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### Community Health Worker Certification Program - Motivational Interview, Advocacy, Communication and Conflict Resolution

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**Community Health Worker Certification Program - Motivational Interview, Advocacy,  
Communication and Conflict Resolution**

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## **Community Health Worker Certification Program - Motivational Interview, Advocacy, Communication and Conflict Resolution**

### **Abstract**

**Background:** Rural population accounts for 15% of the population in the United States of America. Rural residents have a higher risk of health disparities than urban populations. The significant health inequities in the underprivileged population include a higher incidence of chronic diseases, lack of access to healthy foods, health care, health insurance, unhealthy eating habits, poor socioeconomic status, cultural and language barriers, and lack of health literacy.

**Problem:** The population in Fresno and Tulare County in Central Valley, California is underprivileged, lack access to proper health care and has higher rates of health disparities. The Save the Children organization's Community Health Workers (CHWs) serve these counties.

**Context:** Save the Children (STC) is a global organization collaborating with the University of San Francisco, developing a curriculum to educate community health workers (CHWs) in Fresno, Tulare County, in California. **Proposed Interventions:** Curriculum and five teaching modules will be developed in a free canvas platform with topics including Motivational interviewing, Advocacy, Communication skills and conflict resolution. Each teaching module will include learning objectives, roleplays, and case studies to solve. **Proposed Outcome**

**Measures:** The study participants' confidence level, knowledge, and competency will be evaluated before and after each teaching session with a five-point Likert scale survey.

Additionally, a qualitative survey about the effectiveness of the teaching program and periodical feedback will be received before and after this program.

*Keywords:* community health workers, lay health worker, home coordinators, motivational interviewing.

## **Community Health Worker Certification Program - Motivational Interview, Advocacy, Communication and Conflict Resolution**

### **Background**

The rural population accounts for 15% of the total number of people in the United States of America (USA) (The Centers for Disease Control and Prevention [CDC], 2019). According to Health Resources and Services Administration (HRSA, 2022), rural populations are people who live in rural areas that are not urban. HRSA (2022) consider the term “rural” to include all people, housing, and territory that are not within an urban area. Rural residents have a higher risk of health disparities than urban populations (CDC, 2022).

The United States Census Bureau (2018) revealed that Latinos are the most significant ethnic or racial minority in America, making up 58.9 million people or 18.1% of the total population. As of 2010, the largest minority group in rural areas are the Latinos, adding up to 9.3 percent of rural populations (Housing Assistance Council [HAC], 2012). More than one-quarter of the U.S. population is projected to be Latino population by 2060 (Figueroa et al., 2021). The significant health inequities in the underprivileged population include a higher incidence of chronic diseases, lack of access to healthy foods, unhealthy eating habits, lack of access to health care, poor socioeconomic status, lack of health insurance, cultural and language barriers, and lack of health literacy (CDC, 2019).

### **Problem Description**

Six in ten Americans live with at least one chronic disease, such as cancer, heart disease, or diabetes (CDC, 2019). In the U.S., the main demographic contributing to these chronic disease cases is the Latinx minority group (Vega et al., 2009). The key lifestyle risk factors associated with chronic disease are tobacco use, poor nutrition, lack of physical activity and excessive

alcohol use (CDC, 2022). These preventable chronic health issues in the rural population are the leading driving force of increased mortality, disability, and health care costs in the USA (AJMC, 2021). According to the CDC (2022), 90% of the national health care costs are used for managing chronic health conditions and mental health issues. Furthermore, low health literacy is associated with higher health care utilization and costs (Haun et al., 2015)

Low health literacy rates in Hispanics impacts their ability to make critical health decision. An exploratory study by Becerra et al. (2017) used the California health interview survey to learn about the critical determinant of low health literacy in the minority immigrant Hispanic population. Becerra et al. (2017) concluded that health literacy factors include poverty, lack of consistent health insurance, and limited English language proficiency. Furthermore, low health literacy inadvertently affects the overall health of the patient. Hickey et al. (2018) found that Hispanic participants scored higher (41%) than the white participant (16%) for inadequate health literacy measures. Hence, it is evident that low functional health literacy impacted a patient's ability to comprehend their healthcare and make important decisions regarding their health and was associated with multiple chronic conditions (Hickey et al., 2018).

Inadequate health insurance negatively affects health and wellbeing and is the main barrier to access to health care and proper screening. A scoping review by Mondragon et al. (2016) highlighted that risk of acquiring a non-communicable disease is paired with decreased health care access among Hispanics. Hispanics are vulnerable to significant health risk factors such as obesity, tobacco use, teen pregnancy, and substance abuse (Mondragon et al., 2016). Furthermore, the low socioeconomic status of many Hispanics relates to their uninsured rate because employer-based health insurance is the leading portal for health care services in the USA

(James et al., 2017). However, the Affordable care act in 2014 has reduced this burden, but the knowledge of using the proper resources remains unknown (James et al., 2017).

Additionally, per CDC (2019), rural populations have a higher incidence of unhealthy behavior and tobacco and substance abuse. Several unhealthy behaviors result in poor health outcomes, such as smoking, substance use, lack of exercise, unhealthy eating habits, lack of exercise, and lack of health screening (CDC, 2022). It is evident from the literature that the rural populations have poor health outcomes and face several health inequalities compared to the urban population. Most chronic health issues in rural communities are preventable and manageable with proper and timely interventions, especially by improving healthy behaviors. Early identification, such as proper screening, educational awareness, utilizing effective communication and advocacy skills to encourage healthy lifestyle modifications, and culturally competent support from health care providers, would be beneficial in curbing these health inequities in the rural Latinx population.

### *Community Health Workers*

Community Health Workers (CHWs) are a crucial part of the community providing care, education, and advocacy for residents. The term CHWs is frequently used for the frontline public health workers serving their local community (CDC, 2019). Other names used for CHWs are "lay health workers, home visitors, Promotoras de Salud, promotores, health advocates, lay health educators, community outreach workers, health coaches, and patient navigators" (CDC, 2019; Bureau of Health Workforce, n.d.). The use of CHWs is not widespread in the USA. Most states, including California, have not used the services of CHWs in local communities to their fullest potential but these states do have a standardized certification program to practice as a CHW. (CDC, 2019). However, in the last fifteen years, the CHW workforce has expanded dramatically

and has been recognized as public health workers and employed for a pay or as volunteer across the USA and around the world (CDC, 2019).

Hispanic communities are often underserved due to a scarcity of culturally and linguistically appropriate programs (CDC, 2019). CHWs are the connecting entity between the underserved population in the community and health care systems (CDC, 2019). Moreover, CHWs are effective in reaching this population due to shared common cultural backgrounds, language, food habits, housing, and economic status. (Balcazar et al., 2011). These health care workers can establish trusting relationships and rapport with the community while promoting healthy behaviors (Rosenthal et al., 2010). CHWs have been used in several health promotion programs addressing outcomes such as asthma, hypertension, obesity, cancer screening, infectious disease, and maternal and child health (Balcazar et al., 2011; Kangovi et al., 2017; Perry et al., 2014; Rosenthal et al., 2010). Therefore, introducing CHWs with adequate skills training is crucial in delivering quality service in underserved areas and closing health disparities (Perry et al., 2014).

### *Motivational Interviewing*

Motivational Interviewing (MI) is an evidence-based communication skill that helps alleviate ambivalence associated with behavior change and enhance healthy lifestyle modifications (Magill & Hallgren, 2019). MI has a unique way of communicating and approaching the patients by not educating or suggesting a change but enabling the patients to express their desire to change and leveraging the change talk into the actual behavior change (Keeley et al., 2016). The core skills of MI include using a technique described by the abbreviation OARS: asking Open ended questions (O), offering Affirmation (A) Reflective listening statements(A) Summarizing the conversation (S) (Rosengren, 2018). Literature

supports that using MI skills has proven effective in changing high-risk behaviors in community settings (Katigbak et al., 2015). Although initially MI had been primarily used for substance abuse counselling, there are other health care avenues where MI has been proven effective such as adherence to treatment or medications, lifestyle modifications and even mental health realms (Edwards et al., 2015).

Health care professionals trained in MI have proven to elicit positive behavioral outcomes in their patients. An experimental study by Edwards et al. (2015) revealed that healthcare providers improved and sustained their knowledge and confidence in counseling abilities after learning brief MI skills. A meta-analysis results showed statistically significant effects of MI in intervention group of medical care regarding various health behaviors in comparison to standard treatment in control group. Statistically significant effect sizes were reported for physical activity, body weight, substance consumption, dental hygiene, willingness to change behavior, treatment adherence, and mortality (Bischof et al., 2021). Additionally, the literature suggests that enhancing the advocacy and communication skills among the community health workers would lead to better care rendered to the community resulting in improved health outcomes (Ingram et al., 2008; Logan & Castañeda, 2020; Reinschmidt et al., 2015; Sabo et al., 2013)

### ***Setting***

Save the Children is a global organization with a local chapter operating in the Fresno and Tulare County areas of the Central Valley in California, collaborating with the University of San Francisco (USF), to develop a comprehensive curriculum to educate their workers at the level of community health worker certification. The population in these two counties are



underprivileged, lack access to proper health care and has higher rates of health disparities. The Save the Children organization's CHWs serve these counties.

### **Specific Aim**

This project aims to develop, implement, and evaluate a curriculum consisting of toolkits, create a learning platform on canvas and teach five hour-long class sessions for the Save the Children organizations' CHWs about motivational interviewing, advocacy, communication, and conflict resolution skills. The effectiveness of these class sessions will be measured in brief pre- and post- surveys, aimed at knowledge acquisition.

#### *The Objectives*

1. The CHWs will have a 10% increase in knowledge from the pretest scores about advocacy, motivational interviewing, communication, and conflict resolution skills.
2. The CHWs will gain confidence in using the learned skills from the five sessions. A return demonstration of role-plays will measure the desired skills outcomes.
3. The CHWs will be able to demonstrate self-efficacy in using advocacy, motivational interviewing, communication, and conflict resolution skills.

### **Available Knowledge**

#### **PICOT Question**

The high rate of health inequities among rural populations, particularly in Latinas, leads to the question, "Among a rural migrant (or Latinx) population, how does the introduction of the Community Health Worker role using motivational interviewing, advocacy and interpersonal skills improve positive health outcomes and reduce health disparities?".

## **Search Methodology**

A comprehensive electronic database search for peer-reviewed English language articles from 2010 to 2022 was performed in PubMed, Scopus, and Cumulative Index to Nursing and Allied Health Literature Complete (CINAHL complete). Keywords and Boolean phrases included *community health worker\* OR lay health worker\* OR promotoras OR "barefoot doctor" OR "home visitor "AND "motivational interviewing," community health worker OR lay health worker*. Initially, PubMed revealed 37 studies, Scopus yielded six articles, and CINAHL retrieved 51 results. Furthermore, the search strategy was extended to search the reference list of the chosen study, and a Scopus search of other databases yielded similar study results.

The author used inclusion criteria to narrow the search process, including rural populations, community health worker's training in MI and studies conducted in the USA and other countries. This refining process retained 26 studies, within which eleven were selected after duplicate studies were located and removed from the search results. Additionally, the writer used the Johns Hopkins Nursing Evidence-Based Practice (JHNEBP) (Dang & Dearholt, 2017) appraisal tool to evaluate the evidence's quality and strength. Selected and appraised studies were laid out on the evidence table (Appendix C). There were two studies in each level I and level II quality and one nonexperimental level III study with good quality. Five of the chosen studies were level V literature reviews. Lastly, one clinical practice guideline article on level IV of good strength was included.

## **Integrated Review of the Literature**

Although there is a paucity of literature regarding Community Health Workers (CHWs) training in Motivational Interviewing (MI), this literature review has identified a few themes

supporting the PICOT question and the proposed intervention of educating the CHWs in MI to improve health outcomes in the rural population.

### ***CHWs' Role in Rural Areas***

The CHWs are crucial in improving the overall quality of life in underserved and rural populations (Brown et al., 2022; Portillo et al., 2020; Schroeder et al., 2018). Better understanding and knowledge about the risk factors associated with poor health outcomes empowers the CHWs to persuade the community residents effectively to adopt a healthy lifestyle and behavioral modifications (Brandford et al., 2019; Brown et al., 2022; Portillo et al., 2020; Schroeder et al., 2018). CHWs are available within the community in their geographical area, unlike other healthcare providers, which promotes access to healthcare information and guidance readily available and is more convenient to the community residents (Spencer et al., 2010).

Furthermore, Portillo et al. (2020) assert that CHWs provide culturally and linguistically appropriate care as they share a similar background to the locals. Hence the residents are comfortable and open to sharing their fears and barriers to CHWs achieving their healthy life goals. CHWs have many roles in health care improvement in their community. Preventive health care screening, health education, motivation, behavioral change, and lifestyle modifications are the crucial avenues where CHWs play a crucial part (Brandford et al., 2019; Brown et al., 2022; Portillo et al., 2020; Schroeder et al., 2018). A systemic review by Schroeder et al. (2018) revealed that CHWs play various roles in interventions, although they most commonly deliver health behavior education or counseling.

### ***The Importance of CHWs' Training***

Proper education and training are imperative in providing quality care to the people. CHWs lack adequate training and certification in several states in the USA (Glenton et al., 2013;

Schroeder et al., 2018). Having sufficient knowledge about the health care conditions, contemporary health care requirements, screening protocols, communication/counseling skills, and options for healthy choices would equip the CHWs to guide the residents to make an informed health care decision (Brandford et al., 2019; Dewing et al., 2014; Louwagie et al., 2014; Portillo et al., 2020; Schroeder et al., 2018). Indeed, it improves overall health literacy in the community resulting in positive, healthy choices.

Literature supports that CHWs training in MI is crucial to influence the residents to change their high-risk behaviors such as smoking, tobacco use, medication non-adherence, lack of physical activity, and poor eating habits (Barrett et al., 2018; Brandford et al., 2019; Dewing et al., 2014; Naar et al., 2021; Schroeder et al., 2018). In addition, MI education improves CHWs' role and competency and enables them to provide and execute proper MI techniques (Brandford et al., 2019; Brown et al., 2022; Louwagie et al., 2014; Portillo et al., 2020). Brandford et al. (2019) identified that periodical evaluation, constructive feedback, and refresher MI sessions have proven effective in retaining the learned MI skills. Moreover, CHWs identified that an educational session about MI skills empowered them to be confident and competent enough to face the residents and provide better guidance and motivation (Brandford et al., 2019).

### ***Impact of CHWs' MI education on behavior change***

Motivational Interviewing is a practical communication skill used to motivate people to behavior change (Louwagie et al., 2014; Portillo et al., 2020). Educating the CHWs in MI skills to influence the community resident into healthy lifestyle and behavior change could result in an inevitable outcome. The MI techniques are proven effective in reducing high-risk behaviors such as smoking, substance abuse, poor eating habits, and lack of exercise (Barrett et al., 2018; Brown et al., 2022; Louwagie et al., 2014). Similarly, MI is vital in improving preventive health care

measures such as cancer, tuberculosis, and colorectal screening (Brandford et al., 2019; Brown et al., 2022). Behavioral modification is achieved through proper use and consistent approach of the community members using MI techniques (Portillo et al., 2020). Furthermore, trained CHWs used MI techniques to improve medication adherence, follow-up treatment adherence, and seek health care on time (Louwagie et al., 2014).

### ***Lower health care cost***

CHWs trained in MI skills in rural areas has proven to provide cost-effective services in rural and underserved areas (Brown et al., 2022; Portillo et al., 2020). A resident motivated to change behavior would follow a healthy lifestyle that minimizes health care costs associated with poor health habits. For instance, proper screening for cancer, decreasing cancer-related complications and death, quitting smoking reducing lung cancer or other lung infections, and healthy eating habits/ routine exercises lower cardiovascular disease and obesity. Moreover, CHWs use MI skills to improve medication adherence resulting in better health outcomes and minimizing relapse and frequent hospitalization (Barrett et al., 2018; Brandford et al., 2019; Dewing et al., 2014; Naar et al., 2021; Schroeder et al., 2018). Furthermore, utilizing CHWs trained in MI skills is a proven, cost-effective intervention in which the cost savings could be substantial, given the tremendous health care costs associated with modifiable risk factors and complications from chronic health issues (Brown et al., 2022; Portillo et al., 2020).

### **Synthesis of Evidence**

This literature review reveals strong and compelling evidence that CHWs trained in MI promote healthy behaviors in the community. However, evidence shows that CHWs lack standardized competency training and certification. Surprisingly, there is a lack of literature pertaining CHWs training in MI and the use of those skills in the rural population. Also, some

studies were conducted in countries outside of the US, such as developed and developing countries. So, there is a considerable need for further research in the US about utilizing CHWs, their training, and the effects of MI skills in the community. Particularly randomized control studies, as opposed to qualitative studies and literature reviews, could yield higher-level evidence. Although not all the studies elaborated on how the CHWs were trained to use MI skills, utilizing the prepared scholarly trainer would be beneficial. Lastly, the study participants have various backgrounds, such as counselors, nurses, and the local community social workers but are generalizable as health care professionals. However, future studies should include many study participants with similar educational backgrounds to produce statistically significant results with a higher level and quality evidence.

### **Rationale**

The conceptual framework for this project consists of two theories: the social cognitive theory (SCT) and the transtheoretical model (TTM). In 1960, Mr. Albert Bandura started the social learning theory, which was developed into SCT in 1986 (Boston University School of Public Health [BUSPH], 2019). The SCT posits that dynamic and reciprocal interaction of the person, behavior, and environment results in learning (BUSPH, 2019) (Appendix D). The SCT constructs explain the health disparity and poor health outcomes in the rural population guided by the literature review (Sun & Lyu, 2020; Tougas et al., 2015). The emphasis on social influence and external and internal social reinforcement is the unique feature of SCT, which aligns with this project as the CHWs are the primary source of social influence and reinforcement in the community (Katigbak et al., 2015). Additionally, personal attributes such as knowledge, motivation, and thinking should be influenced to promote positive behavioral outcomes (Tougas et al., 2015). For instance, CHWs in this project could affect the community

resident's health beliefs and attitudes and promote their healthy behavior such as quitting smoking, annual health screening, and healthy eating habits.

Similarly, the environmental construct encompasses the involvement of social support, the effect of the person's surroundings, and the barriers it upholds toward the behavior change. In this project, the CHWs reside locally with residents, can learn about their environmental factors, and use them to mitigate the barriers and empower the residents to embrace healthy behaviors as needed. Furthermore, SCT's key construct, self-efficacy, refers to the level of a person's confidence in their ability to successfully perform a behavior guides the intervention part of this project which is training the CHWs on motivational interviewing skills (Tougas et al., 2015).

A motivational interview (MI) is an effective practical communication skill to alleviate ambivalence related to the change process. The TTM guides CHW's MI skills as they will be aware of the stages of change, meet the residents and encourage them with their behavior or lifestyle modification (Connors et al., 2013). The TTM developed by Prochaska and DiClemente in the late 1970s evolved through studies examining the experiences of smokers who quit independently versus those who used medical influences. The five stages (Appendix D) in TTM are used in training the CHWs/any health care personnel to use the MI skills effectively to promote healthy behavioral changes (Substance Abuse and Mental Health Services Administration. (2021).

## **Methods**

### **Context**

Save the Children (STC) is a global organization collaborating with the University of San Francisco, developing a curriculum to educate community health workers (CHWs) in Fresno, Tulare County, in California. This group project covers several topics; the DNP students

teach the CHWs over three semesters using a hybrid model. This project entails teaching about motivational interviewing techniques, advocacy, communication, and conflict resolution skills. The primary study participants are eleven home coordinators working for STC and serving these underserved counties.

The role of stakeholders is exponential as they are the project's key players from start to end. The Save the Children organization, University of San Francisco students, and faculty are the partners in initiating and planning this project and implementing the educational session. They have high power, so keeping them informed periodically is crucial. The study participants and the community residents are the beneficiaries of this project. Furthermore, local authorities, health care providers, and schools would be dissuaded by this project's results even though they may not be involved. As the stakeholders' interests might be either financial gain or prevention of illness, it is imperative to focus on the stakeholders' interests and convince them to support this project. Also, open communication, individual focus, appreciation, and feedback could aid the change initiative. (Appendix E)

### **Proposed interventions**

This DNP project will use a hybrid virtual and in-person educational sessions model to improve the CHW's knowledge and competency. The DNP scholar will develop a curriculum and five teaching modules in a free canvas platform. The first four teaching sessions will take place via zoom, and the last one will be an in-person class at USF. Each teaching module will include learning objectives, roleplays, and case studies to solve. Pre- and post-assessment will be incorporated inside the modules and released on time to avoid learning bias.

### ***Gap Analysis***



The status from the literature review revealed that the CHWs lack formal training and competency. CHWs working for STC are experienced but not officially certified. Also based during the interview, STC home coordinators verbalized that they need to learn about certain important topics and skills such as MI, advocacy, communication, and conflict resolution skills. Also, they listed several specific points under each main topic that are planned to educate them about. Hence developing a curriculum to improve their competency would lead to the desired state of utilizing trained and competent community health workers to enhance health behaviors/outcomes in the community (Appendix F).

### ***Gantt Chart***

Meeting with the stakeholders and assessing the need for this project and the importance of the project details were the initial steps. Meeting the USF faculty, STC representative and the project coordinator was conducted in Summer and Fall 2022. This project's literature review and project planning took place in the summer of 2022. In the fall of 2022, the prospectus proposal and statement of determination will be submitted to the USF project committee for project's approval. Curriculum development, lesson plan and teaching modules will be done in spring 2023. Also, the DNP scholar will implement the project by teaching the CHWs in five sessions via virtual platform from February to May 2023 and complete the data analysis and evaluation after each module and at the end of the all the teaching sessions. Finally, the executive summary and presentation will be in fall 2023 (Appendix G).

### ***Work Breakdown Structure***

The work breakdown structure (WBS) is crucial for a project's success. WBS visualizes the project flow and gives the project lead a clear picture of the project's trajectory. The WBS for this project encompasses three phases (Appendix H). The first phase of the WBS is curriculum

development, in which a literature review takes place to find evidence for curriculum development. In addition, talking to the stakeholders would guide in finding the need and approval for the project's implementation. The evidence from the literature review and information from the stakeholders support the educational curriculum content development in the canvas teaching platform. The second phase of WBS is the implementation of the educational session by providing the classes via a hybrid model using zoom for the first four sessions and the last one in person. The project evaluation is the final phase in WBS. The data collection and assessment are done with the help of Qualtrics, Microsoft Excel, and the statistical product and service solutions (SPSS) software. (or Canvas in the quiz analysis capabilities.)

### ***Communication Plan/Matrix***

This project's communication plan (Appendix I) includes an initial meeting with the chairperson and the USF faculty involved with this project to discuss the project's timelines, feasibility, and acceptability. Later monthly meetings with the USF faculty and the project coordinator guided the project's goals, implementation, and outcomes measures. The study participants meet with the DNP scholar before and throughout the teaching session via zoom.

### ***SWOT analysis***

The strengths of this project (Appendix J) include that it is a well-planned group project with an interprofessional collaboration between the Save the Children (STC) organization and the University of San Francisco (USF). The participants have similar experiences with the previous training, which adds strength to the project. Also, the project has a hybrid model of education, which is convenient for the participants and the educator. The identified project's weaknesses are lack of face-to-face communication and language barriers from the educators regarding medical jargon. Another weakness is that the use of technology might result in some

electrical/technical problems during the teaching sessions. This project has opportunities to improve the CHWs' role, confidence, and competency. Ultimately, this project will improve the local community's health outcomes. Lastly, the associated threat to this project is the lack of adequate government funding (California Association of Community Health Workers [CACHW], n.d). Also, CHWs in California are not required to be certified (CACHW, n.d). Furthermore, several online websites provide training and competency without follow-up refreshers for the community workers.

### ***Proposed Budget***

As seen in Appendix K, the total of the proposed budget is an accumulation of the DNP scholars' and the study participants' hourly pay multiplied by the time they spent on this project development and implementation. Also, the cost of printing study material for the presentation contributed to this budget.

### **Proposed Outcome Measures**

The outcome measures and evaluation are the crucial part of a project to evaluate the project's effectiveness. In this project, the participants' confidence level, knowledge, and competency will be evaluated before and after each teaching session with a five-point Likert scale survey. Additionally, a qualitative survey about the effectiveness of the teaching program and periodical feedback will be received. This implementation phase consists of five teaching modules in an hour teaching session covering various topics: Motivational interviewing, Advocacy, Communication skills, conflict resolution. The first 30 minutes of the teaching session will be educational material and last 30 minutes will be a competency check of solving cases studies and return demonstration by role play. Furthermore, meeting with the study participants before and after the teaching sessions would improve the project outcome.

### ***Proposed CQI Method and Data Collection Instruments***

Data collection instruments such as Qualtrics survey tool and Microsoft Excel will be used to collect and store the data and evaluation. Staff assessment and competency check survey also will be distributed via Qualtrics, and all the staff qualitative data will be saved and visualized as word cloud. Additionally creating a PDSA cycle (Appendix L) would guide the DNP scholar to adequately plan and enhance the program's process with the help of feedbacks to continuously improve the quality of this project in the future.

### **Proposed Analysis**

Analysis of study participants feedback survey will be done after the data collection at the end of each teaching session and after all the module completion. The survey scores will be validated and compared from the pre assessment to post assessment scores and effectiveness of the program will be elicited if there is percentage increase in the post assessment from pre assessment scores. Additionally, the qualitative survey of participants confidence level in using the learnt material and overall effectiveness of this program will be collected and visualized upon each module completion and the whole program. The analysis of the pre and post assessment data will be done separately to avoid any numerical bias on the scores.

### **Ethical Considerations**

This project includes no human research subjects and receives the approval of the USF faculty committee after submitting the statement of determination. All the participants' confidentiality is protected by following HIPAA regulations. Additionally, the American Nurses Association (2015) code of ethics standards has been reflected as this project included health education and health promotion activities of training the CHWs to improve community health. Also, the MI skills emerged from an evidence-based practice that supports ANA health

promotion standards and evidence-based practice. Moreover, Jesuit values of "For the greater glory of God" aligns well with this project as we educate the home coordinators who serve the underprivileged population and help improve their health outcomes (University of San Francisco, 2020).

## **Discussion**

### **Limitations**

Anticipated limitations are the language barriers such as understanding the content and pronunciation, or some technical terms used in Spanish between the educator and participants. Also, there might be a few technical difficulties since this educational session is a hybrid model. So, the DNP scholar plan to talk with the home visitors before the implementation phase to gain insight into their potential language barriers and assess their ability to handle the Canvas platform. This pre-project assessment of participants would enable the educator to solve the issues and provide a practical teaching session. In addition, the DNP scholar might talk to some previous educators (DNP students) involved in this group project and have educated the same group of participants. Also, watch their recorded educational session videos from the STC canvas portal.

### **Implications for Practice**

CHWs play an important role in improving their community's health outcomes. Studies suggest that utilizing CHWs could be beneficial for both the providers and the residents. The health care clinics, Medicare, and Medicaid facilities could have the standard practice policies to include CHWs during the discharge planning of a rural patient's health care team. Utilizing CHWs should be approved, and policy changes at the state and federal levels could improve the rural population's preventive health services, resulting in lower health care costs. The MI skills

are a crucial aspect of behavior change and incorporating MI modules in health care professional educational curriculum and the workplace refreshers course result in better communication between the provider and patients. Lastly, the lack of funding to support the CHWs workforce is a barrier to using their services and training. Generous funding from the stakeholders such as the state/Federal government could aid in more CHWS training and support in conducting a higher quality study in the future pertaining CHWs.

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**Appendix A: Statement of Determination**

## Appendix B: Letter of Support from Agency

**From:** Mitchell, SaRonn smitchell@savechildren.org   
**Subject:** Save the Children and USF Partnership  
**Date:** October 31, 2021 at 5:32 PM  
**To:** Jo Ann Loomis (jaloomis2@usfca.edu) jaloomis2@usfca.edu



To Whom it May Concern:

It gives me great pleasure to be in partnership with USF and its students to bring much needed support and training to Save the Children's partner staff and the communities we serve. Our new and bold endeavor of building a Community Health Worker program, for example, will not only support families with understanding the importance of identifying a medical home, but will support our Early Childhood Coordinators/home visitors with a variety of interventions that will improve the overall quality of life and productivity for the communities they serve.

Since 2012, Save the Children and University of San Francisco have worked together in partnership to promote positive health outcomes for families and children in California's Central Valley. The USF students have provided health education and training for Early Childhood Coordinators/home visitors on topics such as breastfeeding education, oral health, child and family nutrition, and the effects of toxic stress and violence on children. The USF students were able to accompany the home visitors to provide nursing support with early childhood developmental screenings. These home visits were highlights of the experiences for USF students with the intention of providing them with deeper insight into some of the health needs of the families we serve, in rural America. This learning experience was vast in its approach as it included meeting program families and working with them on a one-to-one basis helped teach the need and create the 'heart' for many of the students to consider living and working in rural California. Working with the early childhood coordinators was an important part of these experiences, as they provided insight into the community needs to the USF students who many live and attend school in urban San Francisco.

Today, as we continue our work together, we will co-design a Community Health Worker training program for our local Early Childhood Coordinators/home visitors. Like our Early Childhood Coordinator, Community Health Workers literally meet families where they live, and see their economic, physical, and related mental health struggles on a daily basis. The Early Childhood Coordinators will be strategically positioned to provide support for the whole person as they assess the wide array of environmental, economic, and social determinants of health for this population. They visit with parents in their homes and see first-hand the effects of poverty, language barriers, and other social disadvantages that affect physical and mental health. This educational program will be designed to equip and enlarge the skills, attitudes, and behaviors of the early childhood coordinators as CHW to assess the whole person, in respect for the individual circumstances and needs of parents and families in the community, especially those families who experience traumatic and adverse determinants of health.

We are committed to creating new approaches to support systemic and collaborative community health-based initiatives that promote among other things, optimal birth outcomes and positive family and child outcomes. Furthermore, our early childhood coordinators will be better equipped during regular home visits to support families. Early Childhood Coordinators will provide families with health-related knowledge and tools to be better advocates for themselves as parents and for their children.

### Appendix C: Evaluation Table

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:            Brown, L. D., Vasquez, D., Lopez, D. I., &amp; Portillo, E. M. (2022). Addressing Hispanic obesity disparities using a community health worker model grounded in motivational interviewing. <i>American Journal of Health Promotion</i>, 36(2), 259–268. <a href="https://doi.org/10.1177/08901171211049679">https://doi.org/10.1177/08901171211049679</a></p>							
To determine whether Hispanic residents receiving the Healthy Fit intervention enhanced with MI experienced greater improvements in body composition, relative to participants receiving the initial intervention	Longitudinal quasi experimental evaluation. No conceptual framework identified.	Hispanic residents – 18 years or older, 374 participants, of which 97 received MI and 277 completed the standard intervention. El Paso County, Texas	Demographic data, height and weight body fat percentage, BMIs,	Yearly income by z-scores, full body composition scale with bioelectrical impedance analysis to measure height and body fat percentage. Binary wt loss and fat loss by subtracting baseline from 12-month f/u value. Used Phen X toolkit for health measures	SAS version 9.4 to conduct all analyses and multiple imputation to estimate missing data. Logistic and linear regression models were used	Participants receiving MI had 2.13 times higher odds of losing wt and 2.59 times higher odds of reduced BFP relative to initial intervention participants. MI participants lost an average of 1.23 kg and their BFP declined 2% over 12 months	Level II- High quality (A) Guides to use the CHWs and MI in the community level. Strengths: Biometric outcomes of BMI & BFP. Use of control group, including body composition as a variable and the study duration of 12 months. Weakness: Use of quasi method rather than random assignment, not generalizable since 87% of the study participants are females. Conclusion: Findings suggest CHW use of MI is a promising approach for promoting incremental changes in diet and exercise, which Healthy Fit integrates into a low-cost intervention. Recommend to RCT study to establish efficacy of this approach.

Definition of abbreviations:

BFP – Body fat proportions, BMI – Body mass index, MI: Motivational Interviewing, RCT: Randomized Control trial, Wt- Weight.



Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:  Louwagie, G. M., Okuyemi, K. S., &amp; Ayo-Yusuf, O. A. (2014). Efficacy of brief motivational interviewing on smoking cessation at tuberculosis clinics in Tshwane, South Africa: A randomized controlled trial. <i>Addiction (Abingdon, England)</i>, 109(11), 1942–1952. <a href="https://doi.org/10.1111/add.12671">https://doi.org/10.1111/add.12671</a></p>							
To determine the efficacy of brief motivational interviewing (MI) by lay healthcare workers (LHCWs) in assisting TB patients to quit smoking	Multi-centre two-group parallel individual randomized controlled trial. No conceptual framework identified.	Newly diagnosed patients with TB:(intervention group, n = 205 and the control group, n = 204. Six primary care tuberculosis clinics in a South African township.	Self-reported smoking abstinence, Sustained abstinence, prevalence abstinence and quit rates	Exhaled carbon monoxide (CO) testing. Biochemical testing.	Microsoft Excel and analyzed with Stata, version 12. Primary analysis is Intend to treat (ITT)	Self-reported 6 month sustained abstinence is higher in IG (21.5% than CG (9.3%). RR=2.29, 95%CI=1.34,3.92	Level 1 Good Quality (B). Worth to practice since the study results supports the use of LHCW and MI. Strengths: Adequate number of participants. Study design. Randomized study group. Limitations: High number of participants were not traced back. ITT analysis. MI intervention was offered in a single session. LHCWs competency is low for delivering MI. Interviewer or respondent bias Conclusion: Brief MI counselling by LHCWs was effective in assisting TB patients to quit tobacco smoking. Recommendations: Authors recommend the careful implementation of brief MI by LHCWs at TB clinics in Tshwane.

Definition of abbreviations: CG- Control Group, RR- Relative Risk, TB - Tuberculosis

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:            Portillo, E. M., Vasquez, D., &amp; Brown, L. D. (2020). Promoting Hispanic immigrant health via community health workers and motivational interviewing. <i>International Quarterly of Community Health Education</i>, 41(1), 3-6.</p>							
<p>To examine three innovative strategies designed to overcome the health disparities Hispanic immigrants face: the use of CHWs, vouchers for preventative health services, and motivational interviewing (MI).</p>	<p>Non research survey method. No conceptual framework identified.</p>	<p>Hispanic immigrants from a health fair or community fair at El Paso Texas</p>	<p>Participants completed a baseline health screening which includes a demographic survey and health measurements, such as blood pressure, body mass index, and fat percentage</p>	<p>N/A</p>	<p>N/A</p>	<p>N/A</p>	<p>Level V-Good quality (B).            Worth to practice since this review concluded that use of CHWs with MI skills lead to low cost well focused intervention in rural community.            Strengths: Large number of participants &gt; 2500            CHWs were adequately trained in MI skills            Weakness: No analytical data            No statistical evaluation of the variables</p>

Definition of abbreviations:

CHW: Community health workers.

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:            Schroeder, K., McCormick, R., Perez, A., &amp; Lipman, T. H. (2018). The role and impact of community health workers in childhood obesity interventions: A systematic review and meta-analysis. <i>Obesity reviews: An Official Journal of the International Association for the Study of Obesity</i>, 19(10), 1371–1384. <a href="https://doi.org/10.1111/obr.12714">https://doi.org/10.1111/obr.12714</a></p>							
To explore the role and effectiveness of community health workers (CHWs) in childhood obesity interventions.	Systemic review and meta-analysis. No conceptual framework identified.	Nine studies: Quasi experimental or experimental, sample children (0-18 years), implemented in the United Nations, Intervention f/o childhood obesity, interventionist includes CHWs.	BMI	BMI percentile, BMI z scores	MS Excel	BMIz [7 studies]: 0.08, 95% CI: 0.15, 0.01, p = 0.03, I2 = 39.4%; BMI percentile [2 studies]: 0.25, 95% CI: 0.38, 0.11, p < 0.01, I2 = 0%).	Level V Good Quality B. Findings from this review demonstrate that partnering with community health workers may be an important strategy for reducing childhood obesity disparities and advancing health equity.  Weaknesses: Chosen studies were not published in English. Studies were selected from a developed country. Has only two variables. May not be generalized.

Definition of abbreviations:

F/o – Focused on; BMI – Body mass index; CI- confidence interval.

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
APA Reference: Brandford, A., Adegboyega, A., Combs, B., & Hatcher, J. (2019). Training community health workers in motivational interviewing to promote cancer screening. <i>Health Promotion Practice, 20</i> (2), 239-250. <a href="https://doi.org/10.1177/1524839918761384">https://doi.org/10.1177/1524839918761384</a>							
To describe the feasibility of training CHWs to deliver a motivational interviewing (MI) intervention to promote cancer screening in underserved populations.	Qualitative Pilot study. No conceptual framework identified	African American women visiting two university affiliated emergency departments in eastern Kentucky	<ul style="list-style-type: none"> <li>• MI skills fidelity</li> <li>• Cancer screening rates</li> <li>• Feasibility of the MI training</li> </ul>	<ul style="list-style-type: none"> <li>• MI—planning, evoking, focusing, and engaging</li> <li>• Cancer screening rates</li> </ul>	MITI 3.1.1 Qualitative survey	24.4% of the participants received the cancer screening. The, debriefing qualitative data showed that CHWs were satisfied with the trainings, pace of training delivery	Level: V High quality Weakness: CHWs had various study backgrounds, The MI skills recordings were not submitted on time to evaluate completely. The MITI tool was not used effectively and did not release the results. Conclusion: The training CHWs to use MI is feasible and valuable to the work of promoting cancer screening in underserved populations. The training enhanced the skills of a group that has a pivotal role in community-based prevention research and allows for an expansion of that role to include a powerful and proven tool that had previously been used only by trained professionals.

Definition of abbreviations: CHW: Community health Workers, MI – Motivational Interviewing. MITI – Motivational Interviewing Treatment Integrity coding system.

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:            Barrett, S., Begg, S., O'Halloran, P., &amp; Kingsley, M. (2018). Integrated motivational interviewing and cognitive behaviour therapy for lifestyle mediators of overweight and obesity in community-dwelling adults: A systematic review and meta-analyses. <i>BMC Public Health</i>, <i>18</i>(1), 1160. <a href="https://doi.org/10.1186/s12889-018-6062-9">https://doi.org/10.1186/s12889-018-6062-9</a></p>							
To investigate whether integrated motivational interviewing and cognitive behaviour therapy leads to changes in lifestyle mediators of overweight and obesity in community-dwelling adults.	Systematic review and meta-analyses. Six electronic databases were systematically searched up to 04 October 2017. Analyses were restricted to randomised controlled trials that examined the effect of integrated motivational interviewing and cognitive behavior therapy on lifestyle mediators of overweight and obesity (physical activity, diet, body	Ten randomized controlled trials involving 1949 participants were included	The outcome measures of the studies	Integrated MT-CBT effectiveness	Meta-analyses were conducted using change scores from baseline in outcome measures specific to the lifestyle mediators of overweight and obesity to determine standardized mean differences (SMD) and 95% confidence intervals (95% CI). The Grades of Recommendation,	Results revealed moderate quality evidence that integrated motivational interviewing and cognitive behavior therapy had a significant effect in increasing physical activity levels in community-dwelling adults (SMD: 0.18, 95% CI: 0.06 to 0.31, $p < 0.05$ ). The combined intervention	Level: V, Good quality B  Conclusion: this analysis indicates that integrated MI-CBT leads to modest improvements in PA and body composition changes amongst community-dwelling adults.  Weakness: This review and meta-analyses included several small trials, undertaken on restrictive populations, which might have influenced the observed effect sizes

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
	composition) in Community-dwelling adults.				Assessment, Development and Evaluation approach was used to evaluate the quality of the evidence	resulted in a small, non-significant effect in body composition changes (SMD: -0.12, 95% CI: -0.24 to 0.01, p = 0.07).	

Definition of abbreviations: CBT- Cognitive Behavioral Therapy. MI – Motivational Interviewing

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:  Dewing, S., Mathews, C., Cloete, A., Schaay, N., Simbayi, L., &amp; Louw, J. (2014). Lay counselors' ability to deliver counseling for behavior change. <i>Journal of Consulting and Clinical Psychology, 82</i>(1), 19-29. <a href="https://doi.org/10.1037/a0034659">https://doi.org/10.1037/a0034659</a></p>							
<p>To determine the impact of refresher training and supervision on counselors' proficiency in the intervention</p>	<p>Action research method. Nonexperimental. Audio-recordings of counseling sessions were collected for 22 of 39 counselors after 18 hr of refresher training and supervision had been delivered over a 12-month period. Recordings were transcribed, translated, and analyzed for fidelity to the Options protocol and the MI approach. Analysis was conducted using the Motivational Interviewing Treatment Integrity</p>	<p>South Africa, nongovernmental organizations (NGOs). Four of these NGOs employing 39 adherence counselors were randomly chosen to take part in the 5-day training program. N= 22</p>	<p>Counselors' ability to deliver the intervention protocol after 5 days of Training.</p>	<p>MITI coding scale. .MI proficiency</p>	<p>MITI score, Z scores (Paired-sample Wilcoxon signed-rank test)</p>	<p>Participants global scores (Z=2.729, p = .006). Specifically, these tests showed a significant improvement between Time 1 and Time 2 on the following global characteristics : evocation (Z =3.099, p=.002), collaboration (Z =2.312, p=.021), and empathy (Z =2.385, p=.017).</p>	<p>Level: II Good quality B  Conclusion: This study contributes evidence for the positive impact of ongoing training and supervision on lay health worker practice. Refresher training and supervision improved counselors' basic counseling communication skills and therapeutic approach, enabling them to deliver better quality counseling for behavior change.  Weakness: Lack of follow up with some of the participants in phase 2 of the study. Language issues between the educator and participants.  Recommendations: Large-scale LHW interventions involve considerable financial investment</p>

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
	<p>Tool and an instrument developed by the researchers. Results were compared to findings from an evaluation of counselors' performance immediately following the initial 35-hr training. Conceptual framework: Model of behavior change.</p>						

Definition of abbreviations: LHW- Lay Health Workers, MI – Motivational Interviewing. MITI – Motivational Interviewing Treatment Integrity coding system.



Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:  Naar, S., Pennar, A. L., Wang, B., Brogan-Hartlieb, K., &amp; Fortenberry, J. D. (2021). Tailored motivational interviewing (TMI): Translating basic science in skills acquisition into a behavioral intervention to improve community health worker motivational interviewing competence for youth living with HIV. <i>Health Psychology: Official Journal of the Division of Health Psychology, American Psychological Association</i>, 40(12), 920-927.  <a href="https://doi.org/10.1037/hea0001071">https://doi.org/10.1037/hea0001071</a></p>							
To promote evidence-based practices (TMI) are particularly needed for paraprofessional staff working with minority youth with HIV who have higher rates of HIV infection	Experimental study. No conceptual framework found.	Longitudinal data were collected from 19 CHWs at 16 youth HIV agencies.	MI competence, Impact of the intervention. Qualitative surveys.	MI competence	Random coefficient models were utilized to examine time trajectories of competence scores and the impact of the intervention on competence trajectories. Semi-structured interviews were conducted to determine barriers and facilitators of TMI.	Competence scores in the TMI group significantly increased while the scores of the control group significantly decreased.	Level I Good quality B  Conclusion: Use of TMI is effective in improving the CHWs competence and improving patient outcomes in adolescent HIV settings.  Recommendation: Fully randomized pilot study of TMI relative to a control condition in preparation for a stepped-wedge cluster randomized full scale trial.

Definition of abbreviations: CHW: Community health Workers, HIV – Human Immunodeficiency Virus, TMI – Tailored Motivational Interviewing,

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:  Puchalski Ritchie, L. M., van Lettow, M., Barnsley, J., Chan, A. K., Joshua, M., Martiniuk, A. L. C., Schull, M. J., &amp; Zwarenstein, M. (2012a). Evaluation of lay health workers' needs to effectively support anti-tuberculosis treatment adherence in Malawi. <i>The International Journal of Tuberculosis and Lung Disease</i>, 16(11), 1492-1497. <a href="https://doi.org/10.5588/ijtld.12.0206">https://doi.org/10.5588/ijtld.12.0206</a></p>							
To identify barriers and facilitators to efforts by lay health workers (LHWs) to support antituberculosis treatment adherence in Malawi to inform the design of a knowledge translation intervention for improving adherence.	Qualitative study utilizing focus groups and interviews conducted with LHWs providing tuberculosis (TB) care in Zomba District, Malawi. No conceptual framework identified	The study was conducted with 30 LHWs providing TB care in Zomba District in southern Malawi. Participants were selected using an intensity approach to purposeful sampling.	The LHWs' experience in working with TB patients to identify the barriers and facilitators to their work as adherence supporters. Disease-specific knowledge, patient-provider interactions and substance abuse	N/A	Manual Content analysis	Participants identified lack of knowledge, both general (understanding of TB and its treatment) and job specific (understanding of tasks such as completion of treatment forms) as the key barrier to LHWs in their role as adherence supporters	<p>Level: III-High qualityA</p> <p>Conclusion: Findings suggest a gap between LHW knowledge and their responsibilities as adherence supporters. The results have informed the development of an educational outreach intervention and point-of care tool, to be evaluated in a randomized trial in Zomba District</p> <p>Weakness: Not generalizable since the study took place in Zomba. Possible mistranslation of words or concepts which could limit the understanding of the cultural context.</p>

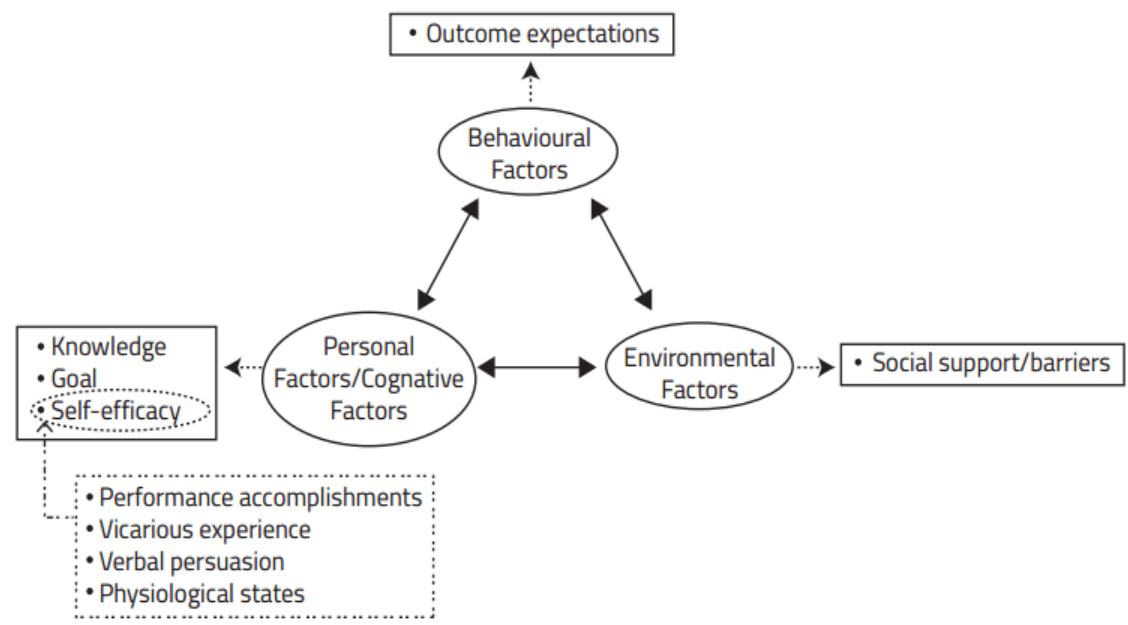
Definition of abbreviations:

Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
<p>APA Reference:  Mash, R., Baldassini, G., Mkhathswa, H., Sayeed, I., &amp; Ndapeua, S. (2008). Reflections on the training of counsellors in motivational interviewing for programmes for the prevention of mother to child transmission of HIV in sub-Saharan Africa: Open forum. <i>South African Family Practice</i>, 50(2), 53-59.</p>							
<p>This paper reflects on how MI can be incorporated successfully into PMTCT counselling and what lessons can be learnt regarding how to conduct training with counsellors.</p>	<p>Action research method.</p>	<p>Nurse and lay PMTCT counsellors from four sites in Southern Africa. An action researcher was appointed at each site to train the counsellors, as well as to facilitate and document the action-reflection process. None of the counsellors had previously been exposed to motivational interviewing. Ethical approval for the study was obtained from the</p>	<p>MI skills</p>	<p>MITI code tool. Global ratings of empathy and the spirit of MI are also made using a seven-point Likert scale.</p>	<p>Qualitative survey, MITI coding system</p>	<p>None of the groups achieved proficiency in the use of complex reflections. The counsellors in Namibia achieved beginning proficiency in all the other MITI criteria, and the counsellors in Swaziland followed a similar pattern, although they were just below the thresholds required for</p>	<p>Level: III- Good quality B</p> <p>Conclusion: The nurse counsellors in Namibia and Swaziland demonstrated beginning proficiency in MI, while the lay counsellors in South Africa did not.</p> <p>Weakness: MITI evaluation is done by one person. The counselling sessions were translated, and it is possible that the original meaning and grammatical formulation were distorted. Some participants did not submit the video tapes for MITI evaluation</p>

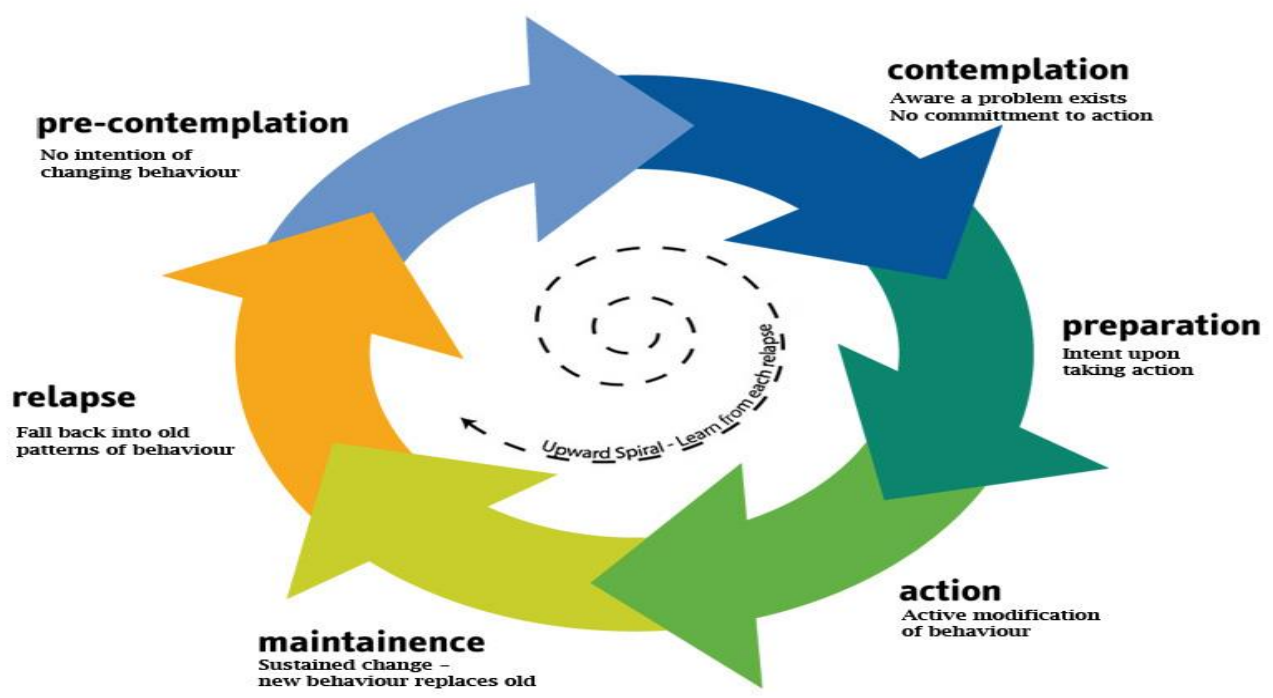
Purpose of Article or Review	Design / Method / Conceptual Framework	Sample / Setting	Major Variables Studied (and their Definitions)	Measurement of Major Variables	Data Analysis	Study Findings	Level of Evidence (Critical Appraisal Score) / Worth to Practice / Strengths and Weaknesses / Feasibility / Conclusion(s) / Recommendation(s) /
		University of Cape Town in South Africa.				the use of open questions and MI-adherent behavior counts. The nurse counsellors as a group also achieved borderline proficiency, with sub-threshold scores for the reflection-to-question ratio and MI-adherent behavior counts.	

Definition of abbreviations: MI – Motivational Interviewing. MITI – Motivational Interviewing Treatment Integrity coding system, PMTCT- Prevention of Mother to Child Transmission.

### Appendix D: The Social Cognitive Theory (Esourceresearch, 2021)



### The Transtheoretical Model (The relationship blog, 2016)



**Transtheoretical Model of Change**  
Prochaska & DiClemente

### Appendix E: Stakeholders

<b>Level of Power</b>	<b>Keep Satisfied</b> <b>High Power, Low Interest</b>	<b>Manage Closely</b> <b>High Power, High Interest</b>
	<ul style="list-style-type: none"><li>• Local Public Health department</li><li>• University of San Francisco</li><li>• Local health care providers</li></ul>	<ul style="list-style-type: none"><li>• Save the children organization</li><li>• University of San Francisco faculty and DNP students</li></ul>
	<b>Monitor</b> <b>Low Power, Low Interest</b>	<b>Keep Informed</b> <b>Low Power, High Interest</b>
	<ul style="list-style-type: none"><li>• Community residents</li><li>• Local schools</li></ul>	CHWs in Save the children organization
	<b>Level of Interest</b>	

## Appendix F: Gap Analysis

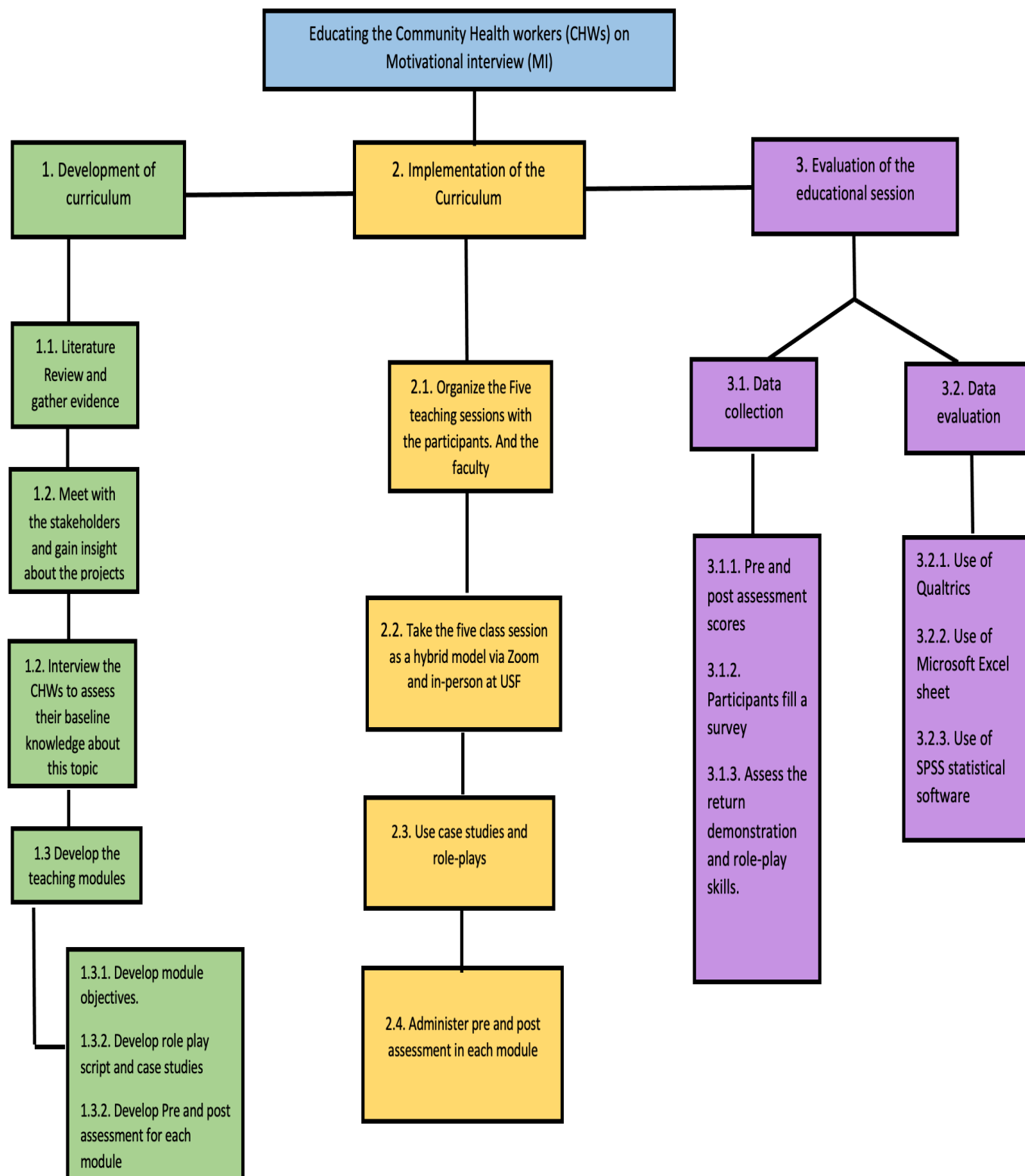
Gap Analysis		
Area under consideration: Community Health worker's (CHWs) Training in Motivational Interviewing Skills (MI)		
Desired State	Current State	Action Steps
Utilizing community health workers trained and competent in MI to improve health behaviors in the community	Lack of adequate training and competency for community health workers	Develop a curriculum and take classes for the community health workers

## Appendix G: Gantt Chart

Course/Life Event	2022									2023											
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Stakeholder meeting & project planning	Summer																				
Literature Review 705B	Summer																				
DNP project prospectus development				Fall																	
Prospectus development, and prepare educational content in canvas platform				Fall																	
DNP project implementation									Spring												
Data collection and evaluation									Spring												
Manuscript submission													Summer								
DNP project presentation																Fall					
Graduation																Fall					



## Appendix H: Work Breakdown Structure



### Appendix I: Communication Plan/ Matrix

<b>Communication Vehicle</b>	<b>Description</b>	<b>Delivery Method</b>	<b>Frequency</b>	<b>Target Audience</b>
Monthly report to the chairperson	Update about project development process	Email or zoom	Monthly	USF faculty and chairperson
Meeting with the other DNP student who shared the similar project	Discuss about the canvas educational module development	Zoom	Once	Stakeholders
Curriculum training	Teach the participants the required modules	In person/Face to face or online via Zoom	Twice every month for 3 months	Community health workers from Save the children organization
Educational intervention assessment	Gather feedback from the participants and stakeholders regarding the training and identify ways to improve	Pre and Post assessment after each module	Twice a month for 3 months	Community health workers

### Appendix J: SWOT Analysis

	Favorable/Helpful	Unfavorable/Harmful
Internal (attributes of the organization)	<p style="text-align: center;"><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Part of a planned group project supported by renowned organizations (STC &amp; USF)</li> <li>• Interactive teaching sessions</li> <li>• CHWs are familiar with the similar teaching method</li> <li>• Participants are well motivated</li> </ul>	<p style="text-align: center;"><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Lack of in-person face to face communication</li> <li>• CHWs with various educational background</li> <li>• Electrical / technical difficulties during the hybrid education</li> <li>• Language barrier between educator and the participants</li> </ul>
External (attributes of the organization)	<p style="text-align: center;"><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Delivers well planned educational support and guidance for getting the CHW certificates</li> <li>• Establish Canvas /Zoom platform for the participants to access anytime at their convenience.</li> <li>• Improves CHWs confidence, role, and competency</li> <li>• Improves community health outcomes</li> </ul>	<p style="text-align: center;"><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Other websites have an online educational module</li> <li>• Lack of adequate government funding</li> <li>• Lack of follow up/ refresher classes</li> <li>• CHWs in California does not need to be certified.</li> <li>• Lack of government policy to train the CHWs</li> </ul>

## Appendix K: Proposed Budget

Type of expenses	Cost
DNP students time	\$3250
Participants time	\$200
Material prints out	\$1000
Total Cost	\$4450

### Appendix L. PDSA Cycle

