Introduction

Research problem:
- There is a severe and persistent health care discrepancy between majority and minority populations in the U.S.
- This discrepancy spreads to professions such as primary care physicians, physical therapy, occupational therapy, social work, and emergency care respondents.
- Possible causes for this include personal biases, lack of knowledge, socioeconomic status, insurance, and lack of cultural competence.
- One of the major limitations to improving the skill and awareness of current health care is the time and training that is necessary in order to make improvements.
- If training and experience can be integrated into health care workers’ educational curriculum, cultural competence can be improved before entering the medical field.

Purpose of the study:
- Therefore, the purpose of this study is to document and statistically analyze a methodic training session, combined with hands-on experience, in order to improve health care students’ cultural competence.

Specific aims or objectives
- To use the model developed by Suarez-Balcazar (2009) as (1) cultural awareness, (2) cultural knowledge, (3) cultural skills, and (4) practice and application of cultural competence in order to develop a 4 week training guide.
- To assess the effectiveness of a cultural competency training program.
- To provide hands-on experience with refugee families in the community to practice skills learned in training sessions.
- To improve university awareness of a culturally diverse population.
- To collect and analyze introductory data to provide a basis for building social connections between college students and refugee families in the surrounding community.
- To implement a permanent (ongoing) cultural competency program for JMU students who have a healthcare focus of study.

Research hypotheses or guiding questions
- Cultural competency training that includes in-class instruction and hands-on experience will provide participants with a well-rounded understanding of cultural competency that will translate well into practice.
• Individuals who receive specific training on cultural competency that has been developed under an established framework model will have higher levels of cultural competency.
• Hands-on experience will result in higher scores on the Cultural Competency Assessment Instrument.
• Students who solely receive instruction by participating in their daily health care courses will not show significant changes in their scores on the Cultural Competency Assessment Instrument.

Significance of the study

- Minority populations are expected to make up over 40 percent of the United States population by 2035.
- The combination of refugee immigration over just the past 10 years yields an astounding number, and this specific population represents a large portion of the overall minority population.
- Refugees also have a deep connection to their culture and have often times experienced trauma before receiving their Green Card and permanency (Fondacaro & Harder, 2014)
- Also, the refugee population is largely unfamiliar with the health care system in Western society, and this puts them at risk for becoming subject to injustices in health care
- In order to provide fair, unbiased treatment to all individuals, health care professionals must be aware of cultural differences and must be willing to accommodate and adjust treatment plans or interactions
- Griswold, Zayas, Kernan, & Wagner (2007) reported that medical schools which provided adequate cultural competence in their curriculum produced students who were more culturally competent than their peers.
- Providing fair and equal treatment to all patients is critical to the health care system and cultural competence is a major factor in achieving this.

Literature Review

Theory and supportive rationale

- Refugee populations experience the negative effects of disparity in society as their cultural identities are challenged when navigating a community with different beliefs and traditions from their own, learning a new language, and learning new systems for health, welfare, and education
- Healthcare professionals are in an optimum position in society to address the needs of this marginalized population and advocate for change in society to bridge these gaps.
- According to Marilyn Cochran-Smith, a social justice framework is one that “actively addresses these dynamics of oppression, privilege, and stratification
along socially constructed group lines” (as cited in Sensoy & DiAngelo, 2009, p. 350).

- She continues to suggest that “social justice in education means guiding students in critical self-reflection of their role in these unequal relationships and encouraging the analysis of the mechanisms of disparity and stratification and their abilities to challenge and remediate these hierarchies”

- It has been suggested that cultural competence on the part of health care providers and organization may be a mechanism to reduce racial and ethnic disparities in care (Beach, et al., 2005).

- Campinha-Bacote states that cultural competence is demonstrated 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/her practice to provide effective interventions for people from various cultures”

- Cultural competence training shows promise as a strategy for improving the knowledge, attitudes, and skills of students in health care fields as they learn to demonstrate sensitivity and responsiveness to a client’s culture and environment (Beach, et al., 2005).

- In two separate bodies of literature, Suarez-Balcazar and Campinha-Bacote independently identified four key components of cultural competency: (1) cultural awareness, (2) cultural knowledge, (3) cultural skills, and (4) practice and application of cultural competence (Campinha-Bacote, 2006; Suarez-Balcazar, 2009).

- According to Suarez-Balcazar and Rodakowski, “becoming culturally competent is an ongoing process of personal growth that results in professional understanding and ability to adequately serve individuals who look, think, and behave differently from us” (Suarez-Balcazar et al., 2009).

- Reflected in the literature is the need for a more careful examination of formal and informal training for students in health care programs that introduce and expose them to issues of diversity and cultural competency.

**Related studies and methods**

- Connecting Cultures program at the University of Vermont is a nonprofit training clinic established in 20007 that was designed to promote cultural competence in clinical psychology graduate students
  
  o Connecting Cultures connects the social justice framework and ecological model to create a culturally sensitive context from which trainees can learn to effectively work with refugees
  
  o The students are given the opportunity to engage with refugee communities at multiple levels and ensures that individuals are viewed within the context of their social environments.
  
  o This approach includes four unique components: (a) community-based outreach, (b) direct clinical services, (c ) mental health research and evaluation, and (d) professional training
The community-based outreach services provide an opportunity for students to interact with their clients on a regular basis, teach them how to establish rapport, and operate within an environment different than their own.

“96% reported their involvement in Connecting Cultures trainings has increased their knowledge related to working with refugees” and the majority of participants reported that they felt that their training experience in Connecting Cultures definitely impacted their work and efficacy as a culturally competent professional.

- Hill and his colleagues chose to address cultural competency training through an interprofessional lens:
  - Interprofessional education is defined as “occasions when two or more professions learn from and about each other to improve collaboration and the quality of care”
  - Social work and medical students enrolled in this intervention program attended eight sessions, three hours each, for a total of 24 hours of in-class training over eight weeks.
  - Throughout these intervention sessions, the following four themes were revisited: (1) understanding social work and medical students’ perspectives on working with groups who are socially excluded, (2) the legal and policy context, (3) service user/care perspectives, (4) towards a more creative practice.
  - Student responses to the training were reported in post-test surveys and showed personal growth, increased knowledge about how the law disenfranchises asylum seekers, and developing comfortability with discussing and identifying with differences and prejudices.
  - This training could be used to help reduce social exclusion by listening to people, recognizing their strengths and making a commitment to practice that challenges and seeks to understand the experiences of marginalised peoples.

- Griswold and colleagues conducted a qualitative study to examine cultural competency displayed in the experiences of 27 first and second year medical students during patient encounters:
  - Each student was briefed by an anthropologist and a refugee social worker for one hour before evaluating a refugee patient. The medical students then did an initial evaluation of the refugee individual using an interpretive service. Finally, the students participated in an individual or group semi-structured interview.
  - This second interview was conducted by the anthropologist who did the initial training on the patient encounters.
The initial training that was conducted included a definition of cultural competency, what it means to be a refugee, and how to use interpretive services. The semi-structured interview addressed (1) overall encounter experience, (2) communication challenges, (3) cultural lessons, (4) clinical examination, (5) psycho-social issues, (6) emotional self-reflection, and (7) suggestions for curriculum development. The researchers concluded that hands-on, clinical experience was found to be beneficial for medical students. Interpretive service, refugee awareness, and cultural humility were found to have had the most impact on culturally sensitive practice. The researchers suggest medical school curriculum would benefit from more hands-on experience as it provides a unique opportunity to learn and experience cultural awareness and sensitivity.

Design and Procedures of the Study

1. Subjects
   a. The focus of this study was to recruit undergraduate students at JMU who are either pre-occupational therapy or social work majors.
   b. It was our aim to have 20-30 volunteers.
      i. 8-10 from pre-OT; 10-20 from social work.
   c. The researchers recruited participants in-person via presentation to the class or a meeting that were determined by the Director and President.
   d. Participants were screened for previous hands-on experience with refugees, and had one or less personal interactions with a refugee.
   e. Students were academic Juniors or Seniors to ensure that they had received courses specifically designed for their majors.

2. Materials Used
   b. Handouts for the training and other classroom materials.
   c. Feedback surveys for the refugee families.

3. Procedures

   Study design
   a. All 27 participants began the study by taking a modified, student-applicable version of the Cultural Competence Assessment Instrument. The assessment was given in-person at a predetermined meeting time. This provided a baseline measure of cultural competence for each individual.
   b. Then, the students who were assigned to the experimental group underwent a four session training seminar taught by the researchers. Each hour of the training session addressed a single component of
cultural competency according to the model defined by Suarez-Balcazar (2009) as (1) cultural awareness, (2) cultural knowledge, (3) cultural skills, and (4) practice and application of cultural competence.

c. At the end of the training session, the participants in the experimental group took the modified Cultural Competence Assessment Instrument again. This measurement was compared to the baseline in order to assess the effectiveness of a lecture style intervention on improving cultural competence.

d. Then, the same participants in the experimental group chose four hands-on interaction experiences with refugees in the community. There was a total of six recreation options from which to choose, each lasted approximately an hour and a half. There was a minimum of 12 refugee individuals at each event. The refugee families that attended were hand-selected to ensure that they were able to communicate in English at a basic level, had an interest in integrating into the Harrisonburg community, and were willing to attend public events. The participants interacted, shared in a learning experience, and practiced cultural competence with the culturally diverse families that attended.

e. The event dates ranged between the months of September to December. After the last event date had passed, all 27 participants took the modified Cultural Competence Assessment Instrument a final time. This measurement assessed the impact of a hands-on learning experience in developing cultural competency. The researchers will schedule open meeting times if any of the participants would like to further discuss the information that was learned.

4. Data Analysis
   a. The Cultural Competence Assessment Instrument provided the researchers with quantitative data regarding the effectiveness of their intervention. This quantitative data was coded by the researchers and analyzed by Dr. Andrew Peachy, a professor in the Health Science department at James Madison University. Dr. Peachy conducted t-tests, an analysis of covariance (ANCOVA), and post-hoc statistical tests to search for/determine any statistical significance between pre-test and post-test scores.

5. Results
   a. Quantitative Data
      i. There was a statistically significant difference between the pre-test scores of the social work students and the pre-test scores of the pre-occupational therapy students
         1. According to the Cultural Competency Assessment Instrument and data analysis, the social work students
were more culturally competent than the pre-OT students from the beginning

ii. No statistical significance was found between pre-test and first post-test (after training session) for any participants in the experimental group, regardless of their major.

iii. When participants in the experimental group were split into their respective majors (pre-occupational therapy and social work), researchers were able to identify the clear statistical significance of their intervention

iv. Statistical significance (p-value = .033) was found between the pre-test scores of the pre-occupational therapy students in the experimental group and their second post-test scores; indicating the effectiveness of the training and hands-on experience provided by this intervention to improve cultural competence

6. Application of findings
   a. According to the Cultural Competency Assessment Instrument and data analysis, the social work students were more culturally competent than the pre-OT students from the beginning
      i. This finding could have implications for review and modification of future undergraduate curriculum to better prepare students in health care fields of study for professional interactions with and treatment of culturally diverse populations
   b. Training sessions, complimented with hands-on experience is most effective in improving student’s level of cultural competency