Theses & Dissertations

Boston University Theses & Dissertations

2019

# Engaging with African American youth following gunshot wound trauma: The Calhoun Cultural Competency Course

https://hdl.handle.net/2144/37005 Boston University

#### **BOSTON UNIVERSITY**

#### SARGENT COLLEGE OF HEALTH AND REHABILITATION SCIENCES

#### **Doctoral Project**

## ENGAGING WITH AFRICAN AMERICAN YOUTH FOLLOWING GUNSHOT WOUND TRAUMA: THE CALHOUN CULTURAL COMPETENCY COURSE

by

#### TAMARA L. CALHOUN

MOT, University of Tennessee Health Science Center, 2012

Submitted in partial fulfillment of the requirements for the degree of Doctor of Occupational Therapy

#### Approved by

Academic Mentor	Liat Gafni-Lachter, OTD, OTR/L Lecturer of Occupational Therapy
Academic Advisor	
	Karen Jacobs, Ed.D., OT, OTR, CPE, FAOTA Clinical Professor of Occupational Therapy

#### **Dedication**

I dedicate this project to my family who has been an immense support throughout this process. My parents, Thomas and Deborah Calhoun, have been present and encouraging in a way that allowed me to see that I am capable of achieving anything that I can dream. My daughter, Kinsley, has been and continues to be my greatest source of inspiration with her patience and understanding while walking this path with me. I am eternally grateful for you all and the host of others who have contributed to my many facets of growth.

I also dedicate this project to the families that have been affected by community violence. I hope that a project such as this will be influential in bringing you all closer to finding a pathway to more effective communication with clinical staff. Strengthening the engagement in the rehabilitation outcomes is crucial to moving forward as productive members of society.

#### Acknowledgements

I am eternally grateful for all of the individuals who have assisted me with this project.

Liat Gafni-Lachter, you have been patient and so kind. We have been on this journey for over 2 years, and it has been quite the ride. The gratitude I have for you, providing guidance and facilitating the growth I have seen in myself, is bigger than any words I could muster to thank you.

Karen Jacobs, you agreed to mentor me and did just that. You turned every small idea I had into a big challenge and stood by me as I rose to the occasion. You instilled a new level of confidence in me that has opened up a world of possibilities—and I plan to go after them. Thank you!

Karen Duddy, you are awesome. During the first year of the program, you helped me believe that I could keep going, and every time I thought I had arrived at a conclusion, you encouraged me to take what I had a step further. I appreciate all of your help.

Wendy Coster, you helped me expand my knowledge and understanding of theory and its application as I advanced through my doctoral project.

Linda Niemeyer, you helped me gain a better understanding of outcomes and how to explore the logic behind each detail.

Nancy Doyle, you allowed me to express my creativity and explore the many potential avenues for my doctoral project design.

Kate Silfen, you have a wealth of knowledge, and your assistance during the

research process has been invaluable.

I have never met such a group of people that has been so welcoming, supportive, and genuine as the faculty and staff I encountered at Boston University.

Elgin Tunstall, my advisor, you helped me realize early in my career that there is so much untapped value in these youth and, although I was a newer practitioner, that I could be an agent of change in the community.

My family, friends, and co-workers, I cannot thank you all enough for providing support and positive affirmations. I appreciate everything you all have done to help me along in this process.

I'm blessed.

### ENGAGING WITH AFRICAN AMERICAN YOUTH FOLLOWING GUNSHOT WOUND TRAUMA:

#### THE CALHOUN CULTURAL COMPETENCY COURSE

#### TAMARA L. CALHOUN

Boston University, Sargent College of Health and Rehabilitation Sciences, 2019

Major Professor: Liat Gafni-Lachter, OTD, OTR/L, Lecturer of Occupational Therapy

Abstract

African American youth comprise one-third of the 17,300 victims annually impacted by gun violence (National Center for Injury Prevention and Control, CDC, 2016). Injuries they sustain lead to extensive rehabilitation processes often overshadowed by the youths' perceptions of discrimination and mistrust in medical staff, exacerbated by limitations in patient–provider communication and collaboration (Alston, Gayles, Rucker, &Hobson, 2007; Liebschutz et al., 2010). Healthcare staff often misinterpret youth gunshot survivors' behavior and engagement efforts, labeling them noncompliant and implying they overexaggerate their pain. Overall, research suggests that African American patients do not have positive rehabilitation outcomes comparable to those of White patients (Suarez-Balcazar et al., 2009). Studies identify cultural competence, considered a best practice in healthcare professions, as a mitigating factor in this health disparity. The central aim of this doctoral project is to enhance patient–provider relationships to support optimal rehabilitation processes and outcomes and reduce this disparity.

The Calhoun Cultural Competency Course (4C) was designed to address this

urgent and profound problem according to a sound theoretical foundation and best evidence in cultural competency training. It is an online training on best practices for treating young African American gunshot-wound survivors. Course content and instruction methods were developed based on in-depth review of theories and evidence-based literature (Liebschutz et al., 2010; Teal, Gill, Green, & Crandall, 2012). Upon course completion, participants master skills necessary to provide care that is culturally sensitive, responsive, and appropriately tailored to these individuals' needs, leading to more successful outcomes and community reintegration.

The 4C program pilot is anticipated within 1 year of content completion. The program's effectiveness in fostering change in participants' cultural competency will be measured using a mixed-methods pre–post program evaluation design. First-year expenses include funding to support personnel during program-module development, create the online platform, and launch and evaluate the course pilot. The course moves forward in Year 3 with modifications and publishing pilot study results. Dissemination efforts will be written, electronic, and person-to-person methods with hopes of inspiring others to instill cultural competence training in their settings. Cultural competency training has potential to mitigate health disparities. The program described in this doctoral project aims to promote engagement of African American youth in rehabilitation following gunshot assault for better health and participation outcomes for them and their caretakers.

#### References

- Alston, R. J., Gayles, T., Rucker, R., & Hobson, M. (2007). The centrality of race in rehabilitation: Views of former clients who are African American. *Journal of Applied Rehabilitation Counseling*, 38, 12–19.
- Liebschutz, J., Schwartz, S., Hoyte, J., Conoscenti, L., Christian Sr., A., Muhammad, L., . . . James, T. (2010). A chasm between injury and care: Experiences of black male victims of violence. *Journal of Trauma*, 69, 1372–1378. doi:10.1097%2FTA.0b013e3181e74fcf
- National Center for Injury Prevention and Control, CDC. (2016). SAS Output. Retrieved from <a href="https://webappa.cdc.gov/cgi-bin/broker.exe">https://webappa.cdc.gov/cgi-bin/broker.exe</a>
- Suarez-Balcazar, Y., Rodawoski, J., Balcazar, F., Taylor-Ritzler, T., Portillo, N., Barwacz, D., & Willis, C. (2009). Perceived levels of cultural competence among occupational therapists.
  American Journal of Occupational Therapy, 63, 498–505. doi:10.5014/ajot.63.4.498
- Teal, C. R., Gill, A., Green, A., & Crandall, S. (2012). Helping medical learners recognise and manage unconscious bias toward certain patient groups. *Medical Education*, 46, 80–88. doi:10.1111/j.1365-2923.2011.04101.x

#### Preface

"I was standing outside with my family. It was a pretty day, so we decided to grill out. We were standing around, and this car came around the corner, pulled up, and just started shooting. I got hit because I jumped in front of a bullet trying to knock one of the kids out of the way. Next thing I know, everything got quiet, but at the same time was so loud. I remember bright lights, loud screams, and lots of strangers in my face, asking questions that I don't think I ever even answered. Everything was moving so fast. In my mind, all I could think was 'what just happened to me,' and after that, I don't remember anything."

This is a narrative, that as a clinician, is becoming far too familiar. Gun violence results in physical trauma, including brain injuries, spinal cord injuries, and damage to vital organs (Manley et al., 2017). Patients in acute care hospitals undergo a series of procedures and assessments and meet with various members of the clinical team prior to being medically stable or clearly understanding their conditions. They are brought into the hospital and rushed into an examination room with bright lights; their clothes are cut off and medical professionals look over every inch of their bodies. Hospital staff ask them questions, place various intravenous lines, take x-rays, and rush these patients to emergency surgeries and other procedures, essentially stripping these individuals of all control.

While adjusting to the fast pace of the acute care setting, these patients may also be coping with delirium, anxiety, or post-traumatic stress disorder (PTSD), which hinder their participation in the rehabilitation process. Rehabilitation following gun violence is a

long and complex process for patients, their families, and the clinicians involved in their care. It can be further complicated when there are cultural differences and communication gaps between patients and the care team. There is a story behind each bullet that impacts these youths, each with the potential to alter life as they knew it. As healthcare professionals, we have a responsibility to take a stance—to ensure these young people and their caretakers are equipped to return to the community with the best possible outlook on moving forward with a fulfilling, quality of life.

#### **Table of Contents**

Abstract	vii
List of Tables	xiii
List of Figures	xiv
List of Abbreviations	XV
Chapter 1 Introduction	1
Chapter 2 Project Theoretical and Evidence Base	7
Chapter 3 Description of the Proposed Program	33
Chapter 4 Evaluation Plan	44
Chapter 5 Funding Plan	52
Chapter 6 Dissemination Plan	58
Chapter 7 Conclusion.	65
Appendix A: Evidence to Support the Proposed Explanatory Model	69
Appendix B: Evaluative Summary of Effective Solutions	73
Appendix C: Logic Model	81
Appendix D: Sample Lesson Plan	82
Appendix D: Executive Summary	86
Fact Sheet	93
References	95
Curriculum Vitae	104

#### **List of Tables**

Table 3-1. 4C Learning Modules, Objectives, Activities, and Theoretical Basis	38
Table 5-1. Year 1 Expense Budget.	54
Table 5-2. Grant Funding.	55
Table 5-3. Year 3 Expense Budget.	56
Table 6-1. Dissemination to Target Audiences	60
Table 6-2. Dissemination Costs: Primary Audience.	62
Table 6-3. Dissemination Costs: Secondary Audience.	63

#### **List of Figures**

Figure 2-1. Proposed explanatory model.	7
Figure 4-1. Program logic model.	45
Figure 4-2. Program evaluation procedure design	46

#### **List of Abbreviations**

4C		
AOTA		
CCATHCultural Competency Assessment Tool of Hospital		
GSWgunshot wound		
IAPCC-RInventory for Assessing the Process of Cultural Competence among		
Healthcare Professionals-Revised		
IAT Implicit Association Test		
NIH		
PAPMPrecaution Adoption Process Model		
PCCProcess of Cultural Competence in the Delivery of Healthcare Services		
PTSDpost-traumatic stress disorder		
SCI spinal cord injury		
SWOTstrengths, weaknesses, opportunities, threats		
TBItraumatic brain injury		

#### **Chapter 1 Introduction**

#### Scope and importance of the problem

Youth violence is the second-leading cause of death among all youth aged 10 to 24 years, with 82% of these deaths being firearm related (Cahill, 2016, p. 1). Youth and young adults under the age of 24 comprise 38% of fatal and nonfatal injuries in the United States (Giffords Law Center to Prevent Gun Violence, 2016). Research also shows that exposure to firearm violence doubles the probability that a youth will commit violence within 2 years, and that retaliatory-injury risk among violent youth victims is 88 times higher than among those who were never exposed to violence (Cunningham et al., 2009, p. 491).

Individuals injured by gun violence face a long, painful, and costly rehabilitation process. "Gunshot wound (GSW) injuries are the most expensive to treat; the cost of acute care treatment for gun violence injuries conservatively ranges from \$15,000 to \$32,000 per victim (Cunningham et al., 2009, p. 491)." Beyond dealing with the financial burden of medical bills and lost income, many of these patients are unable to deal with the idea of returning to a fulfilling life after rehabilitation. They often withdraw and refuse therapy and other efforts of mobility. Such emotional withdrawal puts patients at risk of exacerbating medical, physical, and psychosocial complications such as suicidal ideations, and for secondary health conditions such as hospital-acquired pneumonia and decubitus ulcers, typically increasing the individual's length of stay.

The patient's cultural and developmental components and the rehabilitation setting's contextual component play a vital role in the rehabilitation process. Problems

arise when these factors, coupled with the complex physical and mental state resulting from GSW, restrict the person's engagement in the rehabilitation process.

The role of healthcare professionals is to guide the patient through a personalized rehabilitation while establishing a trusting, therapeutic rapport that motivates and encourages the patient to persist in such a challenging process. When healthcare professionals do not understand the full picture, they misinterpret the situation and are ineffective in engaging the patient in the rehabilitation process. Although they desire to deliver best practices, they report abundant challenges to communicating and facilitating the recovery process. They often report that African American youth post-GSW are unengaged and that the rehabilitation process and outcomes are suboptimal.

#### Role of Occupational Therapy in Treatment of People With GSW:

The official statement of the American Occupational Therapy Association (AOTA) outlines the essential role of occupational therapy practitioners in their work with individuals and communities to prevent and respond to youth violence (Cahill, 2016, p. 1). As occupational therapists, we have a unique opportunity to use various approaches to facilitate patients' return to independent, meaningful lives. With a history rooted in mental health, we, as therapists, have the ability to develop and aid application of life skills, educate individuals and caretakers, address concerns about changes in physical ability, modify the home environment, and recommend necessary equipment. Beyond the home environment, occupational therapists can assist with functional deficits that may prohibit an individual from participating in higher education, further career efforts, or recreational activities—activities that would encourage a sense of normalcy after a

traumatic event.

In search of effective remediations, cultural competency has emerged as a means to mitigate some challenges in communicating and engaging these young patients.

According to the AOTA (2019), "Cultural competency education is expected to improve health outcomes by enhancing the provider's knowledge, skills, and attitudes toward diverse clients and enhancing the ability to provide culturally responsive and effective services."

#### **Approaches to Address the Problem**

The aim of this doctoral project is to enhance the health outcomes of African American youths post GSW. The four evidence-based approaches to address the problem used in this project are cultural competency training for clinicians, peer mentoring, empowering patients to become care partners, and enhancing contexts.

#### **Cultural Competency Training for Clinicians**

Cultural competency is an aspect of professional development that is suggested as an essential element of learning at the foundation of professionalism (Suarez-Balcazar et al., 2009). Occupational therapists who provide treatment to young African American survivors of gunshot assault would benefit from such training. With better understanding of the circumstances from which these youths entered into the hospital and to which they are expected to return to upon discharge, the occupational therapists could provide care that is consistent with these youths' needs prior to community reintegration (Alston, Gayles, Rucker, & Hobson, 2007). Participating in cultural competence training will provide clinicians an opportunity to learn how to effectively integrate culture into

evaluation and treatment approaches (Perry, Woodland, & Brunero, 2015).

#### **Peer Mentoring**

According to Balcazar. Kelly, Keys, and Balfanz-Vertiz (2011), individuals with experiences similar to the target-age group's and who have previously been successfully mentored can also serve as a vital resource to these youths. An available peer mentor who has completed the rehabilitation process would provide a unique perspective throughout the hospital stay and assist with reintroducing the patient into the community after rehabilitation. Peer mentors provide encouragement and opportunity to engage with a relatable individual and answer general questions under the supervision of clinical staff. With a more realistic perspective of their possibilities, patients would ideally be more motivated to participate in their care and rehabilitation to either achieve or surpass expectations.

#### **Empowering Patients as Care Partners**

Additional motivation to participate in the rehabilitation process is expected from empowering patients and caretakers to become partners in care. Such partnership may include, for example, health literacy education using handouts or a type of media available to patients and families, explaining the various roles of the treatment team, and answering frequently asked questions upon admission.

#### **Enhancing Contexts**

Enhancing contexts extends the realm of care, such as identifying funding sources for a sustainable program that supports patients and clinicians in collaborative culturally competent care.

#### **Project Overview**

The main approach to remediate the problem of restricted engagement in care is to train occupational therapists to apply principles of cultural competency in their daily practice with these patients. The output of this doctoral project is the Calhoun Cultural Competency Course (4C), which was developed to enhance occupational therapists' ability to promote health and participation outcomes by embracing a holistic view of the person, environment, and occupation factors. The primary desired outcome is that a better understanding of values, beliefs, and barriers to performance will lead to culturally relevant treatment planning that engages the patient in meaningful goals and processes. The 4C program is theory and evidence based, with a focus on the importance of attaining awareness, knowledge, and skills in cultural competency. It provides clinicians with education and opportunities to examine how their cultural and developmental backgrounds influence their professional development and ability to provide culturally sensitive care to an at-risk, underserved population. The 4C educational program will be delivered through evidence-based, interactive lectures, eSimulations, a cultural immersion experience, reflective journaling, and facilitated debriefing using a flipped classroom model. Upon completion of this course, clinicians will be equipped with skills for effective communication, assessment, treatment, and collaboration with African American youth survivors, influencing these individuals' level of health literacy and ability to adhere to their plan of care.

I hope to do so in the 4C course by facilitating clinicians' ability to\_1) identify how cultural competency affects rehabilitation outcomes of African American youth

GSW survivors, 2) provide supportive resources that empower the clinicians to identify and apply culturally competent practices during interactions with these youths, 3) formulate goals for ongoing learning, and 4) increase knowledge and skills to create and impact organizational policies. The positive outcomes of these interventions will be demonstrated in reports of increased patient satisfaction and a demonstrated increase in cultural competence by clinicians.

#### Summary

This doctoral project was developed to remediate gaps in the rehabilitation of African American youth following gunshot assault and thus reduce health disparities in this population. The next chapters present the theoretical bases, evidence, rational, and implementation plan of the 4C program. An explanatory model based on extensive evidence in the literature about the distinct needs of African American youth post-GSW is presented in Chapter 2 and provides the foundation for the course content. A detailed description of the course objectives, means to achieve them, and sample lesson plans are provided in Chapter 3. Chapter 4 contains the course evaluation plan, including an overall program evaluation to establish change in cultural competency practice. Funding and dissemination plans are described in Chapters 5 and 6, and conclusions presented in Chapter 7.

#### **Chapter 2 Project Theoretical and Evidence Base**

Figure 2-1 presents a proposed explanatory model of factors involved in the rehabilitation of minority youth aged 15 to 24 years who are hospitalized due to gun violence injuries. The figure uses a Venn diagram representing three main systems: the person, clinician and hospital rehabilitation contexts, and relationships among them, which are all affected by culture. The model is based on a systems perspective in which more effective interactions between systems yield better outcomes.

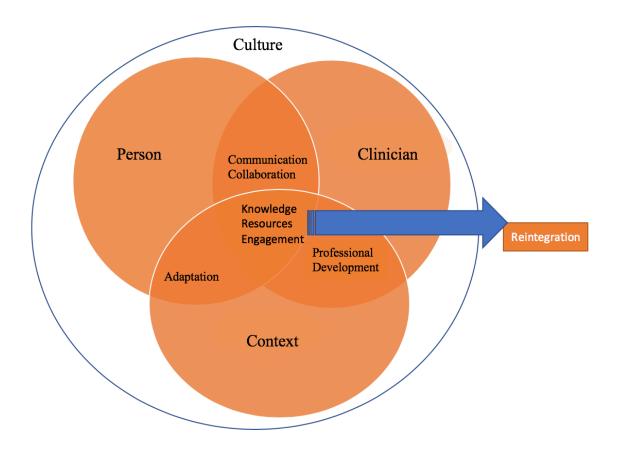


Figure 2-1. Proposed explanatory model.

When a person enters the rehabilitation context due to a life-threatening injury, the context is unfamiliar and undesired, and requires adaption to new circumstances, demands, and roles. In this context, that person also interacts with clinicians. These interactions and encounters require effective communication skills and collaboration. The clinician operates within the context; if the context is supportive, the clinician will develop professionally within and enhance mastery of clinical skills. Thus, optimal interactions among all systems result in knowledge, effective use of resources, and engagement in the rehabilitation process. However, difficulties in the interactions among these factors hinder engagement and the rehabilitation process outcomes. The next sections present the theory and evidence on the causal factors.

#### **Theoretical Lens**

As a person-centered profession, occupational therapists strive to understand the importance and meaning their clients attribute to the challenges they face. Two relevant theories were chosen to enhance understanding of the people and environments included in the explanatory model (Figure 2-1). First, the cognitive adaptation theory (Taylor, 1983) is used to explain reactions to the traumatic event that the person experienced. Second, Bronfenbrenner's (1977) ecological systems theory is used to explain the influence of contexts and environments of development on the patient and clinician.

Taylor's (1983) theory of cognitive adaptation exemplifies an individual's ability to adjust to a threatening event—in this case, an injury inflicted by gun violence. The adjustment process consists of three themes the individual experiences—meaning, mastery, and self-enhancement. To achieve the adjustment, the individual establishes and

maintains illusions, which are fabricated ideas that aid in understanding the crisis and its impact, provide a sense of control over the crisis and outcomes, and encourage the rebuilding of self-esteem. Taylor's theory offers a helpful perspective to understand youth who experienced an act of gun violence and face a major adjustment process. After hospital admission, they and their caretakers initially spend time attempting to figure out what happened and why the act of violence occurred. As they journey through the adjustment process, they are presented with various diagnoses and realizations of a change in functional ability. With the onset of these changes comes an uncertainty of the impact on their personal, family, and societal roles. In response, these individuals attempt to exercise control based on illusions they developed, such as overconfidence exhibited in their ability to successfully recover through their own methods despite the plan of care in place (Kroll, 2008; Liebschutz et al., 2010). They then express these illusions by making uninformed decisions, refusing services, and decreasing therapy participation. The combination of these elements in turn leads to their decreased participation in the rehabilitation process and reduced physical outcomes, as well as changes in mental and emotional health.

Bronfenbrenner's (1977) ecological systems theory explains the effect of an individuals' environments on their growth and development. This theory is helpful for examining factors that influence development of both the person and the clinicians interacting with the patient (Jones, 2007; King, 2009; Manganello & Sojka, 2016; Mikhail & Nemeth, 2016). Bronfenbrenner described four interacting systems that compose the ecological systems theory—the microsystem, mesosystem, exosystem, and

macrosystem.

For youth in a rehabilitation context, the *microsystem* consists of immediate family and caregivers, who serve as the immediate support system (Jones, 2007). Families and caregivers may provide encouragement throughout the rehabilitation process and influence the individual's mood, cooperation, and decision making. Potential risk factors are the lack of involvement from a parent or caregiver, being of a low socioeconomic status, or other family dynamics (Butcher, Galanek, Kretschmar, & Flannery, 2015; Cunningham et al., 2009). The mesosystem represents interactions between the microsystem and exosystem. These interactions may take place across multiple settings and with varied groups, such as within the home or school or among peer groups (Jones, 2007). The exosystem contains indirect elements and interactions that affect the individual, such as the individual and caretaker's access to available financial and material resources based on employment or networking. These elements also may be affected by limited opportunities, crime rates, and participation in government programs (Cunningham et al., 2009; Jones, 2007). The macrosystem also includes "the relative freedoms permitted by the national government, cultural values, the economy, etc." (Oswalt, 2008, para. 5).

Bronfenbrenner's (1977) ecological systems model can also be used to explain the clinicians' personal and professional development (King, 2009). The microsystem level includes lessons learned through life experiences, beliefs, and values learned from family and during graduate education. The mesosystem level consists of how professional training integrates with previously established personal values and beliefs, whereas the

exosystem consists of colleagues and professional resources or organizations. The macrosystem consists of the culture of the work environment, societal events, the parameter of the professional license, laws, policies, and procedures. Thus, the ecological systems model provides a perspective of the interactions that shape both the patient and clinician, as well as how these individuals' similarities and differences influence their relationship and interactions in the rehabilitation context.

Collectively, these two theories provide a view of the sources that challenge the interactions between the person, clinician, and contexts. A myriad of factors, including those related to the systems that influenced the person's development and mechanisms that influence the way he or she understands and deals with the trauma and rehabilitation, shape the person's interactions and perceptions. When these perceptions limit trust and interaction with the clinicians and rehabilitation context, they diminish opportunities to engage in the rehabilitation process, gain knowledge, and use resources, and eventually influence the success of the reintegration process.

#### **Evidence to Support the Explanatory Model**

The following sections present evidence to support the explanatory model components and the interactions among them (summarized at Appendix A).

#### **Evidence of the problem**

According to the Centers for Disease Control and Prevention, youth between the ages of 15 and 24 years in the United States are victims of gunshot assault at an alarming rate—of approximately 17,300 GSW annually, over one-third of those injured are young African Americans (National Center for Injury Prevention and Control, CDC, 2016).

Within the African American communities at risk for gun violence, poverty, diminishing resources, substance abuse, weapons, and the stigma of violence created by subjective media coverage are just a few factors influencing the risk level for these youth (Cohen, Davis, & Realini, 2016).

Previous research has suggested that African-American patients do not have positive outcomes in rehabilitation comparable to those of White patients (Suarez-Balcazar et al., 2009). According to rehabilitation staff, some African American gunshot assault survivors delay rehabilitation participation by attempting to control the process without sufficient knowledge of their injury, leading to anxiety, frustration, and the exacerbation of PTSD symptoms (Kroll, 2008). Even African Americans who participated in rehabilitation reported feeling they did not receive optimal outcomes because the staff was not knowledgeable about or comfortable with the culture of African Americans, did not acknowledge the clients' appropriate skill level during community reentry efforts, and did not act in their best interests during the rehabilitation process (Alston et al., 2007).

#### The Person

Understanding the person is key to understanding the problem. In this project, I focus on the population of young African American male GSW survivors in the acute stages. Data released by two Level I trauma centers (one in Memphis and one in Nashville, Tennessee)—one in which I work—are in consensus that individuals hospitalized for gun violence were predominantly young African American males between 18 and 25 years of age, with some as young as 14 years old (Manley et al., 2017;

Moore et al., 2013). Of the GSW population in Memphis, 80% are victims of assault; the remaining injuries result from accidental shootings, legal interventions, and other unspecified sources (Manley et al., 2017). Living in situations where such violence is a part of everyday reality elicits fear in this population, influencing the way they live, work, and engage within the community (Cohen, Davis, & Realini, 2016).

These youth's cultural background is often composed of close-knit African American families with a strong reliance on religion. Reliance on religion influences their medical decision making, compliance, and overall health literacy (Eiser & Ellis, 2007; Jones, 2007). Strong religious beliefs in the African American culture have correlations to noncompliance with medical advice and self-management of care due to the expectation of divine intervention and use of home remedies (Eiser & Ellis, 2007). Coming from backgrounds where the probability of success is based on their ability to thrive in spite of historical inequities in important areas such as healthcare, education, criminal justice, and community development, gunshot assault becomes an additional traumatizing factor (Cohen et al., 2016). African American youth also face social biases that associate them with crime, drug use, delinquency, and teenage parenthood (Cunningham et al., 2009). They grow up with mistrust that is historically rooted in discrimination and lack of access to medical care, which continues to prompt patients to have issues with adaptation and prohibits their full participation in their plan of care (Eiser & Ellis, 2007). After suffering from gun violence, the presence of and interrogation by police, while receiving medical attention at a facility that should be concerned with providing medical care at the time of injury, magnifies the victim's

mistrust of healthcare facilities (Liebschutz et al., 2010). This perception of discrimination from and medical mistrust in healthcare institutions and professionals prevents African Americans from obtaining the necessary health screenings and treatment or adhering to the treatment (Cuevas, O'Brien, & Saha, 2016; Liebschutz et al., 2010).

African American youth cope with this complex reality in different ways. Voison, Bird, Hardestry, and Shiu (2011) described four coping themes these youths utilize in response to community violence experiences. The first coping strategy is accepting the conditions within the community and finding positive outlets to create opportunities to leave the area. The youth often accepted that—due to the circumstances of their environment—death as a result of violence is possible at any moment (Liebschutz et al., 2010). The second strategy, self-defense, includes being observant of the surroundings and any words or actions that may trigger a misunderstanding. A third strategy is avoiding specifically identified trouble areas. Finally, the fourth strategy is confronting the problem by learning how to fight or carrying a weapon. Voison et al.'s (2011) data revealed a higher rate of confrontation with African American males involved with gun violence and murders, indicating that they felt the need to carry weapons or learn to fight.

It has been my experience that these coping mechanisms can transfer into the rehabilitation setting, and some may be counterproductive while the patient grieves their changes in functional abilities. Response to injuries amongst this population tends to vary. Some individuals accept their injury and focus on quickly discharging to the home environment. Anger overtakes others. They resist the plan of care and treatment approaches. As rehabilitation professionals, if we do not acknowledge the psychosocial

elements of the rehabilitation process, it is difficult to make progress with the patient. These individuals have found themselves in a situation where their attempts to cope or defend themselves from community violence were ineffective and led to injury. Now—as a patient—to defend themselves from the uncertainty of treatment approaches, they avoid tasks that trigger fear or anxiety, such as an individual with a spinal cord injury (SCI) sitting at edge of bed or someone who lost a limb standing for the first time. However, when a trusting relationship is established between the person and the clinician, the patient is more likely to push through the task and progress towards the desired outcome.

#### **Interactions Between Person and Context**

Gunshot wound survivors face an extensive rehabilitation period. Although they are often able to reach functional goals during hospitalization, underlying challenges often present a prominent barrier during rehabilitation and upon reintegrating into the community (Kroll, 2008). These challenges include the new demands of rehabilitation with unfamiliar clinicians in a new environment and reaching goals within the allotted length of stay, as well as a lack of referrals for continued education or vocational training (Kroll, 2008; Liebschutz et al., 2010). These factors present barriers to successful rehabilitation outcomes.

For young GSW survivors who experience traumatic brain injury (TBI) or SCI, the recovery process is further complicated by physical and neurological deficits (Schopp, Shigaki, Bounds, Stucky, and Conway, 2006). These individuals also have the potential to suffer financial and social devastation due to dependence on Social Security income and public programs, as well as poor reintegration into family or social roles and

leisure activities due to unemployment or behavioral changes (Kim, Colantonio, Dawson, & Bayley, 2013; Schopp et al., 2006). These complications add a layer of complexity for a person existing in the context of disparities and inequities in the African American community and now dependent on a system of professionals in whom they lack trust to restore quality of life (Cohen et al., 2016). Further, challenges presented in rehabilitation due to PTSD, low income levels, lack of support system, and lack of identified resources are all sources of distraction that hinder the patient's full engagement (Kroll, 2008).

According to Kroll's (2008) qualitative study, individuals are sometimes limited during the rehabilitation process because they feel they can achieve better results at home, surrounded by family and friends. Unfortunately, upon discharge, they discover that support system is not as adequate as they believed—a discovery that has the potential to decrease the individual's confidence in themselves and the recovery process. This is compounded when individuals with complicated injuries (e.g., SCI) return home without the appropriate housing, equipment, or transportation and leads to social isolation.

Shorter stays in inpatient rehabilitation have also decreased opportunities to simulate the individual's independent living skills by having them live and operate in their home environment and to adequately train caregivers. Barriers such as these identify a need for more effective discharge planning, identification, and use of community resources and supports and peer-to-peer mentoring to optimize outcomes.

#### **Interaction Between Person and Clinician**

Major differences exist between the GSW patients and their practitioners.

Demographic information on African American families in 2015 indicated that 84.8% of

African Americans earned a high school diploma and 20.2% a Bachelor's degree; the average median income was \$36,515, with 25.4% of African Americans at poverty level; and 54.4% had private insurance, 43.6% had Medicaid, and 11% were uninsured (U.S. Department of Health and Human Services Office of Minority Health, 2017).

On the other hand, occupational therapists can hold a Bachelor's, Master's, or doctoral degree in occupational therapy and a number of specialty certifications. In Memphis, Tennessee, occupational therapists' median salary is \$79,286 and, in Nashville, Tennessee—where data from the previously mentioned trauma centers was collected—it is \$77,776 (Salary.com, 2018). In a survey conducted by Suarez-Balcazar et al. (2009) among AOTA members, 91% of respondents were White women between the ages of 23 and 69 years, with 47% having a Master's degree or higher. These results indicate that the clinicians who provide care for young African American GSW victims likely have vastly different educational, financial, and cultural backgrounds than those they treat.

These demographics, socioeconomical, cultural, and developmental backgrounds, along with the historical experiences of the population of young African Americans, contribute to this population's decreased health literacy, lack of resources, and mistrust of healthcare professionals and facilities (Alston et al., 2007; Voison, Bird, Hardestry, & Shiu, 2011). As a result, it is not uncommon for them to have communication challenges with healthcare professionals and engagement in the rehabilitation context (Alston et al., 2007).

Practitioners engaging with African American clients have various levels of

cultural competency skills based on their individual life experiences, educational backgrounds, and client interaction histories (Suarez-Balcazar et al., 2009). Prior research demonstrated that undergraduate educational background prior to entering graduate school, as well as components of the graduate education, can affect a clinician's ability to be open to the perspectives of other cultures. For example, a study that used the Racial Argument Scale to examine attitudes of White students in the field of allied health towards African Americans discovered a negative attitude that seemed to lessen as the students progressed in their education (Steed, 2014). Using the Cultural Competence Assessment Instrument, Suarez-Balcazar et al.'s (2009) study had similar findings, showing a correlation between clinicians' levels of cultural competency and years of experience. These studies suggested a need to incorporate multicultural skills into the educational foundation that enable practitioners to adjust their participation and communication strategies when addressing African American clients in practice (Steed, 2014; Suarez-Balcazar et al., 2009).

#### **Interaction Between Clinician and Context**

According to Durocher, Gibson, and Rappolt (2017), occupational therapists rush to prepare clients for the safest possible discharge to their desired location in the short time allotted by policy and funding—often starting discharge planning at the time of admission. In addition to psychological barriers, clinicians find themselves setting and working towards goals with insufficient knowledge of the patient's culture, discharge environment, or available community resources. Length-of-stay challenges and limited knowledge of the person's cultural background or how to locate appropriate resources

lead to a disconnect between the rehabilitation outcomes within the controlled environment of the hospital and their translation into the discharge environment.

In the fast-paced hospital environment, therapists focus on the care elements related to functional progression, leaving psychosocial and cultural aspects of care underdeveloped (King, 2009; Kroll, 2008). To ensure clients receive the best care, and to take all of these elements into consideration, professional organizations such as AOTA recommend continued professional development of skills and promotion of evidence-based practice (Anonymous, 2017). Although clinicians initiate professional development during graduate education, they are also responsible to seek out opportunities for growth and reflection on how their personal and professional experiences influence their ability to provide the optimal level of care (King, 2009).

According to King (2009), professional development occurs through experience, instruction, and observation in the personal and work environments, as well as through the supports and resources put in place to influence growth. Learning experience can take place through multiple facets, such as interaction with clients of diverse cultures and types of injuries, frequent performance evaluations and opportunities to seek feedback, and self-assessment tools. Healthcare organizations can support clinicians' development by fostering an environment that encourages open communication, mentorship, and variation in caseload.

#### **Constructs of Cultural Competency**

Multiple factors within the person, therapist, and environment influence a person's engagement in the rehabilitation process and subsequent reintegration. Cultural

competency has emerged as a capacity that can moderate many challenges in the persontherapist-context interactions. Central problem elements within these relationships include lack of awareness, knowledge, and professional development of cultural competency skills. Therefore, the focus of this literature search was on possible solutions to enhance cultural competence and thus achieve effective outcomes. (Also see evaluative summary at Appendix B.) The review examined previous attempts to address cultural competency among clinical staff, particularly to enhance interactions with African American youth and their caretakers. The search was conducted using the Cumulative Index of Nursing and Allied Health Literature, PsycInfo, and ERIC databases. A Google search was also conducted using key terms related to cultural competency with African American or minority clients. The evidence exhibited that cultural competency has been examined in healthcare fields such as nursing, medicine, allied health, and psychology.

#### **Main Constructs**

The main constructs of cultural competency described in the literature included cultural awareness, knowledge, and skill (Campinha-Bacote, 2002; Delgado et al., 2013; Iverson & Seher, 2017; Palombaro, Dole, & Black, 2015). Cultural awareness allows individuals to reflect on their beliefs, biases, and values, which they might impose on clients of a different culture. Cultural knowledge develops from opportunities to study issues, such as health beliefs and values, incidence and prevalence of diseases, and efficacy of treatment, that a client of a different culture may face. Knowledge of these issues allows better understanding of the client. Cultural skill speaks to the ability to perform a culturally appropriate assessment based on knowledge of the client's culture, to

encounters are described as means to gain knowledge, awareness, and skill. An encounter allows a clinician direct engagement with the client within the context of the client's environment or beyond the structured environment of a medical facility. The authenticity of this interaction can be used as a tool to modify the provider's perspective (Palombaro et al., 2015). Campinha-Bacote (2002) presented an additional construct, *cultural desire*, which is unique to her model for cultural competency, The Process of Cultural Competence in the Delivery of Healthcare Services (PCC). Cultural desire is making the choice to participate in the encounter based on one's own desire to engage in the change process.

## **Cultural Competency in an Organization**

Weech-Maldonado, Elliot et al. (2012) conducted a retrospective study to examine organizational and market factors that influence a hospital's level of cultural competency. They retrospectively gathered data from multiple datasets, including California inpatient hospital discharges, annual financials, and use of the Cultural Competency Assessment Tool for Hospitals (CCATH) survey. Their regression analysis demonstrated that factors that predict the cultural competency level within the hospital setting are competitive markets, the facility's increased financial performance, average per-person income in the area of the facility, and increased service of minority patients. Surprisingly, they did not identify the number of Medicaid patients or recognition as a teaching facility as significantly affecting the facility's cultural competency level. However, they mentioned Medicaid in the problem explanation because the insurance

provides for a large portion of disabled GSW survivors with low incomes. These survivors are typically treated at large trauma centers, which are often teaching hospitals. Data on the gun violence incidences mentioned were obtained from two Tennessee trauma centers, which are also teaching facilities. Based on these findings, Weech-Maldonado, Elliot et al.'s recommendations included diversity among employees, staff education, interpreter and language services, and convenient services to the community being served to encourage cultural competency in the workforce.

### **Meeting Specific Needs**

Identifying the presence of bias. Several published educational programs attempted to enhance cultural competency by reducing unconscious bias (Teal, Gill, Green, & Crandall, 2012) and enhancing knowledge on topics such as privilege (Iverson & Seher, 2017; Pitner, Priester, Lackey, & Duvall, 2018; Torrino, 2015), oppression and social justice (Iverson & Seher, 2017; Pitner et al., 2018). Two research studies demonstrated better effectiveness in a semester-long course than an infusion or hybrid model (Pitner et al., 2018; Teal et al., 2012).

Teal, Gill, Green, and Crandall's (2012) expert opinion indicated that bias in healthcare based on race, social class, gender, sexual preference, and ability to pay contributes to disparities. Such disparities include aggressiveness of care, pain management, wait times, and medical decision making. Teal et al.'s (2010) previous work contributed to a compilation of strategies to identify such unconscious or implicit bias. During that study, the researchers tested a small group-based approach to discussing bias based on group members' completion of the Implicit Association Test (IAT). The

authors suggested performing the self-assessment in private to allow self-discovery of biases and yield more successful intervention. Pre- and post-group testing comparisons indicated that participants reported a change from the use of less-effective strategies to more-effective strategies to increase awareness of bias. Specifically, rather than depending on internal feedback and suppression, individuals seek out others to provide feedback during reflecting, debriefing, and engaging in discussion.

Teal et al.'s (2010, 2012) studies, as well as unpublished information, supported development of the strategies to address the identified bias, including understanding individuals' culture rather than the associated stereotypes, using assessments such as the IAT to assist with identifying unconscious bias, and using activities that prompt reflection. These researchers proposed that to understand or learn about a particular culture, participants need opportunities for positive cultural encounters or immersion activities. Such opportunities could include service activities, virtual simulations, and professional development for practitioners. They also suggested that during the process of becoming aware of and addressing bias, individuals transition through stages of competency as proposed in Bennett's intercultural competency model (Teal et al., 2012). Bennet's model demonstrates how moving from denial to integration of effective strategies reduces unconscious bias in patient care approaches.

Pitner, Priester, Lackey, and Duvall (2018) conducted a study with a quasiexperimental design among a group of 286 Masters of Social Work students, during which two student cohorts were exposed to either a dedicated course or infusion model for teaching diversity and social justice based on order of enrollment. The first cohort, which started prior to the curriculum change, was exposed to the infusion model. The second cohort, newly enrolled, participated in the dedicated course. An additional comparison group of psychology students were not exposed to either course. The study measured the individual's awareness of bias, the influence of culture on reasoning and approaches, the ability to identify forms and tiers of oppression, and the individual's stage of cultural responsiveness. Both cohorts were part of pre-test measurements; however, the infusion group was not part of post-testing because they had been exposed to the curriculum prior to the study's initiation. Results indicated that a dedicated course was more effective for cultural awareness and responsiveness due to its extended time for structured learning in a safe space.

## Communicating with adolescents and young adults in rehabilitation.

Communicating with adolescents and young adults in rehabilitation requires specific knowledge on their needs and challenges at this stage of life. Manganello (2007) developed a framework that identified individual characteristics and projected influences on health outcomes. During adolescence, clients are becoming more autonomous and experiencing increased development in physical, emotional, social, and cognitive abilities. Researchers agree that this population is heavily influenced by elements of their environment, which is consistent with the ecological systems model (Manganello, 2007; Mikhail & Nemeth, 2016).

Addressing the needs of African American youth is further complicated by health disparities, low socioeconomic status, community environment, and influences, as well as health literacy of the clientele (the youth and their families). Cheng, Emmanuel, Levy,

and Jenkins (2015) identified four methods to address health disparities with this population. The first method is to identify the client's and family's needs through screening that assesses health, socioeconomic status, education level, and environmental risks. To ensure the client receives proper support, the care team should consist of clinical staff representing not only primary, but also any necessary specialty, care providers. The family's needs are as important as the needs of the client and should be addressed to assure the client is in a healthy home environment and the medical decision-making stems from an educated source. Increasing health literacy and acknowledging the client and family unit beliefs allow more effective communication during interactions. Lastly, Cheng et al. suggested clinicians move beyond the parameters of the clinical setting and into the community to meet clients within the context of their community environments.

#### **Distinct Survivor Needs**

Liebschutz and colleagues (2010) conducted a qualitative study to examine factors affecting the ability of African American males who experienced violent assault to effectively engage with clinical staff. They analyzed information from semi structured interviews and identified several barriers. For example, the client's and the clinician's understandings of the sustained injury often differed, limiting the client's participation and eliciting emotions that are difficult to cope with in the hospital environment. In addition to the physical and emotional components of recovery in an unfamiliar environment, impromptu presence of and interactions with law enforcement while the patient is in a vulnerable state enhance the survivor's mistrust of the clinicians and the healthcare system and creates a reluctance to build rapport. When the injury is viewed as

an expected hazard of the lifestyle rather than an abnormal event, the patient relies on the influence of their own methods for self-soothing. Further, the stigma associated with mental health treatment and the lack of available resources to assist with community reintegration or relocation can cause increased stress and duress.

The insight Liebschutz et al. (2010) provided suggests that these barriers must be addressed to increase client engagement and the likelihood of more effective outcomes. Recommendations include instituting policies that increase patient privacy, coordinating interactions with law enforcement during the hospitalization based on the client's preference, identifying supportive community resources to bridge the transition from the hospital to the community, and distinguishing a reliable social network for emotional support. Several researchers also endorsed use of peer mentoring to assist with case management services (Balcazar, Kelly, Keys, & Balfanz-Vertiz, 2011; Devlieger & Balcazar, 2010; Mikhail & Nemeth, 2016).

#### **Cultural Competency Assessment Tool for Hospitals**

Three assessments to assess cultural competency among individuals and organizations consistently emerged from the literature—the CCATH, the IAT, and the Inventory for Assessing the Process of Cultural Competence among Healthcare Professionals-Revised (IAPCC-R).

#### **CCATH**

The CCATH is a survey assessment composed of 12 scales with 28 items that allows organizations to assess their cultural competency in relation to national standards set by the U.S. Department of Health and Human Services Office of Minority Health for

both cultural and linguistic services (Weech-Maldonado, Dreachslin et al., 2012). There are 14 national standards established as culturally and linguistically appropriate services and then categorized as culturally competent care, language access services, or organizational support. Internal consistency reliability of the assessment was .65 or greater, and the reliability of 9 of the 12 scales reached .70 or greater. Based on results of this assessment, nonprofit hospitals surpass for-profit and government hospitals in cultural competency practices on multiple scales.

#### **IAT**

The IAT can be used to assess unconscious bias (Cheng, Emmanuel, Levy, & Jenkins, 2015; Teal et al., 2012). A study conducted by Teal and colleagues (2012) found doctors to have generalized bias towards African Americans. Through computer administration, the IAT allows interactive association of images to words. The test calculates the time an individual takes to associate a picture of an individual of a particular group with a character descriptive word, assuming it takes less time if the individual has already formed an association between that group and the characteristic. This test can be used to not only assess unconscious bias, but also to enlighten individuals on how they perceive people based on race, physical appearance, religious preference, and sexuality.

## IAPCC-R

The IAPCC-R is a survey developed by Campinha-Bacote to measure an individual's level of cultural competence according to constructs of the PCC model (Delgado et al., 2013). There is also a version for students in healthcare, but the revised

version is for healthcare professionals. It contains 25 items measured on a 4-point Likert scale to determine if an individual would be categorized as culturally proficient, competent, aware, or incompetent based on the summary score out of 100 possible points. Multiple healthcare studies have identified this assessment as reliable and valid. The Cronbach's alpha for this assessment range is .75 to .93.

#### **Effective Learning of Cultural Competence**

Addressing cultural competency throughout all teachings, rather than in a specific course, is needed to bring attention to the significance and value of cultural competency as a core practice skill (Palombaro et al., 2015). Effective learning activities include curriculum design, opportunities to apply skills via service learning, reflective learning, and simulations conducted in person or virtually.

## **Learning Curriculum**

One study, noted as the first of its kind, compared the use of a diversity course versus an infusion model. Compared to students in the infusion model, students in the dedicated course had increased positivity about race but no differences related to equality, social justice, or diversity. However, the study was considered lacking in assessment of the vital components of privilege, oppression, and social justice, as suggested in the Council of Social Work Education's Educational Policy and Accreditation Standards (Pitner et al., 2018, citing Osteen et al., 2013). Additional methods of providing opportunities to integrate the practice skill include increasing the diversity among students, immersion into diverse clinical setting, and increasing the involvement of faculty and administrators (Palombaro et al., 2015).

## **Service Learning**

Service, or immersion learning, facilitates encounters in the community between clinicians and other cultural groups (Palombaro et al., 2015; Teal et al., 2012). These encounters can provide an opportunity to interact with individuals who are part of a group against whom the clinician may be biased and—should the encounter be positive—influence future interactions and patient care approaches (Teal et al., 2012). Service learning activities may include community service on scheduled days and holidays or running a pro bono clinic. In Palombaro, Dole, and Black's (2015) study, service activities were completed in communities where population demographics included a majority of African Americans and low socioeconomic status (considered an underserved group with a great number of uninsured individuals). Results indicated that service activities increased cultural competency—even without the presence of diversity in the group, which has been previously identified as a vital influence.

#### **Teaching Methods**

The method or approach used to teach cultural competency can deter the discomfort often experienced when discussing race-related topics (Iverson & Seher, 2017). Healthcare-based studies have explored multiple methods for instruction of cultural competency skills, including reflective learning, classroom and virtual simulations, and service learning or immersion programs (Delgado et al., 2013; Palombaro et al., 2015; Teal et al., 2012; Torrino, 2015; Weech-Maldonado, Dreachslin et al., 2012).

Reflective learning and inquiry are often referred to in the literature as a method to increase awareness among clinicians of any unconscious biases that may be limiting their approach to patient care (Teal et al., 2012). Through self-assessments, discussions, analysis of journals or other types of writing, imagery, and cross-cultural interviews or open discussions, individuals have opportunities to reflect and receive feedback and guided debriefing (Iverson & Seher, 2017; Palombaro et al., 2015; Pitner et al., 2018; Teal et al., 2012).

Simulations and eSimulation scenarios provide opportunities to view situations from various perspectives, including that of the client, to provide and receive feedback on potential unconscious biases (Perry, Woodland, & Brunero, 2015; Teal et al., 2012). Providing cultural competency training through eSimulations has potential as a flexible method to disseminate information to a large number of learners in various locations and with fewer participation requirements. By participating in interactive learning modules, individuals are able to explore and obtain knowledge through realistic scenarios. They also can explore other options to elicit feedback and increase performance while learning how to effectively interact with the patient. Despite its effectiveness, eSimulation does not account for the opportunity to have real-time open dialogue with other professionals in order to be exposed to multiple opinions and expertise levels in patient-care matters (Perry et al., 2015).

### **Summary and Application of Best Practices**

In summary, an abundance of research to enhance cultural competency has been found effective. A unique but effective program curriculum to enhance cultural

competency among healthcare professionals, specifically tailored to working with young African American GSW survivors in a rehabilitation facility, can incorporate the who (learners), what (educational content), and how (application to practice) based on best practices identified in the literature review.

**Learners (the who).** Although Suarez-Balcazar et al. (2009) suggested that any practitioner with less than 10 years of experience is more prone to bias, all healthcare providers, regardless of cultural background or professional experience, could benefit from such a cultural competency program. As such, a program tailored to working with African American youth could be targeted to any provider.

**Educational content (the what)**. Educational content in the tailored program should:

- Be designed according to relevant theoretical models, including the Precaution Adoption Process Model (PAPM; National Cancer Institute, 2018) and the PCC model (Delgado et al., 2013).
- Include specific lessons on identifying unconscious bias, privilege, oppression, and social justice issues that result in the marginalization of African American youth (Iverson & Seher, 2017; Pitner et al., 2018; Teal et al., 2012).
- Promote cultural competency and diversity among clinical staff and within an organization, as well as create open lines of effective communication for increased health literacy among clients and caretakers (Cheng et al., 2015; Weech-Maldonado, Dreachslin et al., 2012).

- Provide guidelines for effective communication with African American GSW youth survivors.
- Incorporate standard cultural competency assessments, namely the CCATH, the IAT, and the IAPCC-R.

**Application to practice (the how).** A course that effectively applies the learning to clinical practice would be:

- Offered as a dedicated course, which has been found more effective than an infused curriculum.
- Flexible for specific learning activities, such as eSimulations, immersion opportunities, service learning, and other methods that incorporate reflective components (Delgado et al., 2013; Palombaro et al., 2015; Teal et al., 2012).
- Practiced by a team with diverse representation and experience and who work with clients of different cultural backgrounds (Weech-Maldonado, Dreachslin et al., 2012).
- Delivered in a safe place and at a set time, with structured learning objectives (Pitner et al., 2018).

## **Chapter 3 Description of the Proposed Program**

The purpose of the 4C program is to address the problem of health disparities in the care of young African American GSW survivors by enhancing the cultural competency of healthcare professionals in the rehabilitation setting. In this course, clinician participants will acquire practical strategies to address the distinctive needs of African American youth who have been impacted by gun violence to promote their active engagement in the rehabilitation setting and better community reintegration.

This educational course was developed according to current evidence on the needs of African American youth, together with evidence on best practices for enhancing healthcare professionals' competency skills. These practices include ways to enhance relationships and communication with the youth. They also enhance self-awareness through reflective inquiry, analyzing how personal values and beliefs, professional training, and life experiences influence the clinicians' practice. Upon course completion, participants will master skills necessary to provide care that is culturally sensitive, responsive, and appropriately tailored to the needs of young African American GSW survivors and lead to more successful outcomes and community reintegration.

## **Guiding Theory and Evidence**

Two central theoretical frameworks inform the course curriculum design. First, the PAPM (National Cancer Institute, 2018) highlights the seven sequential stages a clinician transitions through while increasing cultural competence: 1) being unaware of a lack of cultural competency, 2) being unengaged by a lack of cultural competency, 3) undecided on whether to pursue a change, 4) deciding not to pursue a change in

cultural competency, 5) deciding to make the change in cultural competency,
6) increasing cultural competency, and 7) maintaining the level of cultural competency.

Once individuals become aware of the cultural issue (even if still unengaged in the process), they cannot return to a state of unawareness; however, their responses and applications to the following stages in the model—deciding to act, acting, and maintaining the level of cultural competence—may vary among individuals. The 4C course will present information to foster the advancement along all stages.

The second model is Campinha-Bacote's (2002) PCC model (Delgado et al., 2013). The PCC model identifies the constructs of cultural competency, including cultural awareness, knowledge, desire, skill, and encounter. Thus, the 4C course is designed to provide direct instruction and learning activities to meet each construct. To enhance awareness, participants will engage in reflective inquiries examining their own cultural background and identify how they may reflect elements of their biases and beliefs in their practice. To enhance knowledge, the course curriculum includes lectures on topics on the African American community's historical mistrust of healthcare systems; associated oppression, biases, and privilege; and how clinicians' cultural and developmental backgrounds have potential to affect the care provided. The course also includes practical strategies to enhance culturally competent communication and collaboration, anticipating that cultural desire will grow as knowledge and awareness increase.

By the end of the course, clinicians will have had authentic encounters with the target population—opportunities to place their newly acquired knowledge and skills into

context. They will brief prior and debrief following, to reflect and enhance knowledge, awareness, desire and competence. (See the "Course Content" section for additional information and activities.)

In constructing the program, I thoroughly reviewed previous evidence of effective cultural competency programs. Surprisingly, although there was a documented need for enhancing cultural competency according to research and policy (e.g., the Patient Protection and Affordable Care Act of 2010), there was paucity of evidence on the effectiveness of cultural competency programs for healthcare professionals working with African American patients. Based on the extant evidence, essential elements for successful programs include effective curriculum design (Pitner et al., 2018), opportunities for reflection (Palombaro et al., 2015; Pitner et al., 2018; Teal et al., 2012), immersion into the cultural group (Palombaro et al., 2015), and simulations or eSimulations (Perry et al., 2015; Teal et al., 2012). All of these elements are included in the proposed course.

## **Relevant Policy and Systems**

To maintain professional licensure in the United States, healthcare providers are required to complete varying hours of continuing education. The National Board for Certification in Occupational Therapy (2017) requires therapists to complete 36 hours of continuing education every 3 years, but implementation guidelines vary in each state. For example, occupational therapists in Tennessee are required to complete 24 continuing education hours, of which 12 must relate directly to service provision (AOTA, 2018). The proposed 4C program will comply with these guidelines.

## **Delivery Method**

The cultural competency course will be provided over 12 weeks in an online classroom setting. The course consists of six self-paced modules, each open for completion over a 2-week period with a 90-min live classroom wrap-up. Participants will receive contact-hour credits in accordance with national and state licensure board requirements. The program designer and facilitation team will assist participants in analyzing their own personal beliefs, biases, and misconceptions and adapt to the needs of the individual attendees. Breakout groups, randomly designated based on attendance, will be used for in-class problem-solving activities and interpreting feedback during activities. A large portion of the process will involve getting to know the participants, assessing their goals, and meeting them at their current level of knowledge and awareness. As the program designer, it will be necessary for me to consider the program participants' cultural backgrounds, life experiences, previous training in cultural competency, and openness to change. I will be able to gauge these aspects by the attendees' responses to standardized questionnaires, as well as their participation in group discussions and reflective journaling. This information will allow me and other facilitators to personalize the learning process for each learner.

#### **Course Content**

The course syllabus, summarized in Table 3-1, includes six learning modules. Each module was designed based on the stages of the PAPM and PCC and will be delivered using interactive lectures and learning activities in small groups facilitated by experts. The first half of the course, containing three modules titled *Awareness*,

Knowledge, and Cultural Desire, will be completed using interactive lectures delivered through the online platform, Mentimeter. Participants will then attend a scheduled live session with other course participants for practice activities and debriefing. These modules will introduce the essentials of cultural competency for working with African American youths. In addition to academic content, the course is designed to increase awareness by eliciting self-reflections on participants' application of the content in their work. (See sample lesson plan at Appendix C.)

Module four, *Cultural Skill*, consists of eSimulations, which are clinical simulations conducted electronically via computer and provide participants realistic clinical scenarios. eSimulations have been found effective for developing effective communication skills, clinical assessment skills, and plans of care (Perry et al., 2015). eSimulations include participation in a case scenario, answering questions, and receiving immediate feedback. The use of these simulations is unique in that the program designer can manipulate the characters to create varying patient interaction experiences.

Table 3-1. 4C Learning Modules, Objectives, Activities, and Theoretical Basis

	3-1. 4C Learning Modules, Objectives, Activities, and Theoretical Basis				
Learning	Objective	Activity	Theory Base		
module					
1:	Analyze participant	Course overview	PAPM: Stage 1		
Awareness	cultural,	Identification of course	PCC: Cultural		
	developmental	objectives	awareness		
	background, and	Cultural interviews to			
	impact on practice	identify beliefs and biases			
	approach	that may be reflected in			
2:	Identify evidence-based	practice Lecture on unconscious	PAPM: Stages 1 & 2		
Knowledge	mistrusts, biases,	bias, privilege,	PCC: Cultural		
imowieuge	oppressive elements,	oppression, and social	knowledge		
	and current social	justice	S		
	justice factors of	Analyze examples			
	African American	Movie exercise: "Crash"			
	youth	Reading exercises: Case			
		scenarios			
3:	Identify communication	Debrief Modules 1 & 2	PAPM: Stages 3 & 5		
S: Cultural	differences, effective	"Crack the Code" in	PCC: Cultural desire		
desire	self-coping methods,	communication	1 cc. culturul desire		
	and essential elements	SWOT analysis of			
	of a peer mentoring	introducing a peer			
	program	mentoring program			
	T1 ('C 1 )	Open discussion	DADM C		
4: Cultural	Identify best practices	eSimulations Receive immediate	PAPM: Stage 6 PCC: Cultural skill		
Cultural skill	for assessments, plan of care, discharge	feedback on practice	PCC: Cultural Skill		
SKIII	plans, and skills	eSimulations			
	F,				
5:	Engage in exchange of	Summarize cultural	PAPM: Stage 6		
Cultural	ideas for increased	immersion experiences	PCC: Cultural		
encounter	reintegration outcomes		encounter		
6:	Formulate personal	Debrief	PAPM: Stage 7		
Continuing	goals and identify how	Incorporate learning			
the journey	to create and influence				
	organizational policies				

By module five, *Cultural Encounter*, course participants will be armed with increased awareness, knowledge, and skills. In this module, participants will step out of the classroom to partake in a cultural encounter designed to provide an authentic environment for clinicians to interact with African American youth and caretakers. The goal is that with an increased knowledge base, clinicians will be able to view these families from an educated, empathetic, and less-biased perspective. The task in the encounters will be to get to the heart of the family's concerns about their family member returning to the community. In module six, *Continuing the Journey*, participants return to the virtual classroom to analyze current policies in their workplaces and devise ways to enhance cultural appropriateness and competency of their organizations, as well as continue to develop personal skills.

#### **Role of Personnel**

**Program designer**. The program designer will serve in a key role throughout the presentation of each module, with responsibility to carry out the tasks of providing the course overview, leading evidence-based lectures, and guiding debriefing at the course midpoint and end.

Course facilitators. The facilitation team will consist of a multidisciplinary team of trained healthcare professionals (a social worker, case manager, and former hospital violence prevention liaison) who volunteer their time to assist with the course. They will provide insight on questions related to the training and assist with debriefing during activities and discussions. These facilitators will partake in designing the course content and are available for guest lectures as appropriate throughout the course.

## **Intended Recipients**

This course is designed for practicing clinical staff, including occupational therapists, physical therapists, speech and language pathologists, nurses, physicians, social workers, and case managers, in all levels of experience across the rehabilitation care continuum. The course material is directed towards practitioners who are working with African American youth after gunshot assault. Settings could include pediatric or adult rehabilitation units and outpatient centers within the community. Administrators working in those settings, as well as hospital administrators, also will be invited to participate in the course. Their attendance may support and encourage course participants and exemplify their respective facilities' commitment to increasing cultural competency.

## **Recipient Identification and Recruitment**

Several forms of recruitment will be used. First, the program designer will present the program at professional and community events, such as conferences with the AOTA and the National Network of Hospital Based Violence Intervention Programs, to network with other professionals working in rehabilitation or interested in addressing this health disparity. Second, the program designer will provide trauma centers servicing African American youth with GSW with flyers that advertise the program's core purpose. Finally, broader communication using professional social media and distributing tri-fold brochures by mail will be another source of outreach.

### **Desired Outcomes**

The goal of the 4C program is to enhance the cultural competence of healthcare providers working with African American youth in a rehabilitation setting. Specific learning objectives include that, by the end of the course, participants will be able to

- a) identify how cultural competency effects the rehabilitation outcomes of African
   American youth impacted by gun violence;
- b) analyze how they present aspects of their upbringing, family values, and beliefs in their approaches to patient care;
- c) examine the evidence on how mistrust, bias, oppressive elements, and social
  justice has affected African Americans participation in decision making and
  adherence to medical plans of care;
- d) identify and apply culturally competent practices during assessment and creation of care and discharge plans for this population;
- e) formulate goals for ongoing learning;
- f) increase awareness of their beliefs and values, and their influence on clinical care;
- g) increase knowledge on bias, oppression, and privilege affecting African American youth and how mistrusts in authority influence their participation in their care;
- h) increase understanding of effective communication, assessment, and treatment techniques when dealing with African American youth GSW survivors;
- i) increase cooperation and collaboration, resulting in increased health literacy, collaboration, and adherence to plan of care;
- j) establish a set of goals to maintain the skills acquired through the course; and

k) apply their knowledge and skills to create and influence organizational policies.

To assess the effectiveness of the course in delivering these results, a program evaluation study (Chapter 5) was developed.

#### **Potential Barriers**

Several potential barriers may influence implementation of the cultural competency course. For instance, clinicians may be reluctant to participate in discussions concerning cultural differences—a potentially controversial topic—in a group setting. In attempting to remain neutral in position or appease other participants, some may feel pressured to avoid making statements in a group that has or lacks diversity. With such reluctance, participants may find it difficult to engage in the process, creating a barrier to their acquisition of knowledge and skills. In addition, participants may find that the 4C training conflicts with previous cultural competency training or beliefs. To alleviate these barriers, the program design addresses course parameters for engaging in nonjudgmental, confidential, and constructive dialogue within the course.

Difficulties in funding, resources, and time allotted for course completion and activities may arise for the program designer. The designer will need to pace the course in a way that allows participants ample time to prepare for scheduled live interactions. In the event of technical problems with the online platform, there should also be a preestablished communication alternative and cancellation guidelines.

#### **Summary and Conclusion**

The 4C was designed to address an urgent and profound problem of health disparities in the care of young post-GSW African Americans. This course was designed

to facilitate occupational therapists and other clinicians in learning cultural competency skills in hopes of increasing the cultural competency level among clinicians who serve a growing minority population. The program was developed according to a sound theoretical foundation with practices reflecting best evidence in cultural competency training. Professional licensure policies, together with a national agenda to minimize health disparities, suggest high feasibility to implement the program. As the program designer, it is my hope that these program modules will encourage open dialogue and professional growth and introduce opportunities within the occupational therapy field for diversification and mentoring. Through this training, individuals will be provided with opportunities to increase self-awareness of limitations and biases, knowledge of cultural competency aspects, strategies for change, and action plans to integrate and maintain the knowledge during practice.

### **Chapter 4 Evaluation Plan**

The 4C program is designed to aid clinical staff who work with African American youth recovering from gunshot assault to reach collaborative and effective rehabilitation processes. The program is based on theory and evidence, with a focus on the importance of attaining awareness, knowledge, and skills in cultural competency. It provides clinicians with education and opportunities to examine how their cultural and developmental backgrounds affect their professional development and ability to provide culturally sensitive care to an at-risk, underserved population. The 4C education will be provided through evidence-based, interactive lectures; eSimulations; cultural immersion experiences; reflective journaling; and facilitated debriefing using a flipped classroom model. Upon course completion, clinicians will be equipped with skills for effective communication, assessment, treatment, and collaboration with African American youth survivors, influencing these patients' health literacy levels and ability to adhere to their plans of care. This chapter describes the evaluation plan components, along with methods to carry out the evaluation.

#### **Purpose**

The core purpose of this descriptive and causative evaluation is to determine if the 4C program effectively changes clinicians' levels of cultural competency (Niemeyer, 2017). The evaluation will identify changes in the learners' perceived cultural competency levels via changes in scores on standardized measures of cultural competency. This information will aid in the tailoring of course modules for future participants.

## **Program Logic Model**

As presented in Figure 4-1, the 4C program has identified inputs and resources, program identification, guiding theories, activity sets, and expected outcomes for the short, intermediate and long terms. External and environmental factors are also identified.

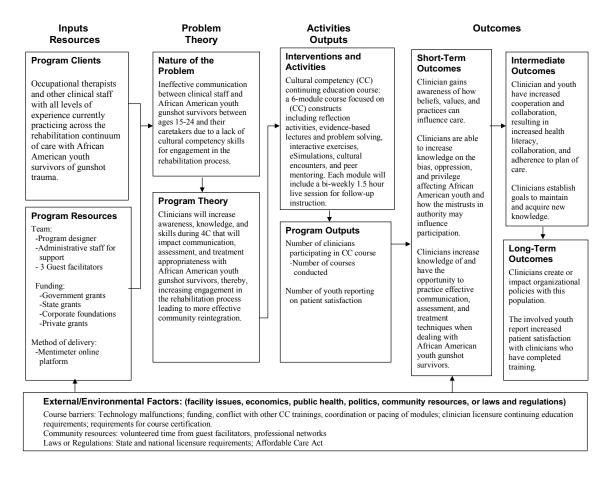


Figure 4-1. Program logic model.

The aim of this formative evaluation plan is to measure the effectiveness of the program's pilot implementation in delivering short-term outcomes. Subsequent evaluation programs will examine which causative factors most influenced short-, intermediate-, and long-term outcomes.

#### Methods

The research design is a mixed-methods approach for program evaluation using pre-, mid-, and post-term comparisons (Niemeyer, 2017), as depicted in Figure 4-2.

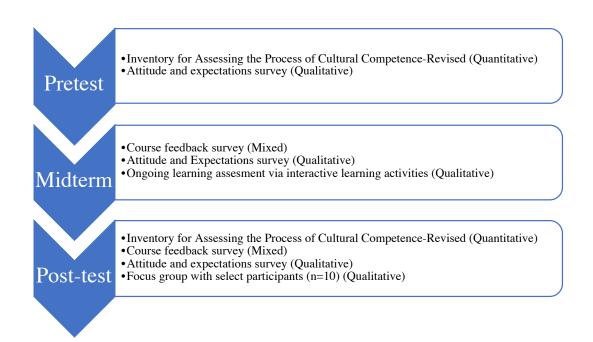


Figure 4-2. Program evaluation procedure design

## **Participants**

Participants will be clinical providers in hospital or outpatient rehabilitation settings who work with African American youth (aged 15–24 years) survivors of gun violence. These participants can come from a vast array of clinical backgrounds, such as occupational or physical therapists and assistants, speech and language pathologists, nurses, physicians, and pharmacists with any level of work experience. Approximately 10 participants will participate in the course pilot.

#### Measures

#### IAPCC-R

The IAPCC-R (described in Chapter 2) will be used to measure participants' levels of cultural competence according to constructs of the PCC model (Delgado et al., 2013; Transcultural C.A.R.E. Associates, 2015) as culturally proficient, competent, aware, or incompetent based.

## **Attitudes and Expectations Survey**

The program designer will develop an attitudes and expectations survey to gauge changes in the learners' attitudes and expectations not covered in the IAPCC-R—that is, changes specific to 4C content areas. This survey will be composed of open-ended questions for the learners to convey their knowledge, attitudes, and expectations related to aspects of cultural competency. Sample questions from the initial attitude and expectations survey include, "What are some constructs you expect to learn about concerning cultural competency with African American youth?" and "How do you feel cultural competency training could potentially affect the way you practice?"

## **Course Feedback Survey**

The course feedback survey will be collected at mid- and end-term. Using Likert scale measurements and open-ended questions, participants will provide feedback on the first half of the course (Modules 1–3). It will be reviewed alongside the attitude and expectations survey to determine if the learner's initial expectations were met and their perceptions regarding the second half of the course. Sample questions include:

- After completing the first half of the course, I feel that I have a better
  understanding of cultural competency constructs (Likert scale: 0 = no, 1 = slight
  increase, 2 = uncertain, 3 = moderate increase, 4 = large increase).
- 2. What skills learned in the first half of the course can be easily incorporated into your practice?

### **Focus Group**

In addition to the above measures, a focus group will be conducted at course end with select participants to identify their perceptions of meaning in the learning process.

Facilitation questions include:

- 1. How did the eSimulations increase your ability to understand and implement constructs of cultural competency?
- 2. I found the cultural immersion experience to be a crucial aspect of increasing my level of cultural competency (Yes or No). Please comment.

#### **Procedure**

Data gathering will begin once the appropriate approvals have been acquired.

Data collection from the questionnaires and surveys will be performed electronically via Qualtrics software.

To establish a baseline, course participants will complete the IAPCC-R and the attitude and expectations survey upon enrolling in the course. At midterm, the course participants will participate in the first course feedback survey. Finally, upon course completion, participants will repeat the IAPCC-R to determine their levels of change in cultural competency. The course feedback and attitude and expectations surveys also will be repeated as additional sources of follow up. Participants will be invited to a focus group to provide insight into perceived changes in communication based on the presumed increase in cultural competency.

#### **Data Analysis**

Quantitative information will be organized via statistical software on Microsoft Excel with the help of a statistician for data entry and interpretation. Qualitative information will be organized using Microsoft Word and coded for themes. All data analysis will be performed on the program designer's personal computer using password protects files to decrease the likelihood of a breach in participant privacy information. The program designer will maintain responsibility for storing and organizing all data in a secure location in order to maintain confidentiality and safety for participants.

#### **Ethical Considerations**

Program evaluations do not typically require institutional review board approval; however, should approval be required, the program designer will pursue approval through the hosting institution. No risks are anticipated beyond the time and effort used to complete the assessments.

#### **Potential Risks**

Several potential risks are associated with the program evaluation. First, participant attrition has potential to reduce the participants' levels of responsiveness and program completion. Second, incomplete assessments may reduce the validity of findings. In addition to sending scheduled reminders to program participants requesting they complete the assessments, the program designer will consider providing an incentive for completion. Third, as in any study, responder bias towards the African American culture, and evaluator bias towards participants with positive and negative responses, may influence the data and interpretation. Finally, although the program is evidence and theory based, all participants may not respond well to the methods used in the training to present the cultural competency constructs. In this case, the program will be reviewed, and participants individually interviewed, to understand the causes of ineffectiveness and identify remediations.

#### Summary

This evaluation plan will determine whether and how effective 4C material is in increasing clinicians' level of cultural competency, attitudes and expectations. It was designed to collect specific feedback on the learning experience and quality of the course

content and instruction. Using a mixed-methods approach, participants will provide insight into which course aspects facilitated the course outcomes through pre-, mid-, and post-term comparisons. Results from the pilot will then be used towards course modifications prior to commercializing the 4C program for continuing education units.

## **Chapter 5 Funding Plan**

## **Program Summary**

The 4C program is designed to aid clinical staff working with African American youth recovering from gunshot assault to reach collaborative and effective rehabilitation processes. The program is theory and evidence based, with a focus on the importance of attaining awareness, knowledge, and skills in cultural competency. It provides clinicians with education and opportunities to examine how their cultural and developmental backgrounds affect their professional development and ability to provide culturally sensitive care to an at-risk, underserved population. The 4C education will be provided through evidence-based, interactive lectures, eSimulations, cultural immersion experiences, reflective journaling, and facilitated debriefing using a flipped classroom model. Upon course completion, clinicians will be equipped with skills for effective communication, assessment, treatment, and collaboration with young African American GSW survivors, influencing these individuals' health literacy levels and ability to adhere to their plans of care.

This course will produce agents of change with the knowledge and skills to influence organizational policies and serve as professional mentors for others involved in the treatment of these youth. To support implementation of the course, a detailed report of the necessary expenses and proposed financial resources is provided in this chapter.

#### **Available Local Resources**

As the program designer, I am fortunate to have colleagues and friends who have generously volunteered their time and small businesses to assist as needed. Within my

immediate availability, I have identified individuals who are willing to assist with editing the written content, setting up course modules, and facilitating the course. As the program designer, I have a personal computer, printer, copier, and fax machine, as well as a postal address for correspondence with prospective attendees. I also have secured space to store course materials and confidential information. In addition, I have connected with a network of professionals at SCORE, a nonprofit organization that provides courses and individual assistance with business-related topics such as funding, business growth, and completing government forms.

## **Funding Needed**

Expenses encountered for the first year (Table 5-1) include funding to support personnel with the time and resources needed to develop program modules and create the online platform and eSimulation used for program education, and the launch and evaluation of the course pilot.

## **Funding Sources**

Potential funding sources have been identified in the form of federal, state, and foundation grants. Table 5-2 describes the grants and associated eligibility information.

Table 5-1. Year 1 Expense Budget.

Iable 5-1. Year 1 Expens	Cost	Justification
Personnel	2 000	
Program designer  Course facilitators/speakers:	\$45/h x 9 hr = \$405	All personnel should be compensated for time and resources contributed to program development and implementation.  Program designer suggested compensation for time missed from work during Year 1.  Program development can be completed outside of work hours.  Course facilitators volunteered to serve as consultants and guest speakers as needed during the initial stages of the program.
Case manager	$20/hr \times 1.5 hr = 30$	
Social worker	$20/\text{hr} \times 1.5 \text{ hr} = 30$	
Violence prevention	$20/\text{hr} \times 1.5 \text{ hr} = 30$	
liaison		
Equipment: Personal	Supplied	Attendees must have a personal computer or
computers		computer with internet access for participation.
Programs		
Microsoft Professional	Supplied	Program designer has Microsoft Office to
Office package		create and edit course materials as necessary.
Mentimeter	Free	Course materials and eSimulation will be on an online internet platform to provide interactive professional presentations. This site can be utilized to conduct training.
Internet access	\$60/month x 12 = \$720	Development/creation of course content and online platform conducted by the program designer outside of work using personal internet.
Supplies		
Writing utensils,	Supplied	These supplies will be utilized by attendees
notebooks, copy paper,		at their own discretion for note-taking,
printer		participating in interactive lectures, and printing materials, including the certificate of completion.
Dissemination:	\$5,145	Program designer will attend at least one
Professional conference	,	professional conference to promote course
attendance and		among other professionals. A poster will be
materials		utilized for conference presentations.
Cultural encounter	N/A	Module 5 includes a cultural encounter, an
(designated by		essential element of the program design, to
attendee)		be chosen and completed by each attendee
•		(10-hr requirement).
Program evaluation: Data	\$50	Program evaluation of pilot event. Student
analysis software		version of MANOVA for Excel to compute
		data.
Total	\$6,410	

Table 5-2. *Grant Funding*.

Grant	Organization	Appropriateness to project
Health Promotion Among Racial and Ethnic Minority Males	National Institutes of Health (NIH)	This grant is appropriate for the 4C program development of a course to enhance cultural competency, which will ultimately
https://www.ruralhealthinfo.org/funding/4005		reduce the health disparity associated with the victimization of African American youth aged 15–24 years. The grant has no budget limit, but must reflect program needs (5-year period).
Improving Patient Adherence to Treatment and Prevention Regimens to Promote Health https: //www.ruralhealthinfo.org/funding/4351	NIH	The 4C course addresses patient adherence at the provider and system levels by providing knowledge and skills to affect the providers' approach and influence system policy.  Grant option RO1 has no budget limit, but must reflect program needs (5-year period).
Health Services Research on Minority Health and Health Disparities https://www.ruralhealthinfo.org/funding /4268	NIH	The 4C program is eligible because it implements a course for providers working in a rehabilitation setting to reduce health disparities of African American youth.  Maximum grant of \$275,000 for 2 years, limited to \$200,000 in a 1-year period.
Robert Wood Johnson Foundation Pioneering Ideas Brief Proposals https://www.rwjf.org/en/how-we- work/submit-a-proposal.html	Robert Wood Johnson Foundation	The 4C program provides a culmination of best practices in cultural competency training focused on health disparities of an underserved population within rehabilitation settings.  Awards and time spans vary; the majority are \$100,000–\$300,000 and range from 1–3 years.
Walmart Community Grant http://giving.walmart.com/walmart- foundation/community-grant-program	Walmart	The 4C course will qualify under the grant's diversity and inclusion criteria.  Award range \$250–\$5,000
The Kroger Co. Foundation https://www.thekrogerco.com/community/	Kroger Co.	Kroger provides start-up grants for programs promoting quality-of-life enhancements in areas where the company operates.
Plough Foundation Grant <a href="http://plough.org/grantinformation">http://plough.org/grantinformation</a>	Plough Foundation (private, independent)	Eligible for special interest category: health care delivery systems

# Program Year 3

After completion of the program evaluation and any course modifications, the course will move forward in Year 3 with publishing results from the pilot study. The Year 3 expense budget is presented Table 5-3.

Table 5-3. Year 3 Expense Budget.

Item	Cost	Justification
Personnel		
Program designer	\$50/hr x 9 hr = \$450	Program designer will be compensated for time and resources contributed to carry out program.
Course		Course facilitators will be compensated
facilitators/speakers		based on module participation.
Case manager	$20/hr \times 1.5 hr = 30$	
Social worker	$20/hr \times 1.5 hr = 30$	
Violence prevention liaison	$20/\text{hr} \times 1.5 \text{ hr} = 30$	
Programs		
Microsoft Professional Office package	\$100	A professional Microsoft Office 365 package will need to be updated for the program designer to create and edit course materials as necessary (Microsoft, 2019).
Mentimeter	Free	Course materials and eSimulations will be on an online platform available with an internet connection.
Dissemination	\$5,145	Program designer will write an article to publish results and attend at least one professional conference to promote the course among other professionals.
Cultural encounter	Supplied	Module 5 includes a cultural encounter, an essential element of the program design to be completed by each participant by the proposed deadline.
Program evaluation: Data analysis software	\$295	Program evaluation of each course. Data analysis software will need to be renewed under private use license (XLSTAT, 2017)
Total	\$6,080	

## Conclusion

The 4C program is an online cultural competency course. The successful development and implementation of the pilot and future course implementation depends on procuring the necessary funding to support the use of personnel, purchase of supplies and programs, and dissemination of results. In addition to the program designer's previously identified resources, federal and foundation grants with annual awards have been identified for proposed financial support.

### **Chapter 6 Dissemination Plan**

## **Program Description**

Designed to aid clinical staff who work with African American youth recovering from gunshot assault to reach collaborative and effective rehabilitation processes, the theory- and evidence-based 4C program focuses on participants attaining awareness, knowledge, and skills in cultural competency. It provides clinicians with education and opportunities to examine how their cultural and developmental background affects their professional development and their ability to provide culturally sensitive care to an atrisk, underserved population through evidence-based, interactive lectures, eSimulations, a cultural immersion experience, reflective journaling, and facilitated debriefing using a flipped classroom model. This chapter details the dissemination plan, including dissemination goals, target audiences, key messages, and dissemination methods, as well as the budget to carry out the dissemination process and evaluate the chosen methods.

#### **Dissemination Goals**

The long-term goal of 4C is to facilitate a change in the practice methods of clinical staff in rehabilitation settings in order to achieve optimal outcomes with young African American GSW survivors. To successfully achieve this goal, 4C will be implemented and piloted among 10 participants considered to be experts of various levels of cultural competency or gun violence intervention studies with African American youth. The information from this pilot will be used to modify the course before obtaining approval to present it under state and national licensure continuing education requirements. In addition, the pilot results will be disseminated among key stakeholders

in order to establish a cultural competency standard suited to addressing the healthcare disparity in the rehabilitation of these youth.

### **Target Audience**

The primary audience for dissemination is clinical staff members within a pediatric, adult rehabilitation unit, or outpatient rehabilitation setting, including occupational therapists and assistants, physical therapists and assistants, speech and language pathologists, nurses, physicians, social workers, and case managers working with young African American GSW survivors across the continuum. The secondary audience consists of hospital administrators, who have the ability to change and enforce standards of cultural competency and associated policies within their respective facilities. Table 6-1 provides details on the key messages and messengers for dissemination.

Table 6-1. Dissemination to Target Audiences.

Table 6-1. Dissemination		Cnalragnagan
Target audience Primary	Key message	Spokesperson
Clinical staff: Occupational and physical therapists Occupational and physical therapy assistants Speech-language pathologists Nurses Physicians Social workers Case managers	Cultural competency training for clinical staff instills confidence that more effective communication, assessment, and treatment techniques when dealing with African American youth gunshot survivors will yield better discharge planning, adherence to the plan of care, and community reintegration outcomes.	Clinicians who have completed the course can provide written feedback upon follow-up of how the course contents influenced practice across disciplines.
Secondary	The knowledge and skills established in 4C will provide a sense of empowerment in creating and impacting policy changes within rehabilitation facilities providing care for African American youth gunshot assault survivors.	
Hospital administrators Professional associations	The 4C identifies the growth of clinicians in cultural competency with these youth, which identifies a gap in service provision and the need for the establishment of a facility and professional standards of cultural competency.	The AOTA professional association provides a platform and sets a standard for occupational therapy service provision.  The National Network of Hospital-based Violence Intervention Programs is composed of hospitals, multidisciplinary professionals, violence prevention liaisons, and outreach services for youth and young adults in an effort
		to address violence and provide trauma-informed care.

### **Dissemination Activities**

Dissemination efforts for both the primary and secondary audiences will be based on written, electronic, and person-to-person methods. Written methods will consist of the production of an informative brochure that provides information on the 4C pilot results and introduces the initiative's key messages. These brochures will be mailed to professionals who may benefit from or take interest in course participation and to rehabilitation units for distribution to the clinical staff. Another method to reach occupational therapists and other healthcare professionals is by submitting a non-peer reviewed or peer-reviewed article to a journal that is available to professionals or individuals with similar interests. In addition, the program designer will adapt materials to create a manuscript to be consider for publication.

Electronic methods include participating in podcast interviews on established podcasts stations that target health professionals or individuals interested in violence intervention and trauma-informed care. The program designer and facilitators can also participate in interviews on local news stations, which then would be available as a recorded source for dissemination on social media platforms. Social media platforms are a viable dissemination source that allow creation of recorded or written media as well as free business pages and a source of networking on national and international levels in real time.

Person-to-person interactions will take place at professional conferences and networking events attended by the program designer or course facilitators. At these conferences, the program designer and course facilitators will distribute 4C business

cards, brochures, and provide first-hand accounts of the 4C curriculum and feedback.

# **Budget**

Tables 6-2 and 6-3 provide the budgets for dissemination costs to the primary and secondary audiences. The total cost for all dissemination efforts is \$5,145, which covers all individual costs but excludes duplicate materials.

Table 6-2. Dissemination Costs: Primary Audience.

Dissemination method	Cost	Justification
Written		
Brochure		
Creation	Free	Program designer can create the brochure using previously purchased Microsoft Word program
Printing	\$0.42/unit	(Office Depot, 2019)
Postage	\$0.55/unit	Postage stamps purchased from the U.S. Postal Service (2019) to disseminate brochures.
Article manuscript submitted to peer-reviewed journal	Free	Program designer will write the article using previously purchased Microsoft Word program.
Electronic	<b>.</b>	
Podcast interviews	Free	Professional podcast interviews conducted by invitation on established podcast stations.
Social media	Free	Business pages on social media platforms such as Facebook, Instagram, and LinkedIn are free.
Person-to-person		
Conference presentation Travel, housing, registration, stipend	\$2,500.00	Professional presentation at a discipline- specific conference to network with other professionals and individuals with shared interests
Poster presentation	\$40.00	Cost to print professional poster (FedEx, 2019).
Professional networking events, business cards	\$7.99/100	Cost to design and print business cards (Vistaprint, 2019)
Total	\$2,645.00	Based on 100 units

Table 6-3. Dissemination Costs: Secondary Audience.

Dissemination method	Cost	Justification
Written		
Peer-reviewed journal article; publish manuscript	Free	Submission to a peer review journal will cost the program designer time for completion of article and manuscript.
Electronic		
4C website	Free	Wix.com (2019) allows the creation of a free website.
Person-to-person		
Conference presentation Travel, housing,	\$2,500.00	Professional presentation at a conference open to multidisciplinary teams to network with other professionals and individuals with
registration, stipend		shared interests
Conference poster	Supplied	Cost to print professional poster
Administrative meetings or town hall, business cards	Supplied	Cost to design and print business cards
Total	\$2,500.00	

#### **Evaluation**

In evaluating the dissemination efforts, I (as the program designer) expect outcomes to include increased overall course participation and exposure to the course, creation of one to two collaborative relationships with an organization or network with similar interests for support and possible sponsorship, and provision of the course at a rehabilitation facility. Dissemination success will be measured through achievement of the following goals. Specifically, the 4C program will:

- a. Be featured in a special interest magazine focused on youth or cultural topics.
- Receive at least three meeting or interview requests about the program or possible collaborations.
- c. Achieve 1,000 or more visits on the 4C website in a 12-month period.
- d. Receive at least 25 follow-up calls per 100 business cards distributed.

e. Issue 100 course completions in a 12-month period.

## Conclusion

The dissemination of the 4C material will focus on the primarily audience of rehabilitation clinicians, followed by the secondary key stakeholders, hospital administrators and professional organizations. The dissemination budget (Tables 6-2 and 6-3) has been constructed to use written, electronic, and person-to person contact methods to network with as many professionals as possible. Promoting the course through a variety of outlets will increase the span of connections, grow the program to its full potential, and make it a program of choice for cultural competency training with African American youth gunshot assault survivors.

### **Chapter 7 Conclusion**

This occupational therapy doctoral project was designed to address the urgent problem of suboptimal rehabilitation services provided to young African Americans post-GSW. The first step in the project was to thoroughly understand the sources of this problem through an extensive review of theories and evidence to gain a broad understanding of causal factors and existing solutions. As discussed in Chapter 2, two theories enhance understanding of the people and environments included in the explanatory model for this health disparity: the cognitive adaptation theory (Taylor, 1983) and Bronfenbrenner's (1977) ecological systems theory.

Multiple causal factors contribute to the disparate health outcomes. Post-GSW, African American youth must adapt in a hospital environment where they distrust clinicians and lack the health literacy they need to understand their plan of care, while facing physical, psychosocial, and financial barriers to recovery. They experience an additional strain when the previous family and communal supports are inadequate for their adjustment to changes in their post-GSW roles and identities.

As clinicians, we are trained to gather information through an array of methods such as: chart reviews, interviews, formal and informal assessments, and observations. However, clinicians still face multiple barriers to providing services for young African American GSW survivors. Often, clinicians battle barriers such as the patient's lack of financial aid and resources, patient-caregiver differences in cultural or life experiences and values and beliefs, and the hospital's stringent productivity demands. The resulting imbalances in communication and collaboration hinder the provision of best care and

leave these youths unequipped to reintegrate into the community.

After identifying the central sources of the problem, Chapter 2 presented a synthesis of literature reviewing existing solutions and identified two effective, evidenced-based solutions to enhance the quality of care that rehabilitation staff provide: peer mentoring and cultural competency training. Peer mentoring is a low-cost means to empower youth by establishing meaningful relationships among peers. Such relationships foster the growth of knowledge regarding health and wellness, resilience building, and identification of resources. Cultural competency training provides an opportunity to integrate culture into treatment and discharge planning to ensure that the plan of care is consistent with the needs of these youths and caretakers (Alston et al., 2007; Perry et al., 2015).

Based on these findings, I developed the Calhoun Cultural Competence Course (4C). The 4C is designed to address health disparities in the care of young African American GSW survivors by enhancing the cultural competency of healthcare professionals in the rehabilitation setting. This educational course was developed according to current evidence on both the needs of African American youth and best practices for enhancing healthcare professionals' competency skills. Use of the PAPM and PCC theories guides the course content to facilitate clinicians' transition through the stages of cultural competency.

The course consists of six self-paced modules, each open for completion over a 2-week period with a 90-min live classroom wrap-up. In this course, clinician participants will acquire practical strategies to address the distinctive needs of African American

youth who have been impacted by gun violence and promote their active engagement in the rehabilitation setting and better community reintegration. Upon course completion, expected clinicians' outcomes include the abilities to identify how cultural competency affects rehabilitation outcomes; analyze how aspects of development, values, and beliefs are integrated into approaches to care; and use their new knowledge and skills to provide adequate care, set future goals, and influence organizational policies.

The 4C course is expected to be piloted within 1 year of completing the course content development. To evaluate the course effectiveness and delivery methods, the 4C will be piloted among 10 participants who are considered experts of various levels in cultural competency or gun violence intervention studies with African American youth. Results from the pilot will then be used to modify the course prior to commercializing the program for professional continuing education credit. The pilot results also will be widely disseminated to key stakeholders to establish a cultural competency standard for providing best care and achieving optimal outcomes with these youths.

Because African American youth are disproportionately affected by gun violence, they are more likely than White patients to require an extensive rehabilitation process in which they receive disparate health outcomes. Cultural competency training is just one aspect of addressing this resulting health disparity when attempting to return African American youths to the community after such a traumatizing event. Additional programming efforts, including peer mentorship and enhanced GSW-prevention programs, are needed before and after reintegration to support this transition. It is recommended that such programs follow a process similar to this doctoral project—one

of identifying the central causal factors and developing interventions according to theory and evidence.

# **Appendix A: Evidence to Support the Proposed Explanatory Model**

Is there evidence that youth have difficulty reintegrating after gun violence? With TBI? With SCI?

Author (year)	Report type	Participant characteristics / selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Kroll (2008)	Qualitative exploratory study	Nurses and other rehabilitation professionals	Largest rehabilitation hospital in Washington, D.C.  Urban treatment center that treats gun-related spinal cord injuries	Demographic and clinical differences— violently versus nonviolently injured individuals with SCI, barriers to rehabilitation, staff educational and training needs	Semi structured interviews onsite, independent analysts using NVivo; focus on differences in violently versus nonviolently acquired SCI, rehabilitation challenges and barriers, necessary staff education and training	Rehabilitation challenges due to PTSD, low income levels, lack of support system, and lack of identified resources by patients and clinicians	Explicitly identified need for more effective discharge planning, identification and use of community resources and supports, and peer-to-peer relationships for successful short-term rehabilitation as identified in my logic model
Kim, Colantonio, Dawson, & Bayley (2013)	Retrospective cohort study of population- based data from Cana- dian hospital records 2001– 2006	Individuals 16–64 years admitted 2001– 2006 who received inpatient rehabilitation in Ontario and other provinces. Demographics: age, sex, spoken language, vocational status, rural or urban residence, living arrangement, and mechanism of injury	Canadian Institute for Health Information:	Comorbidities prior to inpatient admission, alcohol/drug abuse history, days from injury to rehab admission, rehabilitation LOS, disability level, discharge destination	scale for outcome measures. Retrospective	Individuals with TBI due to physical assault vs. unintentional TBI had poorer overall reintegration in family roles and recreation. Inpatient rehab should address occupational performance in real-life contexts, and meaningful	Specifies how occupational therapists can contribute to specific outcomes related to increased community reintegration through the standardized assessments, family involvement, community outreach

						client-centered goals	
Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Schopp, Shigaki, Bounds, Stucky, & Conway (2006)	Comparison of violent versus nonviolent etiology brain injured individuals with a 1-year follow up	Included 45 individuals with confirmed violent or nonviolent etiology TBI as primary diagnosis who were also included in studies conducted through the Missouri Model Brain Injury System	Participants from two Midwestern rehab facilities: 15 from acute rehab, 30 from long-term rehab hospitals	Measured differences between violent and nonviolent TBI etiology: demographic, social, economic, injury severity, finances, cause of injury, legal history, economic status, post-injury psychiatric and behavior functioning and substance abuse	Individuals participated in neuro-psych test battery, chart reviews, family member interviews for history in study categories. 1- year follow-up through face- to-face interviews in the clinic or by phone	No differences in the groups for admission/discharge FIMS. Nonviolent etiology group scored higher in social integration post-injury. Violent etiology group consisted of more ethnic minorities. Increased dependence on Social Security Income and public programs for violent etiology group	Identifies differences in demographics and outcomes of individuals who experience violently acquired TBI and the challenges faced based on the individuals' characteristics pre- and post- injury

Is there evidence that cross cultural understanding has an influence on the interaction of the individual and clinician?

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Eiser & Ellis (2007)	Expert opinion report on aspects that serve as barriers and how to overcome them to achieve cultural competence and increase cross-cultural communication	Speaks of the relationship between African Americans and clinicians	Information concerning the history of African Americans in the U.S. post-slavery and the Jim Crow period of discrimination	Relationship of African Americans and clinicians; themes related to cross- cultural communication: "patients' mistrust, lack of cultural understanding, different paradigms for illness, and health illiteracy (p.176)"	N/A	African Americans' mistrust in medical professionals is rooted in history of discrimination, lack of available medical care, and a distrust after events such as the Tuskegee syphilis study. Influence of religion on medical decision-making, compliance, and health literacy	Insight on the need for cross-cultural communication to improve healthcare outcomes of an underserved minority population with historical social and religious beliefs that are a barrier to health literacy and overall outcomes. Provides strategies for increasing cross-cultural education and training

# Is there evidence that demographics have an effect on health literacy? Minorities? Socioeconomic status?

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Cuevas, O'Brien, & Saha (2016)	Qualitative	Focus group facilitators with similar gender and race characteristics participated in 8-hour (1-day) training Participants with diabetes/ hypertension and need regular interaction with clinicians, self- identify as Black or African American and over 18 years old. Community-based rather than clinical selection in Portland, Oregon to gain varied insight	Community coffee house, Portland, OR	African American experience mistrust, discrimination, poor communication, racial disconcordance in healthcare	Focus groups provide information on individual experiences with clinicians, values, and preferences in patient-clinician interactions. Focus group interactions audio-recorded, transcribed into Microsoft Word. Data analyzed with NVivo10 for examples of themes: discrimination, medical mistrust, poor communication, race discordance	Perception of discrimination/ medical mistrust in clinicians/ healthcare systems prevents African Americans from obtaining the necessary health screens, treatment, and adherence to treatment. Decreased communication during patient-clinician interactions prevents African Americans from being involved in decisions regarding care. Clinician's race did not play a prominent role in patients' experiences	Supported using individuals of similar race, gender, and characteristics to conduct focus groups due to possibility of sensitive topics. Identified race may not be important factor in patient-clinician interactions, but feelings of concern, care, and having an advocate increase communication, leading to better quality of care

# **Appendix B: Evaluative Summary of Effective Solutions**

What methods are being used to teach cultural competency during graduate studies? Continuing education methods?

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Iverson & Seher (2017)	Quasi- experimental; Quantitative research	Two student cohorts ( $N = 34$ ) at Great Lakes University, fall 2009 and ( $N = 24$ ) at Cherry Hill University; different points in their academic paths	Two Master's degree cohorts: Great Lakes University and Cherry Hill University	Multicultural Competence for Student Affairs- Preliminary 2 Scale used as pre-, midpoint-, and post-test	Each cohort instructed on cultural competency with methods to increase awareness, knowledge, and skill	No evidence supports a specific best instruction method. Both programs supported the development of awareness, knowledge, and skills. Support of the university or healthcare facility is crucial to developing cultural competency	Self-reflective autobiographical essay" = creative method for self- awareness; provides opportunity to explore privilege and critique assumptions and biases in light of chosen career as a helping professional Importance of social desire as an element of competence (part of PAPM is desire to act)

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Palombaro, Dole, & Black (2015)	Comparison study measuring development of cultural competency in doctor of physical therapy students after didactic and service learning opportunities	Two groups: first year university students ( <i>n</i> = 39) and third year students ( <i>n</i> = 40). The cohort used had no ethnic diversity within the class	A university in the United States	Pre- and post- test using IAPCC-student version	Literature review examined methods to increase staff's cultural competency aspects (knowledge, awareness, skills)	Cultural competency training immersed into curriculum. Weaving cultural competence into entire program demonstrates the importance of the skill across the board versus in one course. Cross-cultural Adaptability Inventory also a reliable measure. Within-group diversity increases the group's cultural competency	Details examples of program activities to increase cultural competency. Defines constructs of with cultural competency according to Campinha-Bacote's model, demonstrating unique aspect of cultural desire for program design. Supported use of: reflective writing, cultural immersion programs, standardized patients for application and feedback on skills related to cultural competency, service opportunities, case studies, readings, discussion and instruction or lecture

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Pitner, Priester, Lackey, & Duvall (2018)	Quasi- experimental design with pre-and post- testing	First-year MSW students took a dedicated diversity and social justice course (experiment group); second-year students had diversity and social justice infused in all courses (comparison group) A third group received no training		Pre- and post- tests measured participants' awareness of personal biases and beliefs, impact of cultural influences on thoughts and actions, ability to identify forms/levels of oppression, and cultural responsiveness		The diversity course resulted in greater positive attitudes about race but no difference than the infusion model on diversity, social justice, or equality Faculty preparedness served a greater role in producing large attitudinal changes Addressed topics of critical awareness of privilege and oppression The diversity group had significantly better results only in identifying forms of oppression and cultural responsiveness. Cross-cultural experiences (volunteering with different groups of people) increased cultural competency	Hypothesis consistent with proposed program solutions: increase awareness, identify aspects/ levels of oppression, and cultural responsiveness. Transcultural Self- efficacy Tool can be used as a self- assessment. Supports a course specifically dedicated to diversity. Experimental group (dedicated course) showed significant results over a shorter period than the comparison group (infusion model)

# How does diversity among hospital staff OR staff mentoring influence development of cultural competence?

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Delgado et al. (2013)	Pilot study measuring nurses' pre- and post- levels of cultural competency in 1-hour course	Patient care staff recruited from a medical center in the Midwest with 111 participating units. Convenience sample of 85 registered nurses, 9 patient care assistants, 4 unit secretaries	Medical facility in U.S. Midwest	Self-reported pre- and post- course measurements of cultural competency	IAPCC-R administered to establish baseline cultural competency before course; retested 3 and 6 months after completion of the cultural competency course	Consensus of disparities stem from lack of clinicians' awareness, knowledge, and skill and organization support. Similar outward appearances of clinicians and patients do not equate to a better understanding between clinical staff and minority patients. Despite the identifying need to address cultural competency in the literature, researchers have not identified a best method of instruction	Methods for cultural competency training include simulations, immersion, online teaching modules; for achieving cultural competency within an organization: diverse workforce, convenient access to services for community members, language services, regularly scheduled staff education, data tracking and reporting of quality of the care provided to groups based on race, ethnicity, and culture, and including the community in aspects of service planning, delivery, and goals. Campinha-Bacote's model for cultural competency

Author	Report type	Participant	Site/context	Variables & measures,	Key Findings	Application
(year)		characteristics &	of study	Procedures		
		selection				
Weech-	Pilot study	Convenience	125	Independent variables =	Nonprofits out performed	Provides information
Maldonado,	of the	sample of three	hospitals	organizational and market	for-profit and government	on standards, domains
Dreachslin	CCATH;	California and two	(general and	variables associated with	hospitals in multiple	the CCATH assesses,
et al. (2012)	Quantitative	Pennsylvania	pediatric) in	cultural competency.	CCATH categories.	and what can be done
	research	hospitals; focus	the	Dependent variable = degree	Nonprofits: higher	to meet the standard
	with	groups from Illinois,	California	of cultural competency (via	likelihood of cultural	from the perspective
	regression	Idaho, California,	Hospital	CCATH)	competency due to the	of the healthcare
	analysis	Florida, Nebraska,	Association	Surveys containing the	influence of municipalities,	organization
		Texas; cognitive	Directory,	CCATH assess adherence to	local government, and	
		interview	2006	standards developed by the	government-funded	
		participants		HHS for culturally and	healthcare such as	
		recruited from an		linguistically appropriate	Medicaid.	
		institute for		services distributed to	Additional factors in higher	
		diversity and		hospital CEOs.	cultural competency rate =	
		culturally and		CCATH domains within a	large hospital, teaching	
		linguistically		healthcare organization = leadership, integrating	facility, large minority	
		appropriate services list serve.		cultural competency into	patient population area	
		125 hospital CEOs		management and operations,		
		responded to a		workforce diversity and		
		survey		diversity training, engaging		
		Survey		the community, clinician-		
				client communication,		
				method of care delivery and		
				mechanisms of support		

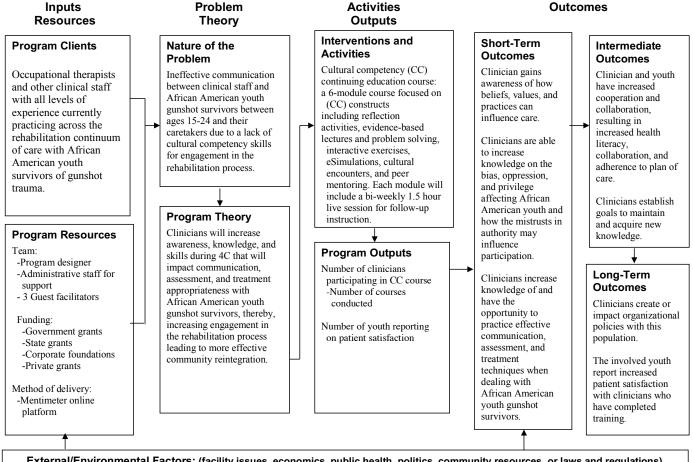
# How are healthcare organizations enhancing OR supporting cultural competence among staff?

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Weech- Maldonado, Elliott et al. (2012)	Quantitative research; regression analysis	General and pediatric hospitals from the 2006 California Hospital Association Directory	California	CCATH used to examine 11 hypotheses about how various organizational factors influence organizations' cultural competency	Regression analysis with five data sources on California hospital facilities; Survey sent out using total design method	Staffs' cultural competency assists organizations to decreasing health disparities. Provides brief overview of how hospitals are underprepared at national and international levels for diversification in patient population	Describes CCATH theoretical framework Exemplifies how the survey assessment can be used to examine factors related to increased cultural competency

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedre	Key findings	Application
Perry, Woodland, & Brunero (2015)	Case study of computerize d simulation to enhance healthcare providers' cultural competency	500 healthcare providers completed online simulation; 1,000 simulations were distributed for computer use. Module completion time = 60 min	Sydney, NSW, Australia Health District	Case study module developed through interviews with community members and focus groups with healthcare providers; Simulations are self-based and require problem solving with feedback and opportunities to reflect	Major effective learning factors = simulation authenticity, ability to actively participate, integrate learned theory into practice, ability to repeat and reflect on concepts. Workforce diversity, interpreters and translated materials, cultural competency training, tailoring services to cultural groups effective for cultural competency and communication. Australian and US literature supports cultural competency training to increase knowledge, skill, change in practices that affect patient satisfaction. Limited research credits increased health outcomes with increased cultural competency. eSimulation became required training for new hires and a prerequisite in specialty clinics		eSimulation benefits learner benefits include convenience, flexibility, accommodation Organizational benefits = cost-effective, decreased training time, ability to train large groups with ease, Simulated real life and availabile resource are key to success eSimulation brought changes: increased use of interpreters, culturally sensitive questioning, integrating cultural issues into discharge planning. Identifies necessary steps to develop successful eSimulation module

Author (year)	Report type	Participant characteristics & selection	Site/context of study	Variables & measures	Procedure	Key findings	Application
Teal, Gill, Green, & Crandall (2012)	Expert opinion	N/A	N/A	Unconscious bias	Literature review and synthesis	Bias as a contributing factor to health disparities based on race, ethnicity, gender, social class, or sexual preference.  Supports addressing bias in educational setting. Educational strategies: to recognize unconscious bias = learning about cultural groups (e.g., not focusing on African American mistrust of clinical staff, but focusing on signs of mistrust from this cultural group); reflective activities, IAT Educational strategies to reduce/ manage unconscious bias = immersion into cultural groups, simulations.	practitioner classifies a patient as a group member and applies stereotypes of

### **Appendix C: Logic Model**



External/Environmental Factors: (facility issues, economics, public health, politics, community resources, or laws and regulations)

Course barriers: Technology malfunctions; funding, conflict with other CC trainings, coordination or pacing of modules; clinician licensure continuing education requirements; requirements for course certification.

Community resources: volunteered time from guest facilitators, professional networks

Laws or Regulations: State and national licensure requirements; Affordable Care Act

## **Appendix D: Sample Lesson Plan**

## Module 2: Knowledge

The content of Module 2 will be presented in a flipped classroom method. Course participants will log on to the 4C using Mentimeter to complete Module 2: Knowledge. Participants are expected to review the learning materials prior to attending the live classroom session in order to participate in class discussions and activities.

- > Part 1: individual learning (a-synchronous)
- ➤ Participants will read an electronic document detailing the following information in written form including embedded narrated PowerPoint slides:
  - Review of Major Points of Module 1: Awareness
  - o Bridging Module 1 to Module 2: Knowledge
    - Participants will review a video that reiterates the major points
      of the *Awareness* module and introduces the *Knowledge*module.
  - History of mistrust in the healthcare system and authoritative figures:
    - PowerPoint slides with narrated content.
    - Video compilation of African American youth gunshot survivors and caretakers reviewing historical, influential moments in African American history. The video is designed to create a generational comparison of how historical mistrusts have evolved over time or how past movements are similar to

recent movements.

- ➤ How does the evidence present African American youth associated with gun violence?
  - PowerPoint slides with narrated content
  - Stereotypes and Social stigmas
    - Interactive assignment: Insert terms associated with stereotypes and stigmas to make a word cloud

### Complex PTSD

- Narrated PowerPoint slides reviewing the term, diagnosis, and application
- Interactive assignment: Discussion board posting—answer the question: How have past and current events contributed to the fragility of interactions with healthcare workers and law enforcement (i.e. Black Lives Matter Movement)?

## Unconscious bias:

- Narrated PowerPoint slides reviewing the content
- o Interactive assignment: Complete Implicit Association Test
  - Journal entry: What were the results of your Implicit Association Test? How is this interpreted? What was your perspective of the results?

# > Oppression:

- Narrated PowerPoint slides reviewing the content
- Interactive assignment: Movie exercise
  - Please watch the movie titled *Crash* by Paul Haggis
  - Journal entry: Please describe an element of symbolism or a reoccurring theme presented within the characters' storylines.

## > Privilege:

- Narrated PowerPoint slides reviewing the content
- o Interactive activity: Examination of case study scenarios
  - Participants will answer questions related to the scenarios in an anonymous format on Mentimeter.
  - Journal entry: "Please describe an experience when a client was shown privilege within the rehabilitation setting due to race, gender, mechanism of injury, sexual orientation, and/or socioeconomic status that conflicted with your identified values or beliefs. How did you handle it? What could you have done differently?"

### Class Discussion: Live online session (synchronous)

- The program designer will facilitate an open discussion on Module 2 topics and activities.
- After reviewing the module topics, course participants will be assigned to breakout groups to discuss the following topics:

- How can unconscious bias, oppression, and/or privilege impact patient care? Prioritization of patients? Discharge recommendations?
- Can values, beliefs, and practice of behaviors in an individual's personal life be carried over into his or her professional practice?
- Participants will then return to the larger group to summarize discussions.
  - Guest facilitator: Case manager

## **Appendix D: Executive Summary**

In the United States, youth aged 15 to 24 years are victims of gunshot assaults at an alarming rate of approximately 17,300 annually. Over one-third of those injured are African American (National Center for Injury Prevention and Control, CDC, 2016). Rehabilitation following injuries from gun violence is a long and complex process for patients, their families, and the clinicians involved in their care. Patients' perceptions of discrimination and mistrust in the medical staff are based in African American history, together with current notions that medical staff do not understand African American culture, acknowledge community re-entry needs, or act in these patients' best interest during the rehabilitation process (Alston, Gayles, Rucker, &Hobson, 2007; Liebschutz et al., 2010). Healthcare staff often misinterprets youth gunshot survivors' behaviors and engagement efforts, labeling the patients as noncompliant or implying they are exaggerating their pain. As a result, research findings suggest, African-American patients do not have positive rehabilitation outcomes comparable to those of White patients (Suarez-Balcazar et al., 2009).

The American Occupational Therapy Association (2019) acknowledged unconscious bias and use of stereotypes as not only a source of differential treatment, but also an influence on the quality of and access to care for minorities. Cultural competence has been identified as a key mechanism to mitigate these health disparities. Campinha-Bacote defined *cultural competence* as occurring "when the practitioner understands and appreciates differences in health beliefs and behaviors, recognizes and respects variations that occur within cultural groups, and is able to adjust his or her practice to provide

effective interventions for people from various cultures" (cited in Suarez-Balcazar et al., 2009, p. 499). Being culturally competent is considered a best practice in occupational therapy and all health professions. Thus, the central aim of this doctoral project is to remediate the communication gap between patients and medical staff in order to enhance patient-provider relationships and support optimal rehabilitation processes and outcomes.

### **Project Overview**

The Calhoun Cultural Competency Course (4C) is a comprehensive cultural competency training on best practices for treating African American youth who are gunshot assault survivors. The training was designed as an online continuing education course according to professional licensure guidelines. The course content was developed based on an in-depth review of theories and evidence-based literature that indicated the needs of African American youth (Alston, Gayles, Rucker, & Hobson, 2007; Cuevas, O'Brien, & Saha, 2016; Liebschutz et al., 2010). The theoretical basis for the course includes the Precaution Adoption Process Model (PAPM; National Cancer Institute, 2018) and the Process of Cultural Competence (PCC) in the Delivery of Health Care Services (Campinha-Bacote, 2002).

The PAPM and PCC uniquely contribute to development of the course by providing the necessary steps to transition from a state of unawareness to achievement of cultural competency. Each theory contains a distinct feature incorporated into the module development, contributing to the attainment of awareness, knowledge, and skills.

The course instruction methods are based on evidence from research on best practices to enhance healthcare professionals' cultural competency. Essential elements

for program success include effective curriculum design, opportunities for reflection, immersion into the cultural group, and simulations or eSimulations (Palombaro, Dole, & Black, 2015; Perry, Woodland, & Brunero, 2015; Pitner, Priester, Lackey, & Duvall, 2018; Teal, Gill, Green, & Crandall, 2012). All these elements will be included in the proposed course curriculum design to enhance clinicians' self-awareness by reflective inquiry to analyze how their personal values and beliefs, professional training, and life experiences influence their practice. Upon course completion, participants will have mastered the necessary skills to provide culturally sensitive, responsive, and appropriately tailored care that suits the needs of these individuals and leads to more successful outcomes and community re-integration.

The course content will be presented in six modules in the format of an interactive online classroom. Participants will complete the self-paced modules over the span of 12 weeks. Each module will be available to complete during a 2-week period with 90-minute live interactive group discussions. Table 1 depicts the 4C learning modules, objectives, and learning activities.

The module content is presented in a variety of methods, to include PowerPoint slides with narrated content, video compilations, interactive assignments, discussion board posts, journal entries, eSimulations, and cultural immersion experiences.

Participants will become part of a community of learners for ongoing maintenance and enhancement of cultural competency.

A pilot of the 4C program is anticipated to be launched within 1 year of content completion. The program's effectiveness in fostering change in participants' cultural

competency will be measured using a mixed-methods pre–post program evaluation design. Data from this pilot will be collected using interviews and a survey developed for the study and analyzed. The analysis results will help determine any needed modifications prior to obtaining approval for continuing education requirements for state and national licensure requirements.

Table 1. 4C Learning Modules, Objectives, and Learning Activities

Module	Objective	Activity		
Awareness	Analyze participant cultural and developmental background and impact on practice approach	Course overview Identify course objectives Cultural interview to identify beliefs and biases that may reflect in practice		
Knowledge	Identify evidence-based mistrusts, biases, oppressive elements, and current social justice factors of African American youth	Lecture on unconscious bias, privilege, oppression, and social justice Analyze examples Movie exercise: "Crash" Reading exercises: Case scenarios		
Cultural desire	Identify communication differences Identify effective self-coping methods Identify essential elements of peer-mentoring program	Debrief on modules 1 & 2 "Crack the Code" SWOT analysis of introducing a peermentoring program Open discussion		
Cultural skill	Identify best practices with assessments, care plans, discharge plans, and skills	eSimulations Receive immediate feedback on practice eSimulations		
Cultural encounter	Exchange ideas for improved re-integration outcomes	Summarize cultural immersion experiences		
Continuing the journey	Formulate personal goals Identify how to create and influence organizational policies	Debrief Incorporate learning		

Expenses expected to be encountered in Year 1 include costs to support personnel (time and resources to develop the program modules), creating the online platform and eSimulation, and launching and evaluating the course pilot, totaling \$3,055. After the program evaluation and course modifications in Year 2, the course will move forward in Year 3, publishing the pilot study results. Year 3 estimated expenses total \$3,435. Potential funding sources for all years have been identified in the form of federal, state, and foundation grants.

Dissemination of the 4C material will focus on the primary audience—rehabilitation clinicians—and secondary audience—the key stakeholders of hospital administrators and professional organizations. Dissemination efforts for both audiences will be based on written, electronic, and person-to-person methods consisting creating brochures, submitting journal articles, and preparing a manuscript for publishing. In addition, the program designer and course facilitators will participate in podcast and news media interviews, utilize social media platforms, and attend professional conferences and networking events.

#### Conclusion

The 4C training is designed to address an urgent and profound problem of health disparities in the care of African American youth post-gunshot injury. It incorporates a sound theoretical foundation and best evidence in cultural competency training.

Professional licensure policies, together with a national agenda to minimize health disparities, suggest high feasibility to implement the program. This training will provide clinicians opportunities to increase their self-awareness of limitations and biases,

knowledge of cultural competency aspects, strategies for change, and action plans to integrate and maintain this knowledge during practice. As the program designer, it is my hope that these program modules will encourage open dialogue and professional growth and introduce opportunities within occupational therapy for diversification and mentoring.

#### References

- Alston, R. J., Gayles, T., Rucker, R., & Hobson, M. (2007). The centrality of race in rehabilitation: Views of former clients who are African American. *Journal of Applied Rehabilitation Counseling*, 38, 12–19.
- American Occupational Therapy Association. (2019). *Cultural Tool KIts*. Retrieved from American Occupational Therapy Association:

  <a href="https://www.aota.org/Practice/Manage/Multicultural/Cultural-Competency-Tool-Kit.aspx">https://www.aota.org/Practice/Manage/Multicultural/Cultural-Competency-Tool-Kit.aspx</a>
- Campinha-Bacote, J. (2002). The process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing*, *13*, 181–184. doi:0.1177%2F10459602013003003
- Liebschutz, J., Schwartz, S., Hoyte, J., Conoscenti, L., Christian Sr., A., Muhammad, L., . . . James, T. (2010). A chasm between injury and care: Experiences of black male victims of violence. *Journal of Trauma*, 69, 1372–1378. doi:10.1097%2FTA.0b013e3181e74fcf
- National Cancer Institute. (2018). Theory at a glance: A guide for health promotion practice.

  Retrieved from <a href="https://learn.bu.edu/bbcswebdav/pid-5853218-dt-content-rid-21415466\_1/courses/18sprgsarot610\_ol/course/course\_documents/sarot610\_w5\_TheoryataGlance.pdf">https://learn.bu.edu/bbcswebdav/pid-5853218-dt-content-rid-21415466\_1/courses/18sprgsarot610\_ol/course/course\_documents/sarot610\_w5\_TheoryataGlance.pdf</a>
- National Center for Injury Prevention and Control, CDC. (2016). *SAS Output*. Retrieved from https://webappa.cdc.gov/cgi-bin/broker.exe

- Palombaro, K., Dole, R., & Black, J. (2015). Curricular integration and measurement of cultural competence development in a group of physical therapy students. *Journal of the Scholarship of Teaching and Learning*, *15*(5), 82–96. doi:10.14434/josotl.v15i5.13505
- Perry, A., Woodland, L., & Brunero, S. (2015). eSimulation: A novel approach to enhancing cultural competence within a health care organisation. *Nurse Education in Practice*, *15*, 218–224. doi:10.1016/j.nepr.2014.11.013
- Pitner, R. O., Priester, M. A., Lackey, R., & Duvall, D. (2018). A dedicated diversity course or an infusion model? Exploring which strategy is more effective in social work pedagogy. *Journal of Social Work Education*, *54*, 49–60.
- Suarez-Balcazar, Y., Rodawoski, J., Balcazar, F., Taylor-Ritzler, T., Portillo, N., Barwacz, D., & Willis, C. (2009). Perceived levels of cultural competence among occupational therapists.
  American Journal of Occupational Therapy, 63, 498–505. doi:10.5014/ajot.63.4.498
- Teal, C. R., Gill, A., Green, A., & Crandall, S. (2012). Helping medical learners recognise and manage unconscious bias toward certain patient groups. *Medical Education*, *46*, 80–88. doi:10.1111/j.1365-2923.2011.04101.x

## **Fact Sheet**



Engaging African American Youth in Rehabilitation Following Gunshot Wound Assault: The Calhoun Cultural Competency Course (4C)

> Tamara Calhoun, MOTR/L OTD Candidate

#### Background

African American youth disproportionately comprise over one-third of the approximately 17,300 gunshot assault victims between the ages of 15 and 24 in the United States (National Center for Injury Prevention and Control, CDC, 2016). As a result of the sustained injuries, these youth face an extensive rehabilitation process with clinical staff who vastly differ in educational, financial, and cultural backgrounds to which they are often unable to relate, while attempting to adapt to changes imposed by their injuries. Adding to the complexities of the interactions is their mistrust in healthcare facilities, which is magnified by the presence and interrogation from police while receiving medical attention at a facility that expresses its primary concern as providing medical care at the time of injury (Liebschutz et al., 2010).

## The problem

Clinical staff report that African American youth post gunshot wound injuries are disengaged in the rehabilitation process and reluctant to participate due to struggles with trust, adaptation to injury, a lack of health literacy, and inadequate resources.

## **Proposed solution: Cultural competency training**

"It is the intersection of these constructs [cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire] that depicts the true process of **CULTURAL COMPETENCE**."

Joseph Campinha-Bacote (2002)



Accumulating evidence and policy guidelines call for culturally competent care as means to enhance health outcomes (Suarez-Balcazar et al., 2009). Cultural competency as described by Campinha-Bacote (2002) influences a clinicians' ability to become more aware of how his or her beliefs, biases, and values and the potential of imposing these views on others, developing knowledge of another culture's values and beliefs, and the ability to perform a culturally appropriate assessment. Evidence of

cultural competency training indicates the effectiveness of educational programs to enhance culturally appropriate interventions (Suarez-Balcazar et al., 2009).

Awareness of self

Historical mistrust

Desire to implement skills
eSimulations

Immerse in the population

Continuing the journey

Cultural Immersion

Values and beliefs influencing practice

Knowledge of African American culture

· Culturally responsive approach to care

Peer mentoring program development

· Unconscious bias, oppression, and privilege

### The Calhoun Cultural Competency Course (4C)

- The Calhoun Cultural Competency Course (4C) was designed to foster clinical competence skills of clinical staff (occupational and physical therapists, occupational therapy assistants, speech and language pathologists, nurses, physicians, social workers, and case managers) working with African American youth recovering from gunshot assault to reach collaborative and effective rehabilitation processes.
- ➤ 4C education is delivered through the use of evidence-based, interactive, lectures, eSimulations, a cultural immersion experience, reflective journaling, and facilitated debriefing accessed through the use of an online platform.
- AC contains six online modules, to be completed at the learner's pace within a 2-week time span, followed by a 90-minute biweekly live classroom session for facilitated debriefing and breakout discussions.
- The course effectiveness will we evaluated using a program evaluation design, including a mixed-methods pre-post measurement of changes in attitudes, knowledge, and application of cultural competency in everyday interactions with patients.

### **Future Implications**

- As the program designer, it is my hope that the introduction of such a training program will encourage open dialogue, professional growth, and opportunities within the field of occupational therapy for diversification and mentoring.
- After the pilot evaluation, it is my intention that 4C will be commercialized to reach a broad range of the clinical staff across the United States to expand cultural competency and quality of care widely.

#### References

Campinha-Bacote, J. (2002). The process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing*, 13, 181–184.

Liebschutz, J., Schwartz, S., Hoyte, J., Conoscenti, L., Christian Sr., A., Muhammad, L., . . . James, T. (2010). A chasm between injury and care: Experiences of black male victims of violence. *Journal of Trauma*, 69,1372–1378.

National Center for Injury Prevention and Control, CDC. (2016). SAS Output. Retrieved from https://webappa.cdc.gov/cgi-bin/broker.exe

Suarez-Balcazar, Y., Rodawoski, J., Balcazar, F., Taylor-Ritzler, T., Portillo, N., Barwacz, D., & Willis, C. (2009). Perceived levels of cultural competence among occupational therapists. American Journal of Occupational Therapy, *63*, 498–505.

#### References

- Alston, R. J., Gayles, T., Rucker, R., & Hobson, M. (2007). The centrality of race in rehabilitation: Views of former clients who are African American. *Journal of Applied Rehabilitation Counseling*, 38, 12–19.
- American Occupational Therapy Association. (2019). *Cultural Tool KIts*. Retrieved from American Occupational Therapy Association:

  <a href="https://www.aota.org/Practice/Manage/Multicultural/Cultural-Competency-Tool-Kit.aspx">https://www.aota.org/Practice/Manage/Multicultural/Cultural-Competency-Tool-Kit.aspx</a>
- American Occupational Therapy Association. (2017). *Rehabilitation & disability*.

  Retrieved from https://www.aota.org/Practice/Rehabilitation-Disability.aspx
- American Occupational Therapy Association. (2018, March). State OT statutes and regulations. Retrieved from https://www.aota.org/Advocacy-Policy/State-Policy/Licensure/StateRegs.aspx
- Balcazar, F. E., Kelly, E. H., Keys, C. B., & Balfanz-Vertiz, K. (2011). Using peer mentoring to support the rehabilitation of individuals with violently acquired spinal cord injury. *Journal of Applied Rehabilitation Counseling*, 42, 3–11.
- Brofenbrenner, U. (1977). Toward an experimental eclogy of human development.

  \*American Psychologist, 32, 513–531. doi:10.1037/0003-066X.32.7.513
- Butcher, F., Galanek, J., Kretschmar, J., & Flannery, D. (2015). The impact of neighborhood disorganization on neighborhood exposure to violence, trauma symptoms, and social relationships among at-risk youth. *Social Science & Medicine*, *146*, 300–306. doi:10.1016/j.socscimed.2015.10.013

- Cahill, S. M. (2016). AOTA societal statement on youth violence. Retrieved from https://www.aota.org/~/media/Corporate/Files/AboutAOTA/OfficialDocs/AOTA-Societal-Statement-on-Youth-Violence-final-for-web-posting.pdf
- Campinha-Bacote, J. (2002). The process of cultural competence in the delivery of healthcare services: A model of care. *Journal of Transcultural Nursing*, *13*, 181–184. doi:0.1177%2F10459602013003003
- Cheng, T. L., Emmanuel, M. A., Levy, D. J., & Jenkins, R. R. (2015). Child health disparities: What can a clinician do? *Pediatrics*, *136*, 961–968. doi:10.1542/peds.2014-4126
- Cohen, L., Davis, R., & Realini, A. (2016). Communities are not all created equal:

  Strategies to prevent violence affecting youth in the United States. *Journal of Public Health*, *37*(Suppl 1), 81–94. doi.org/10.1057/s41271-016-0005-4
- Cuevas, A. G., O'Brien, K., & Saha, S. (2016, May). African American experiences in healthcare: "I always feel like I'm getting skipped over." *Health Psychology*, 35, 987–995. doi:10.1037/hea0000368
- Cunningham, R., Knox, L., Fein, J., Harrison, S., Frisch, K., Walton, M., . . .

  Hargarten, S. W. (2009). Before and after the trauma bay: The prevention of violent injury among youth. *Annals of Emergency Medicine*, *53*, 490–500. doi:.1016/j.annemergmed.2008.11.014
- Delgado, D., Ness, S., Ferguson, K., Engstrom, P., Gannon, T., & Gillett, C. (2013).

  Cultural competence training for clinical staff: Measuring the effect of a one-hour

- class on cultural competence. *Journal of Transcultural Nursing*, *24*, 204–213. doi:10.1177%2F1043659612472059
- Devlieger, P., & Balcazar, F. (2010). "Bringing them back on the right track":

  Perceptions of medical staff on the rehabilitation of individuals with violently acquired spinal cord injuries. *Disability & Rehabilitation*, *32*, 444–451.

  doi:10.3109/09638280902919710
- Durocher, E., Gibson, B., & Rappolt, S. (2017). Rehabilitation as "destination triage": A critical examination of discharge planning. *Disability and Rehabilitation*, *39*, 1271–1278. doi:10.1080/09638288.2016.1193232
- Eiser, A. R., & Ellis, G. (2007). Cultural competence and the African American experience with health care: The case for specific content in cross-cultural education. *Academic Medicine*, 82, 176–183. doi:10.1097/ACM.0b013e31802d92ea
- FedEx. (2019). Posters: Custom poster printing & more. Retrieved from FedEx:

  https://www.fedex.com/en-us/printing/posters.html?gclid=EAIaIQobChMIxC8uK7Y4AIVk5OzCh3h\_ggvEAAYASAAEgLu3\_D\_BwE&cmp=KNC1001817-31-10-950-1110000-US-US-ENNBZ0001Z01ZCONV&s\_kwcid=AL!3806!3!308248192306!b!!g!!%2Bposter%
  20%2Bprinting&code=FXO%7CConversion%7
- Giffords Law Center to Prevent Gun Violence. (2016). Statistics of youth gun violence & gun access. Retrieved from https://lawcenter.giffords.org/youth-gun-violence-gun-access-statistics/

- Iverson, S., & Seher, C. (2017). Investigating the development of graduate students' multicultural competence in student affairs professional preparation. *Journal on Excellence in College Teaching*, 28, 77–97.
- Jones, J. (2007). Exposure to chronic community violence: Resilience in African American children. *Journal of Black Psychology*, *33*, 125–149. doi:10.1177%2F0095798407299511
- Kim, H., Colantonio, A., Dawson, D. R., & Bayley, M. T. (2013). Community integration outcomes after traumatic brain injury due to physical assault. *Canadian Journal of Occupational Therapy*, 80, 49–58. doi:10.1177%2F0008417412473262
- King, G. (2009). A framework of personal and environmental learning-based strategies to foster therapist expertise. *Learning in Health and Social Care*, 8, 185–199.
- Kroll, T. (2008). Rehabilitative needs of individuals with spinal cord injuries resulting from gun violence: The perspective of nursing and rehabilitation professionals.

  \*Applied Nursing Research\*, 21, 45–49. doi:10.1016/j.apnr.2006.06.001
- Liebschutz, J., Schwartz, S., Hoyte, J., Conoscenti, L., Christian Sr., A., Muhammad, L., . . . . James, T. (2010). A chasm between injury and care: Experiences of black male victims of violence. *Journal of Trauma*, 69, 1372–1378.

  doi:10.1097%2FTA.0b013e3181e74fcf
- Manganello, J. A. (2007). Health literacy and adolescents: a framework and agenda for future research. *Health Education Research*, *23*, 840–847. doi:10.1093/her/cym069

- Manganello, J. A., & Sojka, C. J. (2016). An exploratory study of health literacy and African American adolescents. *Comprehensive Child and Adolescent Nursing*, *39*, 221–239. doi:10.1080/24694193.2016.1196264
- Manley, N. R., Fabian, T. C., Sharpe, J. P., Magnotti, L. J., Croce, M. A., & Martin, A. (2017). Good news, bad news: An analysis of 11,294 gunshot wounds (GSWs) over two decades in a single center. *Journal of Trauma and Acute Care Surgery*, 84, 58–64. doi:10.1097/TA.000000000001635
- Microsoft. (2019). *Microsoft Office*. Retrieved from https://products.office.com/en-US/compare-all-microsoft-office-products-b?tab=1&OCID=AID737190\_SEM\_4n7TMSIC&MarinID=s4n7TMSIC|2673220 37038|microsoft%20office|e|c||51726135996|kwd-11647891&lnkd=Google\_O365SMB\_NI&gclid=EAIaIQobChMI8qbb9djG4AIVjbrACh2lrA8nEA
- Mikhail, J., & Nemeth, L. (2016). Trauma center based youth violence prevention programs: An integrative review. *Trauma, Violence, & Abuse, 17*, 500–519. https://doi.org/10.1177%2F1524838015584373
- Moore, D. C., Yoneda, Z. T., Powell, M., Howard, D. L., Jahangir, A. A., Archer, K. R., . . . Sethi, M. K. (2013). Gunshot victims at a major level I trauma center: A study of 343,866 emergency department visits. *Journal of Emergency Medicine*, 44, 585–591. doi.org/10.1016/j.jemermed.2012.07.058

- National Board for Certification in Occupational Therapy. (2017). *Certification renewal*.

  Retrieved from
  - https://www.nbcot.org/en/Certificants/Certification#PracticeStandards
- National Cancer Institute. (2018). *Theory at a glance: A guide for health promotion practice*. Retrieved from <a href="https://learn.bu.edu/bbcswebdav/pid-5853218-dt-content-rid-">https://learn.bu.edu/bbcswebdav/pid-5853218-dt-content-rid-</a>
  - 21415466 1/courses/18sprgsarot610 ol/course/course documents/sarot610 w5
    TheoryataGlance.pdf
- National Center for Injury Prevention and Control, CDC. (2016). *SAS Output*. Retrieved from <a href="https://webappa.cdc.gov/cgi-bin/broker.exe">https://webappa.cdc.gov/cgi-bin/broker.exe</a>
- Oswalt, A. (2008, January 17). Urie Bronfenbrenner and child development. *Mental Help*. Retrieved from https://www.mentalhelp.net/articles/urie-bronfenbrenner-and-child-development/
- Palombaro, K., Dole, R., & Black, J. (2015). Curricular integration and measurement of cultural competence development in a group of physical therapy students. *Journal of the Scholarship of Teaching and Learning*, 15(5), 82–96. doi:10.14434/josotl.v15i5.13505
- Patient Protection and Affordable Care Act of 2010, 42 U.S.C. § 18001.
- Paquette, D., & Ryan, J. (2001, 7 12). *Brofenbrenner's ecological systems theory*.

  Retrieved from http://www.floridahealth.gov/AlternateSites/CMS
  Kids/providers/early\_steps/training/documents/bronfenbrenners\_ecological.pdf

- Perry, A., Woodland, L., & Brunero, S. (2015). eSimulation: A novel approach to enhancing cultural competence within a health care organisation. *Nurse Education in Practice*, *15*, 218–224. doi:10.1016/j.nepr.2014.11.013
- Pitner, R. O., Priester, M. A., Lackey, R., & Duvall, D. (2018). A dedicated diversity course or an infusion model? Exploring which strategy is more effective in social work pedagogy. *Journal of Social Work Education*, *54*, 49–60. doi:10.1080/10437797.2017.1314839
- Salary.com. (2018, March). Occupational therapist salaries in Memphis, TN. Retrieved from https://www1.salary.com/TN/Memphis/Occupational-Therapist-salary.html
- Schopp, L. H., Shigaki, C. L., Bounds, T. A., Stucky, R. C., & Conway, D. L. (2006).

  Outcomes in TBI with violent versus nonviolent etiology in a predominantly rural setting. *Journal of Head Trauma Rehabilitation*, *21*, 213–225.

  doi:10.1097/00001199-200605000-00002
- Steed, R. (2014). Caucasian allied health students' attitudes towards African Americans: Implications for instruction and research. *ABNF Journal*, *25*, 80–85.
- Suarez-Balcazar, Y., Rodawoski, J., Balcazar, F., Taylor-Ritzler, T., Portillo, N., Barwacz, D., & Willis, C. (2009). Perceived levels of cultural competence among occupational therapists. *American Journal of Occupational Therapy*, *63*, 498–505. doi:10.5014/ajot.63.4.498
- Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, *38*, 1161–1173. doi:10.1037/0003-066X.38.11.1161

- Teal, C. R., Gill, A., Green, A., & Crandall, S. (2012). Helping medical learners recognise and manage unconscious bias toward certain patient groups. *Medical Education*, 46, 80–88. doi:10.1111/j.1365-2923.2011.04101.x
- Teal, C. R., Shada, R. E., Gill, A. C., Thompson, B. M., Fruge, E., Villareal, G. B., & Haidet, P. (2010). When best intentions aren't enough: Helping medical students develop strategies for managing bias about patients. *Journal of General Internal Medicine*, 25(Suppl 2), 115–118. doi:10.1007/s11606-009-1243-y
- Torrino, G. C. (2015). Examining biases and white privilege: Classroom strategies that promote cultural competence. *Women & Therapy*, *38*, 295–307. doi:10.1080/02703149.2015.1059213
- Transcultural C.A.R.E. Associates. (2015). *Transcultural C.A.R.E.* Retrieved from transculturalcare.net/iapcc-r/
- U.S. Department of Health and Human Services, Office of Minority Health. (2017, May 02). *Profile: Black/African Americans*. Retrieved from Office of Minority Health: https://www.minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=61
- U.S. Postal Service. (2019). Stamps. Retrieved from https://store.usps.com/store/results/stamps/\_/N-9y93lv
- Vistaprint. (2019). Charcoal chalkboard standard business card. Retrieved from https://www.vistaprint.com/designs/B73-1206395/charcoal-chalkboard-standard-business-cards.aspx?pspid=B73CMB1206395&type=pla&device=c&psloc=9013469&pstid=pla-

- 554879607979&crtv=308594289590&psite=mkwid%7cJ1jyTojC&pscid=141435 7567&psagid=62941103258&psint=&
- Voisin, D. R., Bird, J. D., Hardestry, M., & Shiu, C. S. (2011). African American adolescents living and coping with community violence on Chicago's southside. *Journal of Interpersonal Violence*, 26, 2483–2498. doi:10.1177%2F0886260510383029
- Weech-Maldonado, R., Dreachslin, J., Brown, J., Pradhan, R., Rubin, K., Schiller, C., & Hays, R. (2012). Cultural competency assessment tool for hospitals: Evaluating hospitals' adherence to the culturally and linguistically appropriate services standards. *Health Care Management Review*, *37*, 54–66.

  doi:10.1097%2FHMR.0b013e31822e2a4f
- Weech-Maldonado, R., Elliott, M., Pradhan, R., Schiller, C., Dreachslin, J., & Hays, R. (2012). Moving towards culturally competent health systems: Organizational and market factors. *Social Science & Medicine*, 75, 815–822. doi:10.1016/j.socscimed.2012.03.053

Wix. (2019). *Wix*. Retrieved from https://www.wix.com/ XLSTAT. (2017). *XLSTAT-Base*. Retrieved from

https://www.xlstat.com/en/solutions/base

# Curriculum Vitae

