting costs, coupled with the decline in union membership has left the average worker without the protection needed to maintain wage growth. The political environment has also allowed for the decline of worker’s wage growth and union membership. The forces of supply and demand also come into play, but are instead negated by the political environment. In periods when market forces should be increasing the medium wage of workers, the political influences offset the growth and instead leads to an increase in inequality.

**Justifications of Inequality**

Many arguments indicate inequality is needed to grow which justify the forces which place downward pressure on the equitable distribution of wealth. Stiglitz indicates that these arguments actually lead to economic instability, and hinder overall growth. The first argument which justifies inequality is have a high level of income to the rich in order to support the
balance of investment and savings. Stiglitz cites that this argument is based on the assumption that the bottom earners tend to spend their money and those at the top tend to save. Countries which have a disproportionate amount of wages allows those with wealth to save their capital and invest it back into the economy. Stiglitz refutes this argument, citing the fact that Governments can intervene and redistribute the wealth. By taxing the rich, the wealth can be used to fund economic investments, and appropriately redistribute the wealth for small and medium sized companies.

The second misconception is that the wealthy are job creators. By providing the wealthy with favorable monetary policies, they will be able to create more jobs through innovation and investment back into the economy. The argument hinges on the assumption that wealthy individuals are entrepreneurs, and have the necessary capital to invest and create new jobs. This can also be refuted by the simple fact that demand is also a job creator, and not all successful industries were founded by wealthy individuals. Entrepreneurs can come from all walks of life, and any individual with a good idea can help in driving economic growth, and in turn create jobs.

The third and final argument I will focus on is the fact that societies with greater inequality will not make as much investment into the economy to increase productivity and infrastructure. Wealth will promote economic development, increasing overall demand, which will in turn require infrastructure improvements and productivity advancements. Stiglitz’s argument against this lies with the fact that if the wealthy deem public facilities unnecessary, or a particular segment is deemed unprofitable, the necessary capital investments may not be made. He also goes on to state that countries with high levels of inequality of wealth experience lower levels of public investment. It will ultimately be left to the responsibility of the government to redistribute the wealth to ensure communities benefit from public projects.

How to Discourage Inequality

Stiglitz has a very distinct stance on how to combat inequality, and what steps are necessary in order to redistribute the wealth in an equitable manner. This will all start with politics, and reforms throughout the entire society. First, policies should be made with the intent to reduce inequalities and the redistribution of wealth. This can be done through an increase in funding for education, union membership, anti-discrimination, and earned-income tax credits. These policies will rewrite the rules which have been altered over the years to exploit the average workers, and gave an unfair advantage to the wealthy. Next, Stiglitz focuses on the role of large corporations and the power of executives. Executive compensation is also a topic of interest for Stiglitz, who indicates the compensation should not reward the executive if their actions had no influence on the performance of the firm. He is echoing the common argument for performance based pay, and moving away from the ever increasing executive salary and overall compensation. The best example of this argument would be an external event occurring outside of the company, which has a direct benefit to the company’s net income. Should this event occur, and the current executive team was not an influence, why should they be rewarded with higher salaries or bonuses?

The next focus will need to be on supporting the average workers. The current environment does not support the average workers, who are victims of stagnant wages, fluctuating employment levels, and cuts to social programs. Stiglitz argues that the average worker’s wage is almost
directly tied to inflation, and the policies of most central banks is to closely monitor and control inflation. As soon as wages begin to increase faster than the rate of inflation, the central banks will increase interest rates which places a downward pressure on the wages\textsuperscript{12}. This high level of inequality has weakened the overall demand, which can only be corrected by an increase in public investments. Improvements to public infrastructures would have the potential to revive demand and help curb the inequalities within our economies.

The final argument of Stiglitz we will focus on will be the need for fair taxation, and the impact of education on the working class. Taking a closer look at the tax laws and policies will clearly show favoritism towards those with assets and capital. There are provisions which provide lenient tax rates for capital gains and dividends which are disproportionately benefitting the top earners and do nothing to stop the inequality of wealth. Next, Stiglitz also believes that education is a major driver of the redistribution of wealth. Wealthy families are able to provide private and prestigious education to their children, which helps aide in the wage inequality. By providing those with less fortunate economic backgrounds access to quality education, they will be able to improve their overall economic situation. Overall, Stiglitz favors the fundamental access to quality education, and the redistribution of wealth through fair taxation and tax code improvements\textsuperscript{12}.

**Call to Action against Inequality**

Common measurements of how economies are performing are misleading, as we have seen no correlation between one another are typically focused on averages. This allows for a broad picture of how the overall economies are performing, but provide no insight as to how the individuals are doing within the countries. As we saw with Wilkinson’s publications, the world needs to refocus on the inequities within our own societies, not between them. The income gap between the wealthiest and poorest individuals within the United States has a major and direct impact on the health and wellbeing of the individuals. Low income Americans, in some instances, live 15 fewer years than the wealthiest. The life expectancy varies throughout the entire world, developed and under developed, but disproportionately affects the poor. Disparities in health and social well-being will require targeted efforts in order to improve the health of the disadvantaged.

It is no secret that the growth in the top incomes of the world has been exponentially growing over the past decades. The rhetoric and ideology of a trickle down philosophy of allocating resources has inequitably favored the richer classes, which has a direct impact on economic demand. Inequality is rapidly rising throughout the world, and the exponential growth of the world’s top earners have also coincided with a worldwide economic slowdown\textsuperscript{12}. The policies which support inequality, whether directly or indirectly, will need to be addressed in order to provide any meaningful change. Economies of advanced countries are not performing, and real median incomes are stagnating\textsuperscript{12}. All of this is occurring while overall productivity is at an all-time high. The world has been reinventing itself and improving functional productivity, but has not taken into account the well-being of the typical citizen. A real need to focus on humanity and societal well-being will need to be promoted in order for any meaningful change to occur.
Early Globalization

Comparative advantage was a concept generated by the 19th century British economist David Ricardo. Ricardo theorized that international trade and specific industry specialization would make participating countries all better off. Ricardo was in favor of globalization and the advantages that come along with globalization. David Ricardo would advocate the driving forces behind globalization. “Ricardo would support the globalization, more specifically how results from the trade in goods and services between countries, argue that global integration increases average income within countries, and also reduces inequality”8. When analyzing current day globalization, some ideas test the theory of David Ricardo that globalization make nations better off and arrive at an outcome opposite of the theory by Ricardo.

Modern Day Globalization Leading To Inequality

In an article published by the World Bank Nobel Laureate Eric Maskin of Harvard University has a different outlook on globalization and equality. “Maskin theorizes that while average income has been rising as a result of more trade and global production, so has inequality within countries8”. Although the average income across a certain nation may be rising the income inequality is also rising. The wage gap is widening between skilled workers and unskilled workers. Workers with higher skills continue to see wage increases while unskilled workers see drastic wage decreases. Maskin views the modern day inequality, which is a direct result of globalization in two categories. “Inequality exists in two varieties where one is ‘less worse’ than the other. Maskin says in the less worse version of inequality “inequality is tolerated as a necessary side-effect of increased economic growth within a country”8. The fact that inequality is tolerated is due to the fact that country as a whole is experiencing economic growth. This ties directly to theories of David Ricardo. Although globalization is increasing the wealth and economic of a country as whole there are still come people who are losing out due to this. Those people are the unskilled workers. A large percentage of a country is made up of unskilled workers. Basically the wealth of a country increases and gains economic stability through globalization, and through globalization the skilled workers reap the benefits while unskilled workers do not get these same benefits. In certain segments within the market of country the wages of the workers within that segment may increase but not everyone across each different segment is benefiting. Only workers in certain sectors incur wage increases while other sectors do not see the same wage increases. This leads to a widening wage gap.

In the worse version of economic equality Maskin says “the wages of a segment of the work force (usually low-skilled and low-wage workers) drop as a result of less demand for their skills, while the wages of higher-skilled workers increase”8. An example of this in the United States is due to the fact of skills someone possesses skills pertaining to a certain segment of the market. Due to technological advancements certain individuals with high mathematical, science, engineering, mechanical, technical skills etc. are seeing wage increases. There is always high demand for people with innovative skill sets. These people tend to work in robotics, numerous engineering fields, aerospace, software, medical fields etc. In Maskin’s theory of inequality certain sectors/segments of a market in which people possess high in demand skills will always
see wage increases, while people with skills that are replaceable and that are in low demand suffer lower wages. Globalization has resulted in the production of goods and services to be highly international, things are outsourced, plants and equipment are located overseas, and production is often done outside of the home country. Another example is of this is the production of steel. One could say that engineers, chemists, mathematicians etc. (responsible for the design and makeup of the steel) is a high skilled worker. They will incur higher wages. One could also say a steel worker who works in the factory where steel is produced is an unskilled worker. Most of these jobs have been moved overseas because they are considered replaceable jobs that could be done with the same level of effectiveness by someone in another country for much lower costs of production. The apple IPhone is arguably one of the most iconic products in the modern market place. The phone is designed in the Silicon Valley in California by highly skilled mathematicians, designers, software engineers etc. But the IPhone is physically manufactured overseas in countries such as Japan, Germany, and China. The engineers designing the phone will have increasing wages while the wages of the factory workers producing the phone will be sent overseas at a much lower cost of production leaving domestic low skilled workers with income declines, thus widening the wage gap and increasing economic inequality.

**Theories to Improve Inequality**

Maskin says “we should not try to stop globalization”. Rather we should embrace it and find ways to efficiently manage it. Maskin says “matching skills between workers is one way to decrease inequality”\(^8\). To put this in my own perspective matching skills between higher skilled workers and lower skilled workers is like a modern day mentorship program. Maskin uses the example pairing a food worker in food processing plant with a farmer. I would rather use my own example in this case to better explain what Maskin means by skill matching. Take an accounting firm for an example. There are CPA’s and there are data entry clerks. The CPA’s are the highly skilled workers. The data entry clerks are the less skilled workers. Through the shadowing and mentorship of a data entry clerk under a CPA the data entry clerk can learn of great deal of skills from the CPA. The higher skilled worker can transfer his or her own skills, ideas, work ethic, and encouragement to the lower skilled worker. A method such as this could lead to the development into a stronger and larger market made up of higher skilled workers. Developing efficient and effective methods for lower skilled workers to be able to reap the benefits of globalization would be the most effective way to lessen the wage gap and decreases economic inequality globally. In reference to the article Maskin proposes “path of raising skill levels by offering job training to low-skilled workers so they can match better with international opportunities.” Third parties like governments, multilateral institutions, NGOs and private foundations could step in and help develop lower skilled workers\(^8\).

Income equality can derived from many complicated and complex issues. It is evident that advancements in areas such as science and technology have evolved the skillsets required to not become a victim of globalization. In the past the presence of labor unions protected wide variety of what would be considered unskilled workers such as laborers, plant workers, and many other areas that you would consider blue collar jobs. De-unionization has drastically increased and many less unions exist today which leaves lower skilled works unprotected from the forces of
globalization which lead to income inequality. Globalization provides much more opportunity to the higher skilled labor force while leaving the lower skilled labor force far behind. The higher skilled labor force holds a much higher amount of leverage due to terms of globalization. Referencing an article from Council on Foreign Relations backgrounder Steven J. Markovich says “globalization has brought tough competition to other American workers who have seen jobs move overseas, wages stagnate, and unions decline.” Many unskilled workers have seen their jobs move into other countries and due to the decline of unions these workers have fallen victim to unprotected jobs and wages from the underlying forces of globalization.

Referencing the same article Markovich includes some thoughts and ideas from Princeton economists Alan Blinder and Paul Krugman. As I referenced in the first paragraph David Ricardo backed the fact that globalization/international trade would be beneficial for that nation as whole. But he failed to account who would be losing because of Globalization. Markovich references Alan Blinder who suggests “that although it is beneficial for the United States as a whole the increased labor competition due to globalization will negatively affect many individual Americans”. While the overall economic strength in this case of United States will increase through metrics like GDP, many individual Americans who do not reap the benefits of globalization will suffer. Blinder has a few suggestions on how to help deal with globalization. Blinder suggests “advocated for helping displaced workers through a stronger safety net, reforming education, and encouraging innovation and entrepreneurship”. From my own school of thought improving education is the best way to generate more skilled works and allow for more people to benefit from globalization. Markovich also references Paul Krugman. Krugman suggests “we need to restore the bargaining power that labor has lost over the last thirty years, so that ordinary workers as well as superstars have the power to bargain for good wages”. Paul Krugman is lobbying for the restoring of unions. This could help protect job security and wages of unskilled workers. However I don’t think this option would sustainable or a long term solution. I believe education reforms are the best option. Markvoich references some data that would leave show how education and more so how higher education is directly related to income inequality. “In 2011, the median earnings of a worker with a bachelor’s degree were 65 percent higher than a high school graduate’s; holders of professional degrees (MD, JD, MBA) enjoyed a 161 percent premium.” This supports the fact that receiving a formalized education can provide you with tools to become a higher skilled worker. I feel reforming the education system is the best way to see higher skilled workers in a given market. More unskilled workers can become high skilled workers.

Education Reforms

Education is a primary factor in narrowing the widespread wage gap not just in the United States but globally. The main issue at hand is how to do you reform the education which will lead to long term success and sustainability. In an article reference from the OECD “Current education systems across the globe are not enough as in some places inequalities of income and wealth have increased.” “Across OECD countries nearly one in three adults have only primary or lower secondary education”. Education needs to improve globally and this includes those who are immigrants. “Immigration likely pays a role in stagnant wages, especially among workers without a high school degree, of which immigrants make up about half. Fair and inclusive
education for migrants and minorities is a key to these challenges”7. The skills that can be derived from a proper education lead to many improving many social and economics of one’s life which in turn would lead to decreasing the wage gap. School failure and dropout rates need to be reduced. The best way to reduce dropout rates is to reduce the risk of dropout as early as possible. Basic schooling should support and engage those who struggle at school as well as those who excel13. One way of improving performance and preventing dropout is to identify at-risk students early and take action quickly. This will keep everyone on track. Society needs to be fairer to all people in terms of education. They need to lookout for the best interest of everyone in education system. Educators need to maximize their efforts and making sure completion rates are at an all-time high. Educators need to follow a “no student left behind policy” which will encourage education completion for all people regardless of social and academic level. This will help avoid the large social costs of marginalized adults with few basic skills13. Providing second chances for people who lack basic skills and measurable will benefit people in a big way. Often time people fail the first time they do something. Providing programs that provide literacy training and work-based programs would be very beneficial. 13

Emerging Economies

The ever growing gap in equality within a country can be seen not only in senior, and long developed economies, but also in new emerging economies- we will present the example of Sub-Saharan countries.

According to the 2013 World Forum African countries among the fastest growing economies, following the discovery of various natural resource3. The continent’s estimated economic growth was 4.5% in 201517. This growth trend continues even to present day, as the World Bank predicts a 3.2% growth for this year and a higher one yet for 20191.

GDP growth

As already discussed, Ricardo would argue that the specialization of these newly found resources and trade would make the country better off. Statistics seems to convey just that- According to Fioramonti (2017), “Of the world’s top 10 countries in real GDP growth rates for 2012, five were indeed African.” Specifically, these 5 were Libya (124%), Sierra Leone (15.2%), Zimbabwe (13.6%), Niger (11.8%) and Ivory Coast (10.1%). In 2013, South Sudan experienced a growth of 29.3%. Since, other growing economies included Angola, Chad and the Democratic Republic of Congo.5” These numbers seems to show incredible growth for various countries in Africa that inevitably portray hope and paints of picture of wellbeing. However, the reality lived my many Africans has been another altogether.

In 2013, Sub-Saharan Africa continued to be home to the poorest nations in the world. At the time, a third of the world’s poorest people lived in Africa and 6 of the 10 most unequal countries in the world were in Sub-Saharan Africa3. In 2014, 41% of Sub-Saharan Africans were living in extreme poverty17. The United Nations Development Programme (UNDP) explains that despite the general improvements that Sub-Saharan countries have witnessed, many countries remain in crises, as in many, the growth has not benefited the poor and there is a growing population of youth without skills or without jobs17.
Growing inequality

If there is growth experienced and expected in these countries, how come most Africans are still living in poverty?

The United Nations Development Programme launched a study on African income inequality in 2017 demonstrating that despite the robust growth in some of the African countries, “the region remains one of the most unequal in the world”, as out of the top 19 most unequal countries in the world, ten are Sub-Saharan countries. The report explains that the outlier countries experiencing the growth have the highest Gini coefficients, which also happen to be higher than the global average.

Although we continue to see rising GDPs, it is but a form of measurement, which doesn’t happen to take into account the welfare of the population nor the stability of such growth. This was evident in the case of Nigeria, a country that experienced a severe recession in 2016, following peak growth in 2013. Instead, the Gross Domestic Product measures the value of goods and services produced within the borders of an economy or a country. How that revenue is distributed however, is calculated in the GDP.

It is important to note that there are some countries in Sub-Saharan Africa that rate amongst the most equal in the world (Burkina Faso, Mali, Niger, Burundi and Guinea among them). The United Nations Development Programme attributes these countries characteristics like communal land ownership and egalitarian access to the land to account for the lack of inequality gap.

The Future of Sub-Saharan Africa

But for the rest of the countries in Sub-Saharan Africa, it is imperative to take a moment to assess the growing problem of inequality that is leading to the rich getting richer and the poor getting poorer globally in an effort to avoid following the same path which ultimately lead to a plethora of additional problems, all ranging from a stagnant or unstable economy, all the way to a population with shorter life expectancies based on income distribution.

As Stiglitz pointed out, the development of newly found resources and income coming to top corporations doesn’t necessarily mean that income is flowing down, and that jobs are created. This is evident in the case of Africa who despite a few years of GDP growth with continued growth expected, remains the home of some of the most unequal and poverty ridden countries around the world.

Byanyima writes “Africa’s natural resource wealth has the potential to lift millions of people out of poverty, but illicit capital flows and income inequalities are cheating Africa of its potential.” Fortunately, as a result of the UNDP’s study, an Agenda has been created to achieve a goal by 2030 of “leaving no one behind.” As part of this agenda, the UNDP’s Regional Bureau for Africa will attempt to reach poverty reduction by addressing inequality.
Conclusion

The theories that we have covered shed a light on a problem that has been created as a result of globalization. The argument we share along with the individuals that we have covered is not to prevent globalization but to protect against some of the side effects that have developed as a direct result. As a new economy, Sub-Saharan African countries have the opportunity to strategize in order to avoid following in the footsteps of some older economies that have been covered throughout this essay.

The UNDP’s study shares its suggestions try attempt to bridge the gap in equality, among these, the development of 4 main areas: population, macro-economic fundamental, human development and growth.

Like the study, Fioramonti also argues that instead of focusing on growth alone, we should focus on how to make the “people of Africa thrive”; and like these two, Maskin also encouraged the improvement of human development and Stiglitz provides ways to prevent inequality within a nation consisting of both policy reformation and investment in the citizens of such region- in education, in unions, in tax credits, etc.

Byanyima also quotes the African Commission in writing the following –

“History has shown us that development cannot and does not work if policies are shaped and forced by outsiders”. But Africa cannot do it alone. Africa’s people, governments, business leaders and the wider international community must act in concert to ensure that the revenues from natural resources, set to increase over the next decade, will create opportunities for growth and for human development.”

The benefit of trade and globalization cannot be denied, however, the way in which it is currently managed has led to a gap that continues to widen in income within the economies and nations of the world. The gap equality has its own negative effects. This is why it’s crucial to work on policies and strategies such that we can all responsibly and ethically gain form the benefits that globalization brings, while preventing the bettering of some and the worsening of most. Instead of African countries reflecting the issues of Developed Countries, let African countries reform its practices and serve as the economy to mirror other economies after.

References

Fioramonti, Lorenzo (Nov 5, 2017). “Don’t fixate on whether Africa’s economies are rising or not, let’s focus on helping people thrive”. Quartz. Retrieved from https://qz.com/1120590/africa-rising-was-based-on-a-flawed-metric-of-african-progress/


---

**Biography**

**Ana Cecilia Houser**

Ana received a B.A. degree in Communications Studies from Lock Haven University in Lock Haven, Pennsylvania in 2009. She is currently attending Point Park University and is working on her MBA with a concentration in International Business. She is multilingual- fluent in English, Spanish and French. She is currently working for Cigna Group Operations in Pittsburgh, Pennsylvania as a Claim Manager in the Long Term Disability department. Her research interests include basic human drive and motivation and how it can be translated into the workforce.

**Stephen Schuchert**
Stephen received his B.S. degree from Saint Vincent College in Latrobe, Pennsylvania in 2008. He is currently attending Point Park University and is working toward his MBA with a concentration in International Business. He is currently working for Federated Investors, located in Pittsburgh, Pennsylvania, as the Manager of Global Trading Operations. His current research interests include the ethical use of psychometrics in big data, and the use of technological advancements in renewable energy to address climate change.

**Zachary Snowden**

Zachary received his B.S. degree from Westminster College in New Wilmington, Pennsylvania in 2015. He is currently attending Point Park University and is working toward his MBA with a concentration in International Business. He is currently working for BNY Mellon, located in Pittsburgh, Pennsylvania, in the Asset Management Operations division. His current research interests include the global relations and real estate.
Renewable Energy Solutions for a Town in Need

Lawrence J. Keenan III, EIT
Master of Science in Engineering Management, Point Park University

Abstract

The world we live in today is always dynamically changing with the development of new technology, rising environmental issues, and the demand for renewable energy sources. It was the goal of this paper to choose a topic that included all three of these subjects and could be addressed in one application. Many towns in the world today suffer from being modernized and are held back from being more self-sustainable due to location, local geography, and proper funding. This project topic is to propose a renewable energy solution for a town that would benefit the most from it by becoming completely reliant on its energy and ability to separate from “the grid.” Due to their popularity, it was decided to refer to online mapping of wind and solar energies to determine where in the United States they are the most efficient followed by local mapping to decide on which town to pitch the idea to.

Keywords

Renewable Energy, Photo-Voltaic, MicroGrid, Levelized Energy Cost, Net Zero

Introduction

Whether you are a proud homeowner, municipal official, or have any interest in electricity then the chances are that you are aware of the growing concepts of renewable energy. Renewable energy is one of the fastest growing technologies today and more and more people are working on the developing it to become more efficient, cheaper, and easier to obtain so that reliance on fossil fuels can become a thing of the past. For as long as there has been a demand for energy, fossil fuels have been around to help aid in producing it. It is this reliance that has developed a series of concerns with the environment, dangers in extraction, and the inevitable depletion of resources. In other words, one could say that renewable energy is not only the “better” choice when it comes to energy production but because it is the future.

As time progresses, it is this choice that becomes the solution in the way people obtain their energy. Achieving solutions to environmental problems that society faces today requires long-term potential actions for sustainable development. It is impossible to put in place renewable energy sources without the construction of its components. Whether it is solar and the placement of photovoltaic (PV) panels or hydroelectric power involving the construction of a dam, all need time taken to plan and develop the location where the energy source will be built. These examples of renewable energy sources are either on a small scale providing power to individual homes or businesses to large scale projects that are part of an entire electric supply grid. These applications are important to put in place not just because of their environment friendly concept but as models for larger purposes. What is meant by this is that a renewable
energy source can be looked at as an option for an end user larger than a single residential or commercial unit such as an entire electric grid for a reasonable size area. A reasonable size area meaning a population between 30 and 50,000 people that has the potential to go off the “grid” and become solely reliant on renewable energy. This concept would be similar to the MicroGrid model which is being used in undeveloped, isolated areas around the world and will be explained in further detail later.

It is also important for society to believe in making the world a better place for everyone where the environment can stop being degraded and improve in all areas. Also, Central and State governments in many countries have enacted laws and regulations to promote renewable energy and to encourage sustainable technologies. As a result, more towns are encouraged to follow suit. Smog levels continue to be a threat to major cities, surface waters contaminated from waste production, and the theory of climate change are all well-known causes from fossil fuel energy sources. One of the main goals is to provide readers evidence that it is possible for towns as a whole to become more environmentally and economically friendly without fossil fuel reliance.

Research Resources

Like most research papers, finding the proper resources to gather the best information is essential in providing effective results. When determining which information would be needed for this particular research paper, proper planning and thought went into what to look for. Some examples of the resources used in this research study were case studies, renewable energy output charts, wind capacity (Figure 1) and pollutant reduction (Figure 2) maps, utility sources and rates, geographic and topographic maps, subject city demographics, MicroGrid example projects, and online resources. The findings from these were then used to determine a subject town to pitch the renewable energy source to as well as coming up with facts to present and show that the idea is not just feasible but economically a good choice.

In order to provide the best information for a research paper, it is important to understand what the resources are and how then can be applied. Case studies offer a great source of information that were done by experts in fields relevant to the subject matter in which your paper is in. For this paper, case studies that I used contained research done on undeveloped, isolated areas in the world where civilizations or groups of people are not able to rely on the electrical grid for an energy source and have used renewable energy as their power source. One of these case studies provided a renewable energy output chart comparing the different types of renewable energy sources and their cost per kilowatt. This information would prove to be useful later when doing a cost comparison of the different sources and demonstrate to the subject town their best options. Solar and wind intensity maps are useful resources due to their layouts of the United States (U.S.) showing the variations of capacity factors and which areas would benefit the most from the reduction in pollutants produced from fossil fuels. The wind capacity factor map that was used displays the highest wind capacity is located in the central plains of the U.S. This is no surprise as the geography of these areas is mostly flat in nature and allows wind to rush along the surface with little or no interference. Being very similar to the reason why a lot of wind farms today are being built at sea or on bodies of water. Like most renewable energy sources, they
have to be strategically placed in order to be the most effective. However, the regions with the biggest wind and solar resources aren’t always the most beneficial places to build renewable energy, at least in the very near term\textsuperscript{1}.

![Image](image1.png)

**Figure 1\textsuperscript{1}**

Another important source of information used in my proposal is the local utility rates charged to end users. These values are found as averages and vary between residential, commercial and industrial users. Residential users tend to have the lowest average rate due to their size commonly being a single household. And obviously the industrial users have the highest being that their shear demand for electricity is essential to their large level of product outputs. Utility rates for this research paper were primarily used for cost comparison purposes.

Geographic and topographic research resources as well as demographics were also vital to this study in determining the optimal subject town to propose to. In conjunction with the wind and solar maps, local geography was used to find a town that fell within the population and energy demand criteria. Topographic maps are used to reference local topography or the local surface elevations. As previously mentioned, wind energy performs best on top of peaks or along flat regions so those areas were sought after first. Local demographics include some other information needed including actual location, population, square mileage, and town features.

Online resources today prove to be the most accessible and plentiful sources of information used for research. From encyclopedias, to journal entries, to research findings, one can always resort to the online sources for data. With this data compiled all together in one location, it proved to be very useful in putting this research paper together. Essentially, the majority of the research used on this paper was derived from online resources with the exception of a few journal articles.

**Subject City Description and Feasibility**

After taking into consideration all the data retrieved from the geographic, topographic, wind capacity, and pollution reduction maps, the decision on which town to choose for the proposal was decided. Bowling Green, OH (Bowling Green) seemed to be a great candidate for this renewable energy reliance proposal and further in depth research on that town was done. Bowling Green is located in Wood County, Ohio and part of the Toledo Metropolitan Area (Figure 3). According to the 2010 census, the population is at 30,028 people which falls within
the desired range for this research study. Other demographics include that it has a land coverage area of 12.61 square miles, is centrally urban based, surrounded primarily by agricultural lands (Figure 4), and has very limited surface waters.

Another characteristic looked into on this decision to choose Bowling Green was the feasibility of the practicality of renewable energy. The four renewable energy sources researched as possible options for this town are wind, solar, biomass, and hydroelectric. Although all of these are used to produce electricity, all are very different when it comes to how they produce it. Wind requires proper placement and setup but does not need a whole lot of land to be built on, solar needs to be placed in orientation with the sun’s rays and requires a good deal of land space for placement of all the photovoltaic panels, biomass constantly requires fuel to be incinerated and is more practical on a smaller scale, and hydroelectric power obviously requires a steady flow of water to spin its turbines. With each of these having their own unique features, in depth research was required to determine which ones are the most feasible for the Bowling Green application. Aside from their construction components, the cost analysis and investment rate of return conclusions are needed to provide a proper feasibility.

**The MicroGrid Concept and Examples**

The proposal to Bowling Green is very similar to the MicroGrid concept that is being put into use today around the world. A MicroGrid is a discrete energy system consisting of distributed energy sources (including demand management, storage, and generation) and loads capable of operating in parallel with, or independently from, the main power grid (Figure 5). In this proposal, the renewable energy application chosen is comparable to this concept by putting the renewable energy source in place of a central electrical grid for Bowling Green to rely on.
Using the MicroGrid concept unfortunately has its own case of pro’s and con’s that need to be taken into consideration. Some of the pro’s include being totally self-reliant and no major power grid to worry about malfunctioning, utilizing renewable energy as the power source meaning environmentally friendly practices, government tax breaks, and it is also a job creator. Like all new businesses, a renewable energy power source would require employees to perform certain duties to maintain the continuation of power production. For example, a solar panel farm would need its panels to be cleaned or brushed off on occasion, wind turbines would need to be lubricated, biomass energy sources need to be refueled all the time, and hydroelectric power plants should have routine checks for leaks due to the abundance of water. The idea of job creation would also motivate municipalities to move forward with the renewable energy technology. The growing presence of solar and wind power in rural communities has created job opportunities and income (green power currently employs roughly five times more Americans than the coal industry) and helped municipalities save both money and resources. Renewable energy jobs promise to renew rural areas in ways the fossil fuel industry won’t. Unlike the fossil fuel industry, which features mechanized technology, the renewable energy industry is much more labor-focused and intensive. Job creation aside, persuading municipalities would have to include displaying examples of today’s existing renewable energy models other towns currently have in use.

When understanding how something operates, people like to see examples of the subject matter including real life examples. Today, existing MicroGrid concepts can be found all over the world but are mainly found in the isolated areas where they are most needed. One such example is found here in the U.S. located at Fort Carson in Colorado Springs, CO. The military base has a goal to sustain all facility systems from renewable sources and reduce potable water usage intensity by 75% by 2020. A term that the facility likes to use is Net Zero meaning completely self-sustainable. And like a lot of military terminology exists today in acronyms, Fort Carson represents itself as SPIEDERS or Smart Power Infrastructure Demonstration for Energy Reliability and Security. Another U.S. location that supports MicroGrid technology is located in Albuquerque, NM in a mixed commercial-residential development. This fully functioning MicroGrid consists of a photo voltaic system, fuel cells, natural gas generators and a lead-acid battery bank. Some internationally located examples can be found in South Africa, India, and Western Australia.
On the other side of the concept are some con’s which include again the principle of being self-reliant. What is meant by this is that the idea is to have Bowling Green totally self-reliant on its new renewable energy source that the problem could be just that. One luxury the majority of metropolitan areas today have is that they are all provided power by a central grid that has a thorough and reliable infrastructure where if there is ever a problem, most solutions are easily fixed. In Bowling Green’s case, the renewable energy source would have to still be tied into the central electrical grid so that any loss in power can be solved by re-routing electricity to those in need. This con isn’t necessarily a major reason to avoid converting to a renewable energy source but is something that definitely needs to be taken into consideration and included in the planning stage. A second con is that all renewable energy sources are land consuming. Towns like Bowling Green do not have land set aside strictly to be used for the placement of renewable energy sources and would have to be acquired somehow. These solutions include purchasing land from land owners or from the concept of eminent domain which is not a likely case but may be considered. Land owners today are usually very protective of their property and would only be open to the idea of selling their land for enormous amounts of money. Since municipalities are typically tight on budgets and are always hesitant on what to spend funds on, the allowance to purchase property would probably not be on top of the list due to the fact that they are already on a power grid that is in place and functions properly. In order to increase funds for any municipal purchase, one idea would be to raise taxes for residents. Extremely careful decision making would have to be done however so that you do not have mass retaliation from the public and proven evidence would be needed to persuade the majority of residents. Another con to take into consideration is being prepared for the lack of knowledge and experience on the renewable energy technology concepts. Renewable energy is by no means a brand new technology and many people are aware of its existence. However, complete background knowledge on it is more than likely scarce and not common with most people hence having to be prepared to answer any questions that may arise. One final con is the dreaded capital costs of renewable energy. Like all power plants the initial costs can be very high and the same is for renewable energy technology. Land acquisition, infrastructure components, maintenance, and general construction costs all add up to large initial funds that need to be provided up front.

**Renewable Resources and Their Applications**

When proposing this renewable energy pitch to Bowling Green, it is important to be able to explain to whomever all the possible options available as well as their feasibility to the town. Other sources of renewable energy that exist but are not necessarily good applications for Bowling Green include hydrogen and geothermal. Although these sources may not be economically feasible, it is still a good idea to know of their whereabouts so they can be explained to interested groups or municipalities. Knowledge on the renewable sources that could work is the most important and is explained next.

Amongst all the various types of renewable energy sources, solar is easily the most popular and widely used today. Being around for a few decades now, solar technology has become increasingly more affordable and easier to maintain with its components becoming more efficient and an increasing number of manufacturers. A standard solar power plant set up includes a large collection of solar arrays that are mounted to the ground along with a prepared mounting surface.
These solar array’s purpose is then to absorb solar energy. Solar energy is the sun’s radiation that reaches the Earth. When sunlight hits the PV cells inside solar panels, these cells transform the sun’s radiation into electricity. This electricity is then converted from alternating current into direct current for normal everyday use. Typical solar applications found today range from a single household, a commercial building, and solar farms.

A second display of solar technology currently being used today is not the use of photovoltaic panels but strategically placed mirrors that are pointed to the top of a centrally located tower. These mirrors redirect the sunlight to the top of this tower where salts are super heated to a liquefied state and then transported to another section of the facility where they use the heat to produce steam in which spins turbines to generate electricity (Figure 6). However, this application of solar technology has shown some cons as the concentrated rays harm local wildlife that fly in its path.

Figure 6. Ivanpah. Nipton, CA

Another fast-rising energy technology is the use of wind turbines. Wind turbines can be found almost anywhere due to their ability to be placed in a large variety of areas with their smaller footprint. Wind energy applications are usually composed of a horizontal-axis wind turbine and consist of a large diameter three blade propeller system, an attached generator located directly behind the propeller, and a vertical support system that carries electricity to a nearby transmission line. When determining how much power output can be expected from placing a single turbine, one could look to the size of the rotor diameter. According to the chart below (Table 1), the larger the diameter of the rotor, the greater the power output generated.

<table>
<thead>
<tr>
<th>Rotor Diameter (meters)</th>
<th>Power Output (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>25</td>
</tr>
<tr>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>27</td>
<td>255</td>
</tr>
<tr>
<td>35</td>
<td>500</td>
</tr>
<tr>
<td>40</td>
<td>600</td>
</tr>
<tr>
<td>44</td>
<td>600</td>
</tr>
<tr>
<td>48</td>
<td>750</td>
</tr>
<tr>
<td>54</td>
<td>1000</td>
</tr>
<tr>
<td>64</td>
<td>1500</td>
</tr>
<tr>
<td>72</td>
<td>2000</td>
</tr>
<tr>
<td>80</td>
<td>2500</td>
</tr>
</tbody>
</table>

Table 1
Biomass technology has been around for thousands of years with the most common form being wood burning to create energy. Biomass is a renewable energy source that uses organic material that comes from animals and plants which contain stored energy from the sun through a process called photosynthesis. In this process, plants convert radiant energy from the sun into chemical energy in the form of glucose. Other examples of biomass include agricultural crops and waste materials, food, yard, and wood garbage waste, as well as animal manure and human sewage. However, it takes energy to make energy with biomass because burning is the only way to release the energy. Biomass’s popularity has grown with the development of transportation fuels such as ethanol and biodiesel. Currently, biomass is found on small scale applications such as farms where fuel is plentiful and easier to obtain than within urban environments. Since biomass relies on a constant fuel source, it is not feasible at this day in age to consider it as a complete source of energy for an entire town. Even though with a constant supply of waste – from construction and demolition activities, to wood not used in papermaking, to municipal solid waste – green energy production could continue indefinitely.

The last renewable energy source that will be proposed to Bowling Green is the hydroelectric concept. This type of energy is site selective due to its need to be constructed on a major flowing water source, usually a river big enough to accommodate the infrastructure. One of the most well-known examples of hydroelectric power is the Hoover Dam shown in Figure 7. Hydroelectricity is produced by directing the flow of water over a wheel turbine in which generates electricity. Most common examples include a dam that is built to retain enough water behind it to provide a constant flow. Without the dam being built, the risk of not having enough water to provide hydraulic forces on the turbine becomes much higher than without it.

![Figure 7](image)

**Cost Comparison Analysis**

When selling an energy efficiency retrofit or a renewable energy system, sooner or later it will be necessary to discuss the financial benefits with the potential client, and most of the time that will be the main factor which defines whether the deal is closed or not. In order to present renewable energy solutions to a group of people, it is important to be able to explain the difference in costs between the possible options. All sources may have the end goal of producing electricity but all are very different in capital costs. When comparing the costs between the different power plant types, the levelized energy cost (LEC) is the main number to look at. This number represents the total cost to build and operate a new power plan over its life divided to equal annual payments and amortized over expected annual electricity generation. Included in this cost is initial capital, maintenance, fuels, build time, operations, and return on
investments. Below is a table displaying the various types of renewable energy power plants as well as some current fossil fuel examples demonstrating the difference in costs. According to the source Electric Choice, the average Ohio resident energy consumption per household is around 892 kWh per month. With Bowling Green having a population of approximately 30,000 people, that equates to 7500 households (4 people per house). Using these numbers, further calculations can be evaluated such as:

\[
(24 \text{ hrs} / \text{day}) \times (30 \text{ days} / \text{month}) = 720 \text{ hrs} / \text{month}
\]

\[
(892 \text{ kW-hr} / \text{month}) / (720 \text{ hrs} / \text{month}) = 1.2 \text{ kW in hour per household}
\]

Therefore 9MW of a desired renewable energy power plant would be needed.

Because not all energy sources operate at 100% efficiency, each potential source is designated a capacity factor. Using the above below derived from the U.S. Energy Information Administration, the following capacity factors from 2017 were used in the investment return analysis.

*Source – EIA

<table>
<thead>
<tr>
<th>Energy Source Type</th>
<th>Energy Source Capacity Factor (CF)</th>
<th>Energy Needed to be Installed (MW)</th>
<th>Cost in $/kW-hr LEC*</th>
<th>Approx. Plant Capital Cost (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td>N/A</td>
<td>-</td>
<td>$0.11 – 0.12</td>
<td>-</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>N/A</td>
<td>-</td>
<td>$0.053 – 0.11</td>
<td>-</td>
</tr>
<tr>
<td>Nuclear</td>
<td>.92</td>
<td>9 / .92 = 9.78</td>
<td>$0.096</td>
<td>$101.87</td>
</tr>
<tr>
<td>Wind</td>
<td>.38</td>
<td>9 / .38 = 23.7</td>
<td>$0.044 - 0.20</td>
<td>$538.6 - $118.5</td>
</tr>
<tr>
<td>Solar PV</td>
<td>.27</td>
<td>9 / .27 = 33.3</td>
<td>$0.058</td>
<td>$574.14</td>
</tr>
<tr>
<td>Geothermal</td>
<td>.76</td>
<td>9 / .76 = 11.8</td>
<td>$0.05</td>
<td>$236</td>
</tr>
<tr>
<td>Biomass</td>
<td>.51</td>
<td>9 / .51 = 17.6</td>
<td>$0.098</td>
<td>$179.59</td>
</tr>
<tr>
<td>Hydroelectric</td>
<td>.45</td>
<td>9 / .45 = 20</td>
<td>$0.064</td>
<td>$312.5</td>
</tr>
</tbody>
</table>

*Source: U.S. Department of Energy

**Return on Investment**

A second financial exhibit to present to Bowling Green is the return on investment. The return on investment can be defined as dollars obtained per dollar invested, over a specified time period (typically per year)\(^9\). For the Bowling Green application a plant lifetime of 30 years was used. When an energy efficiency or renewable energy project is backed by a sound financial analysis, the customer is more likely to purchase it\(^10\). The following figures and calculations could be used to show the town’s potential return on investment for the different proposed renewable energy sources:
Ohio electricity profile 2016

Yearly savings if completely reliant on non-grid electricity at 100% efficiency:
892 kWh / month x $0.0984 / kWh x 7500 households = $658,296 per household / month
$658,296 x 12 months / year = $7,899,552 / year of savings or revenue towards plant costs

To allow for a more exact time frame of when each renewable energy plant would be “paid” off and Bowling Green would start seeing an actual revenue and savings, inflation should be taken into consideration. Due to the fact that all sources of energy are affected by the same yearly revenue and inflation being the same at 2%-3%, the initial capital costs of each would be what governs the best decision.

Conclusion

After all the research on which renewable energy source would be the best application for Bowling Green, it was decided that wind energy would be the preferred choice. Bowling Green is located in an ideal part of the U.S. that has available land for construction and a high wind capacity factor. The capital costs were also determined to be cheaper than a solar power plant. Solar was a close second as it is a popular option but the fact that this is for an entire city like Bowling Green to become completely self-reliant would require a much larger “footprint” and is unable to generate electricity all the time making it less producing than wind. Solar power generation lags wind power production by about a decade. As mentioned earlier in this study, biomass functions on small scale applications like single family households. For an entire town with a population of 30,000 or more would require a biomass facility of such a large scale that it is essentially unfeasible. Lastly hydroelectricity was shown to have a cheaper cost than solar and wind, but it is also not a viable source as it requires a constant major flow of water to produce and Bowling Green mainly consists of land mass. A dam could be constructed elsewhere but additional infrastructure would have to put in place adding to costs and right-of-way acquisition. The idea is to follow the MicroGrid concept and keep the supplying renewable resource within close proximity of the end user. With the recommendation of this proposal and the combination of planning and decision making from Bowling Green officials, a sole reliance of energy on wind use is certainly in the future.
References


Lawrence J. Keenan III, EIT

Currently a Master of Science graduate student in Engineering Management at Point Park University, Lawrence received his Bachelor’s of Science in Civil Engineering with a focus in land development and construction management and also acquired an Undergraduate Certificate in Housing, from the Pennsylvania State University. Since then he has been working in multiple sectors of civil engineering including land development and site civil design for residential, commercial, and energy markets. Other professional licenses and certificates achieved include Engineer-In-Training for the State of Pennsylvania, LEED Green Associate, Certified Professional in Erosion and Sediment Control, Concrete Field Testing Technician, and Green Infrastructure. He is currently an associate member of the American Society of Civil Engineers.
National Medical Council

Siervo, T. ; Maharaja, A.

Abstract

Defensive Medicine (DM) – also called defensive medical decision making, refers to the practice of recommending a diagnostic test or medical treatment that is not necessarily the best option for the patient, but an option that mainly serves the function to protect the physician against the patient as potential plaintiff. - In USA is a huge issue around $ 700 billions dollar / year [1].

Since 1769, when US was an England Province, the court articulate a standard by which physicians’ conduct could be measured, and it was held that a physician could be found liable only if another physician testified that the defendant breached the standard of care, but the court went on to create a significant hurdle for the plaintiff in retaining an expert witness. In 1832 the Supreme Court of Connecticut defined the standard of care in language that is universally used today. The plaintiff obtained a verdict in her favor and the physician appealed. He argued that it was settled law in Connecticut that nothing short of gross ignorance or gross negligence can subject a surgeon to damages in a malpractice lawsuit. In response to this argument the Supreme Court upheld the jury instructions given by the trial court stating: "... that if there was either carelessness or want of ordinary diligence, care and skill then the plaintiff was entitled to recover." [5]

During 1840-1860, physicians saw a flood of malpractice lawsuits, an increase of 950%. This increase continued through the following years even with the creation of American Medical Association (AMA), which had the quest to create standards in training physicians and the practice of medicine. [2] Ironically, developing standards of practice for physicians to follow created benchmarks by which physicians were judged in medical malpractice litigation. [3] When standards are in place the potential for deviating from them arises. The physicians who aspired to the highest level of medical practice possible were well educated and well trained. They were successful professionally and financially, ironically making them attractive targets for medical malpractice claims. [4] The charlatans who did not claim to follow any standards and who claimed no widely recognized expertise were judgment proof. With the arrival of medical malpractice insurance at the end of the 19th century, all physicians became prospective targets. [6]

Physicians practice DM to not be sued and with this mentality it was created to “protect” the Medical Doctors. But with that “protection” the expenses in DM and lawsuits in 2011 was between 650 to 850 Billion dollars [7]. We know the defensive medicine happen everywhere and every time, but to reduce this practice we will need to encourage the providers to change their mindset and also change the judgment system. To change the staff and hospital mind, we should create a council to protect them from the regular lawsuits. In other words, we should create and implement an idea of a National Council of Medicine; a council that will judge, sentence and punish any medical malpractice, negligence, recklessness and over requesting, by the physicians, using books, articles, journals, and medical common sense.

Due to the financial problem the healthcare is going though, we would like to suggest a reduce
on expenses, saving at least 80% on healthcare expenditures with defensive medicine; we expect around 600 Billion dollars. With all these modifications and process. [31]

**Introduction**

How many times you saw an advertisement on TV or outdoors, saying, “Do you suffer a medical malpractice? We can help you!” - this is the trial lawyer's approach.

For a full understanding of this paper maybe you should have some explanations about the Defensive Medicine (DM). DM is a medical malpractice according the Hippocratic Oath and the medical standards. “I will prescribe regimen for the good of my patients according to my ability and my judgment and never do harm to anyone.” [8]. Let’s analyze this statement, At this point the word harm, is not only on the literal meaning, but also to not ask/order/request more than they (patients) need. Also, when the oath says, “my ability and my judgment” it means the Medical Doctor (MD), have the decision power and discernment to decide among a lot of options. The medical standards are based on malpractice, negligence, and recklessness.

- Malpractice: is defined as any act or omission by a physician during treatment of a patient that deviates from accepted norms of practice in the medical community and causes an injury to the patient.[9]

- Negligence: An act or omission (failure to act) by a medical professional that deviates from the accepted medical standard of care.[10]

- Recklessness: An act of proceeding to do something with a conscious awareness of danger, while ignoring any potential consequences of so doing. Reckless disregard, while not necessarily suggesting an intent to cause harm, is a harsher condition than ordinary negligence.[11]

All this info was required to really understand what pass through the MD mind when he/she use DM instead of offensive medicine. And beside all this misconduct the MD should fill all the patients’ requirements, what is

*I want the maximum that I can get and as soon as possible.*

Which means, they want medical care as soon as possible, as cheap as they can, and as the best one, but they ask for healthcare which is completely different! Let extinguish this confusing right now. Medical care, is something you have in that moment, you need a medical assistance, you are in need of physician that moment.

In the other side, health care is what we do, how we take care, with our health, of course with help by medical staff. So we can't ask for healthcare if we do not take care of our own body. Health care is everything. Taking care of our body, alimentation, exercises, mental health, regular medical visits, everything we can do for ourselves.

**Discussion**

As we know HealthCare expense in USA is around +18% of the GDP. In 2016 the US GDP was
$18,569 trillions, so, if do this math, you will find over $+3.34 trillions of Dollars. [29]

If you look though the GDP of the countries, these $3.34 trillions, is greater than the United Kingdom GDP, which is #5 in the world and is $2.629 trillions. To be realistic, what US spends in Healthcare could be the #5 GDP in the WORLD, just about the healthcare. [30]

We are not saying that is not worth, but inside this $ 3.32 trillions, we have almost 23% on unnecessary expenses.

According to Journal of the American Medical Association (JAMA) , in 2010 were spent (in MILLIONS) [7]:

- 1) $+700 in Defensive Medicine,
- 2) $25 in Readmissions,
- 3) $22 in poor diabetes management,
- 4) $17 in Medical Errors,
- 5) $14 in unnecessary ER visits,
- 6) $10 in treatment variations,
- 7) $3 in hospital acquired infections,
- 8) $1 in overprescribing antibiotics.

Let's start with Medical Doctors perspective, if they stop to practice defensive medicine, this $+700 Millions dollars will disappear in this account, and all the companies can use this money for others purpose, or even make the bills cheaper. Of course we know that overprescribing antibiotics is a problem related to defensive medicine, as readmissions. With all this numbers and evidences we can diagnosis the major problem of the healthcare is the defensive medicine. Nowadays the huge problem is the patients.

Patients’ disagree because they want what they want, as fast as they can, and most of the times the patients only know what Dr. Google says. So the Physician must act following what google and patients say. If the MD follow what he/she was trained to do, what they know, and follow their own believes, there is a chance of the patients don’t like/agree with doctors, about the treatments or decisions. And for that "disagreement" the patient will feel unsafe, will stop to follow what physician is saying and probably will fill a claim and prosecute the staff. After innumerous complaints/claims/suits the MD staff decided the defensive medicine/give what the patient want, is more secure (law suit), will bring the patient back, and will make them happier.

Really?

Unfortunately yes, the patient suit just because the MDs don’t do what the patient wants.
According to the JAMA article [16] if we could minimize the number one of this list until number 5, we can almost save 770 billions of Dollars (almost 90% of all expenses). But of course we need to start from some point, and this point should be the #1.

We said a lot about defensive medicine, but what really is that?

“...I will use treatment to help the sick according to my ability and judgment, but never with a view to injury and wrong-doing. ...” - Hippocratic Oath [13]

According to Hippocratic oath, every doctor should help the sick according your own ability and judgment, but what is going now is quite alarming. Defensive medicine, also called defensive medical decision making, refers to the practice of recommending a diagnostic test or medical treatment that is not necessarily the best option for the patient, but an option that mainly serves the function to protect the physician against the patient as potential plaintiff. Defensive medicine is a reaction to the rising costs of malpractice insurance premiums and patients’ biases on suing for missed or delayed diagnosis or treatment but not for being over diagnosed. U.S. physicians are at highest risk of being sued, and overtreatment (The treatment of clinically insignificant disease, that is, minor or indolent illnesses that do not require aggressive or invasive therapy. [21]) is common.

Over The number of lawsuits against physicians in the USA has increased within the last decades and has had a substantial impact on the behavior of physicians and medical practice. Physicians order tests and avoid treating high-risk patients in order to reduce their exposure to lawsuits, or are forced to discontinue practicing because of overly high insurance premiums. This behavior has become known as defensive medicine, “a deviation from sound medical practice that is indicated primarily by a threat of liability.” [20]

This may be the It most challenging but it will also be the one that will most benefit people when completed.

To save $+700,000,000.00, we would need to change the patients’ mindset and the doctors’ reaction. We know to change the patients ‘ mindset won’t be easy and probably will be impossible in a short period of time. But we can start to recondition with a help of the MDs, hospitals, HealthCare plans and most important government.

How?

If everyone agrees in a change, in a big change, to save money, we propose a method to optimize, organize, inspect and judge all conducts and claims about medical field. This project was created to protect all Patients, against bad conducts and malpractice; also to protect all MDs related to the case, to judge and determine if there has been malpractice or bad conduct, and also let the MDs do their jobs with less fear, and also give back to all MDs the autonomy about your profession; and also help the hospital, healthcare plans and government to save a lot of money. To complete all these goals we will need to re-educate all doctors, medical directors, Hospitals CEO, HealthCare plans CEO/directors and all staff for every single unit to a complete recall. This big agency will help all fields of healthcare, and also protect everyone.

An agency National Council of Medicine (NCM) will be part private and part
public/government, and the function will be to regulate, control, arrange, judge, and in be charge of professional regulation in the area of medicine.

This national agency will be represented by a regional council in each US state, which has the same mission as the national agency but at a state level. The councils are supported by annual contributions required of all those practicing medicine in USA and a contribution by state and federal government. The councilors are necessarily doctors, who are elected by their peers. On this agency we will have all positions of a public institution, like President, Vice-president, small group of financial counselors, small group of ethical councilors, and regular employees like secretaries. All fixed positions, which require medical degree, will not be reimbursed. This status will be the higher status of a MD inside the MD society.

In addition to the notary functions, such as professional registration of doctors and their titles, the national Council and the Medical Board are, under law, the supervisory bodies of professional ethics, which it must ensure and work, by all means at its disposal, toward the perfect performance of ethical medicine and the prestige and good reputation of the profession. To fulfill its statutory functions, the regional council one MD indicated by MDs, one by population and one by government would function as court, hearing complaints and prosecutions against physicians and establishing the ethical and professional punishments when there is evidence of ethical or medical violations.

The penalties, as provided by medical law, may consist of confidential warnings, private censure, public censure, suspension of professional practice for 30 days, or forfeiture of professional practice. The decisions of regional councils can be appealed to the National Agency.

If the physician is acquitted, the accusing party shall bear all the expenses of the jury and shall bear the number of working days, which the doctor in question has lost.

All accusations of medical error, medical ethics, professional misconduct, impurity, negligence, recklessness, must be judged by doctors, which work in the same specialty and according to new books, new articles, specialized journals, protocols and medical common sense. Protect the Patient, physician, the institution (hospital, clinic), is the goal.

To give an example, let's get the Top 10 healthcare around the World, 7 out of 10 countries protect their physician staff and the population with their own Medical Board.

| Country      | Protection
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Luxembourg</td>
<td>NO</td>
</tr>
<tr>
<td>Singapore</td>
<td>YES</td>
</tr>
<tr>
<td>Switzerland</td>
<td>YES</td>
</tr>
<tr>
<td>Japan</td>
<td>YES</td>
</tr>
<tr>
<td>Netherland</td>
<td>NO</td>
</tr>
<tr>
<td>Sweden</td>
<td>YES</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>YES</td>
</tr>
<tr>
<td>Australia</td>
<td>YES</td>
</tr>
<tr>
<td>Israel</td>
<td>NO</td>
</tr>
<tr>
<td>Germany</td>
<td>YES</td>
</tr>
</tbody>
</table>
References

20. Singapore Medical Council. About SMC | SMC. 
   October 20, 2017.
25. Good medical practice: a code of conduct for doctors in Australia. Medical Board of Australia. 
   2017.
26. Ständige Konferenz der Geschäftsführungen und Vorsitzenden der Ethik-Kommissionen der 
   Landesärztekammern. Bundesärztekammer. http://www.bundesaerztekammer.de/aerzte/medizin-
   ethik/ethikkommissionen-der-landesaerztekammern/. Published August 9, 2017. Accessed October 20, 
   2017.
27. “NationalHealthAccountsHistorical.” CMS.gov Centers for Medicare & Medicaid Services, 21 Nov. 2017, 
   ts/NationalHealthExpendData/NationalHealthAccountsHistorical.html .
   www.thefiscaltimes.com/2016/08/23/Why-Third-American-Health-Care-Costs-Are-Considered-
   Unnecessary.
Negotiating Religio-Cultural Barriers in Psychotherapy with Female Arab-Muslim Survivors of Sexual Violence: A Literature Review

Carleigh Ann Mallah
Point Park University

Abstract
In this review, I explore the issue of mental healthcare disparity as it applies to and impacts the female Arab-Muslim sexual violence survivor population.

Keywords
Intersectionality; diversity-/cultural-competence; Islam; trauma; sexual violence

Introduction
In this review, I focus on female Arab-Islamic survivors of sexual violence as one specific manifestation of underserviced minority client populations within the United States (US). Arab-Islamic women, especially those who have immigrated from Muslim-majority countries, represent a unique subset of the sexual violence survivor population that, in many cases, requires a specialized, culturally-adapted model of care. The proceeding sections will begin with an explication of some principles and concepts considered essential to Islam and especially relevant to providing psychotherapy and/or other mental health services to Arab-Muslim populations. Following these, I will discuss how the Muslim woman and Muslim female’s body has been discursively constructed in the Western world in recent years, and how this emergent discourse might be interpreted as problematic. This discourse will then be used as a backdrop to understand some of the barriers and obstacles Muslim women face in seeking out and receiving treatment for sexual trauma. In the final sections, I will propose intersectionality and cultural/diversity competency as relevant theoretical frameworks with which community and clinical helping professionals can utilize to better serve Arab-Muslim women.

An emergent client population
Islam is the second-largest religion in the world with an estimated 1.8 million followers spread about globally. Much of the global Muslim population is concentrated in areas throughout the East: the Asia-Pacific region (ex., Indonesia, India, Pakistan…) houses approximately 62% of Muslims worldwide, followed by the Middle East-North Africa (MENA) region (ex., United Arab Emirates, Saudi Arabia, Qatar, Egypt), which houses approximately 20%1. Muslim presence in the West is small relative to that of the Eastern areas of the globe—as of 2017, the group is thought to constitute only about 1.1% of US and 4.9% of European populations, respectively1. Demographic trends considered, it is significant to note that compared with other major religions, Islam ranks first in terms of rate and speed of growth. At present, Muslims constitute approximately 24% of the world’s global population, and this number is expected to rise to 32% by 2060, inclusive of areas in Europe and the Americas1. The European Muslim population is expected to rise from 6%,
as of 2010, to 8% by 2030\(^1\). Upward population growth is also projected for the US and Americas, albeit on a smaller scale. The US, notably, is expected to double in Muslim inhabitants by the year 2030, rising from 2.6 million in 2010 to 6.2 million\(^1\).

Immigration, political/national refuge, and high fertility and/or birthrates among Arab-Muslim women have been attributed as catalysts for the rising number of Muslims living in areas of the West\(^1\). With these factors in mind, it has also been suggested that much of the population consists of persons native to the religion (e.g., via birth/family relations or status of native country) rather than persons who have converted\(^1\). In any case, such demographics present significant clinical implications for psychologists and mental healthcare specialist, as it is evident from these data that the Arab-Islam presence in the West will grow only more prominent and visible with time. Clinical and community helping professionals would, thus, do well to familiarize themselves with Arab-Islamic culture, values, norms, and principles so that they may better serve the unique needs of this emergent population.

### Identity and Mental Health in Arab-Islamic Culture

Islam is a deeply entrenched aspect of Arab culture, significant not only as a spiritual path, but also as a framework for conceptualizing notions of justice and law\(^2\), human rights\(^3\), political ideology\(^4\), and ethics and interpersonal relations\(^5\)—as is the norm for countries and nation-states operating under Islamic jurisprudence (e.g., Sharia Law). While it is a common assumption throughout Europe and the US that Muslims who have immigrated from Sharia Law countries naturally retain more radical views and/or identify more strongly with the religion\(^6\), studies of the subject suggest results that are much more nuanced and variable. Mandaville\(^7\), for example, argues that diasporic Muslims possess an “interstitial identity” that “fully participates neither in the politics of majority non-Muslim society nor in the politics of the country of origin”\(^7\). Transnational status, he adds, displaces Islam from a “national context”, which in turn enables followers to engage with their spirituality in a way that is more critically- and dialectically-minded\(^7\). Studies from Awad\(^8\) and Aydin et al.,\(^9\) found that identification with Islam was moderated by exposure to external stressors, such that individuals who acquire negative experiences (e.g. Islamophobic and discriminatory attitudes) are less likely to conform to acculturating practices and more likely to position religious affiliation as an essential aspect of self-identity.

Recognition of Islam’s embeddedness within the context of Arab culture is crucial both for discussions of how Arab-Muslims conceive of psychopathology and mental health, as well our attempts to develop appropriate and affirmative mental health treatment models for the population itself. Consultation with the writings of Islam is a significant component in many Arab-Muslim interpretations of physical and mental health\(^10,11\), with the Qur’an and Sunnah serving equally as common sources for coping with psychic distress. For some followers of Islam, psychopathology is a product of “demonological” origins and may be treated with the aid of imams\(^1\) who use Qur’anic metaphor to guide clients through episodes of crisis\(^11\). For others, its etiology is the will of Allah, emerging either as “punishment” for past sins, or “tests” of the individual’s strength\(^12\). Individuals of the latter category are generally less likely to pursue formal means of treatment (e.g., psychotherapy or religious counseling) and may view the crisis

---

1 Islamic counselors.
or issue as resolvable with patience and perseverance\textsuperscript{12}. As doubting Allah’s will is strongly prohibited in Islam, this option may also be viewed by more devout Muslim clients as the most ideal\textsuperscript{10}.

It should be noted that in the event that an individual does pursue professional treatment, it is often at the request or with guidance of family member(s). Arab culture is significantly more family-oriented than the West and as such favors the constructs of community and interdependence over the Western emphasis on individualism and independence\textsuperscript{10}. As a result, in psychotherapeutic settings, what often emerges is a departure from the traditional “patient-doctor dyad” towards a more triangular relationship involving the clinician, client, and the client’s family members\textsuperscript{10}. Family members of the Arab client may attempt to co-facilitate or act as “co-therapists” throughout the treatment process by participating in decisions about the course of treatment, financing the treatment, and in some cases, attending therapy sessions alongside the client. Familial loyalty and/or the presence of the family during the treatment may also lead to some Arab clients’ hesitancy to disclose certain issues during treatment, notably if these issues concern conflicts within the family sphere\textsuperscript{10}.

Psychologists and helping professionals unfamiliar with Arab cultural norms and values may perceive the family’s close involvement as problematic and/or cause for concern. For some, it may be interpreted as a sign that the client lacks self- or intrinsic-motivation or that family is overinvolved, coddling, or smothering the client\textsuperscript{10}. Others may fear that strong familial involvement may eventually jeopardize client privacy and/or confidentiality. In any case, the family’s role in the client’s treatment is one that should be approached with sensitivity and caution. Ideally, discussions concerning the extent of familial involvement should be had prior to beginning treatment, with boundaries clearly delineated and a dedicated plan of action to follow in the event that such boundaries are crossed.

\textbf{Gendered Islamophobia and Discursive Processes of Hijab}

Discrimination against Muslims is prevalent throughout the US and Europe and has grown ever more aggressive and overt in the wake of 9/11 and the global War on Terror\textsuperscript{13}. Islamophobic ideology pertains generally to the Muslim community as a whole, yet the experience of Islamophobia manifests differentially across genders. An emerging body of research has suggested, for example, that incidents of anti-Muslim discrimination are categorically and motivationally variable with victim gender. Arab-Muslim men, as data indicates, are more likely to encounter discrimination that is based on their race and ethnicity, and this discrimination is often institutional or systemic (e.g., racial profiling, labor discrimination)\textsuperscript{14-16}. Arab-Muslim women, by comparison, are more often subjects of religious discrimination, with said discrimination occurring often in the form of violent victimization (e.g., hate crimes, physical assault, harassment)\textsuperscript{14,15,17}. Differences may also emerge in terms of how each gender goes on to process their experience/s with discrimination. For instance, Abu-Ras and Suarez’s\textsuperscript{16} analysis of PTSD and trauma symptoms among American Arab-Muslims post-9/11 found that female participants were significantly more likely than their male counterparts to experience negative changes in self-esteem, self-confidence, self-knowledge, and coping skills following a discrimination-related incident.
Western misunderstanding of and prejudice towards Arab-Muslim women who observe hijab (hijabis) may contribute to the population’s disproportionate exposure to incidents of Islamophobic discrimination and violence. Discrimination directed toward hijab/hijabis is unique in that it is often disguised as benign, constructive, and/or well-intentioned. Because Western views tend to associate hijab—especially in its more extreme forms (e.g., niqab, burqa, chador)—with misogyny, subordination, patriarchal control, and a lack or loss of agency, its rejection is sometimes rationalized as a means of aiding in Muslim women’s liberation18,19. In both historical and present contexts, hijab has served as both an exceptionally visible symbol of religio-cultural “Otherness”20, as well as a politicized repository for Western prejudices, misgivings, and anxieties toward Islam18,19. Since 2006, numerous countries throughout the West have introduced legislation prohibiting citizens from observing hijab, with many citing secularism, cultural assimilation or integration, and emancipation or liberation as objective(s)20.

Hijab’s usage in Western colloquial vernacular runs somewhat contrary to its significance and meaning within Islamic culture; while the former appears typically as a descriptor for a Muslim woman’s veil, headscarf, or covering, the latter is, in contrast, a more encompassing term that articulates both the Islamic principle(s) of inwardness and modesty, as well as a gender-inclusive (i.e., applicable to both male and female followers) standard of modest behavior, social relations, and dress. Hijab is derived from the trilateral Arabic root verb hajaba, meaning “to hide”, but also possesses, as Mernissi21 points out, underlying “spatial” and “ethical” dimensions that in turn express its function(s) as a physical barrier and mechanism for protecting against sin (“haram”). Qur’anic references to hijab are etymologically consistent with those described above, yet at the same decontextualized from the term’s accepted contemporary usage. Tasfir2 concerning hijab (both as garment and religious obligation) typically reference sections XXIII:30 and XXXIII:59 of the Qur’an, which speak of the khimar (“headscarf”) and jilbab (“loose outer-garment”) and contain specific instructions from the Prophet (pbuh) regarding followers’ duty to remain chaste and modest in the presence of the opposite sex.

Reasons for observing hijab are variable among Muslim women. As such, individual motivations may range from perceived spiritual obligation, an appeal for the approval of family or peers, or a desire for closer identification with the wider Muslim community19,22,23. Further, some women may also regard the hijab as a vessel through which they may more comfortably navigate interactions with other gender(s), assert bodily agency and personhood, and distance themselves from the male gaze and/or association as a sexual object19,22,23. While it is possible that hijab may be used for oppressive purposes, such as in nations where it is compulsory, an abundance of research also appears to suggest an association with empowering, agential possibilities. Ahmed24 and Bullock22,23 have spoken at length of the hijab as a reclaimed object in Muslim feminism and emphasized its significance as a reaction against patriarchal ideology and Western colonialism. Zimmerman25 and Zine17’s analyses of Arab-Muslim women’s perceptions of hijab show comparable results.

Religio-Cultural Barriers in Psychotherapy with Female Arab-Muslim Survivors of Sexual Violence

---

2 Qur’anic exegesis.
Prior sections have discussed at length certain religio-cultural nuances that may impact and/or influence the provision of psychotherapy and mental health services to Arab-Muslim clients. While these differences are obviously still applicable, still more may emerge when working with Arab-Muslim women in particular. That said, it should be noted that there exists, at present, an overall paucity of research describing the specific needs of female Arab-Muslim survivors of sexual violence. For this reason, the findings in this section will be drawn from sources that discuss the health and mental health needs of female Arab-Muslim community in general in tandem with those few that have been found to address the issue in specific.

Before moving forward, it is also first necessary to elaborate what is meant by the term sexual violence. In the context of US legal code, sexual violence is defined as any sexual act caused by “threatening or placing [the] other person in fear” or that includes one party who is either “incapable of appraising the nature of the conduct” or “physically incapable of declining participation in, or communicating willingness to engage in [the sexual act]”26. The definition posited by this review is generally consistent with that which is provided in 108 U.S.C § 224226; however, given this review’s theoretical orientation (i.e., intersectional and diversity-competent), it is at the same time imperative to acknowledge the different ways in which sexual violence is defined and organized cross-culturally. Sexual violence, like other phenomena, is subject to social and cultural discursive processes that in turn shape subjective experience, the perceptions of the wider community, and judicial-legal interpretation27. While the intrinsic relativism of these processes should not be used to discount the significance of sexual violence as a traumatic experience, they are necessary to consider when attending to the needs of sexual violence survivors from diverse cultures.

With the above provisions now established, the question of what particularities are presented in administering treatment to female Arab-Muslim survivors of sexual assault can at last be considered. Like other minority populations, Arab-Muslim women encounter barriers both in access to and quality of psychotherapy and/or related mental health services. Concerning the former category, one of the most common issues that emerges is client-practitioner gender incompatibility. As engaging in non-essential interaction with members of the opposite sex other than those of one’s family and extended family is forbidden in Islam, many Arab-Muslim women tend to prefer and/or require that their treatment be provided by a member of the same sex28. While such a requirement is typically fulfillable when the need for treatment is established on the client’s own terms, it is less so in the case of crisis services, which may in turn deter Arab-Muslim women from pursuing necessary medical attention following a sexual assault experience. Additional barriers to access may result from concerns regarding preserving modesty and observing hijab. Some women may avoid seeking treatment in anticipation that they may encounter discrimination on account of observing hijab28,29. Others still may hold concerns about healthcare settings compromising their ability to properly observe hijab, either by requiring its removal or, in the case of exams, supplementing it with haram garments30.

Barriers are also likely to emerge in the process of providing psychotherapy and/or mental services to female Arab-Muslim survivors of sexual violence. For instance, somatization is common among female Arab-Muslim client populations and may impact the timing and openness of disclosures; headaches, nausea, fatigue, and bodily aches may, as such, be eventually revealed over the course of therapy as physical manifestations of internal/psychic conflicts10. In addition, while feelings of humiliation and shame are frequently expressed by
survivors following experiences with sexual violence, they are especially prevalent among Arab-Muslim women. Due to Islam’s complex relationship with feminine sexuality and honor, Arab-Muslim victims of sexual violence may require substantially longer amounts of time to work through their experiences.31

Intersectionality and Cultural Competence: Directions for the Future

The history of professional psychology and mental health care practice is bound up with the reproduction of social inequity and preservation of the status quo, phenomena of which have both been extensively documented in research literature. For instance, prior research has examined the undercurrent of oppressive ideological constructs both presently and historically at work in the field, notably D.W. Sue’s extensive analysis of racism in psychotherapeutic practice32, Smith33 and Goodman et al.’s34 critique of classist attitudes among mental healthcare practitioners, and Spitalnik35 and Matthews et al.’s36 analyses of hetero-, cis-, and gender essentialism in psychotherapy with LGBTQIA+ clients. Similarly, others, such as Sue37,38, Vera & Speight39, Corneau & Stergiopolous40, and Rosenthal41, have called attention to the field’s habitual failure in both implementing diversity-informed praxis and accommodating the unique needs of non-traditional, marginalized, and at-risk populations, including people of color (PoC), the LGBTQIA+ community, persons of lower socioeconomic status, migrants, and religious minorities.

In another way, it has also been shown that minority populations continue to be underrepresented and underserved in the contexts of mental illness and mental healthcare settings. The United States (US) Surgeon General’s Mental Health: Culture, Race, and Ethnicity42 2001 report—one of the first public acknowledgements of the issue—cited “striking disparities for minorities in mental health services and the underlying knowledge base” and “a great burden [bore by said minorities] from unmet mental health needs”42. Though the report concluded with a call for a “national commitment” to “[reduce] barriers and [promote] equal access to effective mental health services for all persons who need them”42, the disparities, burdens, and barriers it articulated are, as it stands today, still very much in effect. Data gathered from the 2007-2016 editions of the National Healthcare Quality and Disparity Report (NHQDR) reflect a consistent lack of progress in improving standards of access and care for minority health in general, with recent studies43-45 focused on disparities in minority mental health in particular also reporting comparable results.

Following the Surgeon General’s initial report in 2001, US Congress went on to pass the Minority Health and Health Disparities Research and Education Act (Public Law 106-525), an amendment of the Public Health Service Act that established a federal budget and funding for research activities and education pertinent to resolving minority healthcare disparities. In its 2015 Strategic Plan for Research, The National Institute of Mental Health (NIMH), in collaboration with the Minority Health and Mental Health Disparities Program (MHMHD), took a similar approach, identifying minority mental healthcare disparities as a “high-priority” research area and calling for increased scholarly attention to topics such as genomic studies, biological markers and diagnostics, and methods of psychopharmacological intervention. Such measures suggest a concerted effort to close the gap in minority mental health, though there is still much work to be done. Researchers and practitioners must also direct their attention towards improving quality of care through the means of culturally and diversity-competent psychotherapeutic and counseling modalities.
Intersectionality\textsuperscript{46} is an ethical praxis with which clinical psychologists and related mental health professionals can utilize to navigate and inform their work in treating clients who are members of marginalized populations. Intersectionality is a revision of the well-meaning yet misguided second-wave feminist conceptualization of identity politics and is distinguished by its theorization of identity and/or identity categories as multidimensional, interconnected, and contextual rather than singular, mutually exclusive, and static. An intersectional approach put into action is one that recognizes, validates, and affirms the multiple identity categories that a given person may belong to (ex. Black, woman, Muslim, queer, neuro-divergent, etc.). It is also at the same time one that necessitates sensitivity towards and awareness of the way in which these various categories may intersect within a person to form new or exacerbate preexistent vulnerabilities towards systemic, institutional, cultural, and/or social forms of oppression\textsuperscript{46}.

References

15.  Copsey, Nigel, Littler, Mark, Dack, Janet, and Feldman, Matthew. "Anti-Muslim Hate

Biography

Carleigh Ann Mallah currently serves as a Prevention/Outreach Intern with Pittsburgh Action Against Rape (PAAR). She has a dual B.A. in Psychology and English Literature from Point Park University and is set to graduate from Point Park’s Clinical-Community Psychology program in Spring 2018. Her research interests include Cluster B personality disorders in women, psychoanalysis, sexual trauma, and critical theory. She plans to pursue a doctoral degree in Clinical Psychology upon completion of her M.A. this spring.