Identifying and Exploring Capacity & Readiness of Faith-Based Organizations Implementing Lifestyle-Related Chronic Disease Health Programs

Monica Motley

Dissertation submitted to the faculty of Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

Doctor of Philosophy
In
Biomedical and Veterinary Sciences

Kathryn Hosig, Chair

Elena Serrano

Kerry Redican

Tina Savla

September 16th, 2015
Blacksburg, VA

Key Words: (faith based health programs, capacity, readiness, churches, assessment)

© 2015 by Monica Motley Permission is given to copy this work provided credit is given and copies are not intended for sale

Identifying and Exploring Capacity & Readiness of Faith-Based Organizations Implementing Lifestyle-Related Chronic Disease Health Programs

Monica Motley

Abstract

Background: Lifestyle-related chronic disease is the leading cause of mortality and morbidity in the United States, accounting for more than 63% of deaths. Minority communities experience a disproportionate burden of adverse health outcomes related to these diseases. Collaborative partnerships with faith-based organizations (FBO) present a unique platform to effectively implement lifestyle-related health programs, especially in minority communities. Studies have consistently recognized a growing need to improve FBO capacity and readiness to design, deliver, and sustain programs more effectively.

Methods: This research includes three phases: 1) preliminary research to gain the perspective of FBO, community, health and research partners actively involved in development and implementation of a collaborative lifestyle-related faith-based health program and to further explore capacity and readiness factors; 2) formative research to develop, pilot, revise, and improve content, format, measures, and implementation of a mixed methods questionnaire, Capacity and Readiness Church Health Assessment (CRCHA), that will further identify and assess FBO organizational capacity and readiness to implement lifestyle-related health and wellness programs; and 3) culminating research to pilot the CRCHA with descriptive and statistical analysis of associations between church characteristics and health programming.

Results: Phase 1: Eighteen of 31 capacity and readiness factors were collectively rated as extremely important to participant roles and partnership experience. Qualitative analysis further contextualizes these factors. Phase 2: The CRCHA comprises four major sections with thirteen

subsections to gather information about factors, characteristics, and attributes deemed relevant to FBO organizational capacity and readiness. Phase 3: Churches of varying size and capacity successfully completed the CRCHA. Data indicate potential utility for individual churches for self-assessment and capacity and readiness building and for researchers to identify church characteristics most strongly associated with effective health programming.

Implications: Exploration of capacity and readiness within a larger and more diverse group of FBO will help to further identify capacity and readiness factors to facilitate active FBO participation in the development and implementation of effective lifestyle-related health and wellness programs. Thus, FBO would be better positioned to actively lead and/or partner in faith-based health programs that address their community's most pressing health issues.

Dedication

I'd like to dedicate this to my mother and father, Fred and Virginia Motley, who have loved me unconditionally and deeply. You never complained about the sacrifices you made to ensure I got here, because you always knew I would make it.

To my brother, Bo, I couldn't have asked for a better person to look up to and mold myself after. You took care of me and reminded me that I could always come to you in friendship and love.

To Aidan and Adae, this world is yours and Auntie (and your family) is working hard to make it the beautiful place you deserve. To my future family (partner and children) this is also for you. Although I may not know when you will come into my life, I am waiting for you and cannot wait to share this work, my passion, with you-in hopes that it encourages you to unapologetically follow yours.

To Ma Cat, Grannie, and Papa and all of my family that has gone before me (living and passed away), thank you. You are the reason we are here. We haven't forgotten you all and hope you are rolling with joy!

To those who live in this world and have been told that you are not valuable, you are not normal, you are not deserving, this is for you. If I can do it, you can do it.

Acknowledgements

I am only here because of my family, friends, mentors, and loved ones who have supported me unconditionally. Therefore, I would like to first say this is for you. There are too many of you to name individually because that is how large my village is, but please know I have each and every one of your names etched in my heart.

I cannot say thank you enough to my mother and father. You both worked hard to provide Bo and me with a childhood that far exceeded our income and many of the expectations placed on brown families. Going to college was never a question, but a must. Teaching us that "it's not what you have, but what you do with it" was a way life. "We are a family and you support family no matter what" was our mantra. All those years you maxed out credit cards and struggled just so we could go to school paid off. Now it's your turn. It's your turn for Bo and me to take care of you. I love you.

Thank you to Coach David Koon, the Danville Regional Foundation, the Point Foundation, the VT Diversity Scholar program, Edward A. Bouchet Honor Society, Blacksburg Alumnae Chapter of Delta Sigma, The National Black Justice Coalition, VT Queer People of Color student group, and my social justice/activist family and friends at VT and elsewhere.

To Kathy, there are no words to express what you mean to me. You believed in me, you saw my value, and stood up for me. I've told you time and time again, you saved my life. I admire your dedication to community, your investment in your students, and your ability to fit it all in. Ivy and I still plan on taking your calendar and scheduling down time. You are so important to me and I could not have asked for a better advisor, mentor, and friend. You kept good on your promise to my mom and got me done!

To my committee (Dr. Redican, Dr. Savla, and Dr. Serrano) thank you so much for your continued guidance and support. I could not have asked for a better group of academicians and researchers to lend their knowledge and skills to my work and continued development. Dr. Eileen Anderson-Bill and Dr. Ronny Bell, thank you both so much for your help and contributing your additional expertise to the finalization of this work. Your input was invaluable and I am glad I had the honor of working with both of you.

Thank you to Grace Wilbrun, Ceseley Hayes, Erin Gloeckner, Tyler Litsch, Sarah Vacher, and Ilma Chowdhury for all of your help with the research. Thank you also to Balanced Living with Diabetes research team and the Baptist General Convention of Virginia Health Ministry. Eleanor Schlenker and Ann Foreburger, thank you for being such strong women and scientist. You showed me the ropes well. Dr. Burke, I don't know how you do it, but you do it and do it well. Thank you for continued mentorship in faith-based health. Also, thank you to the community, academic, health, and faith-partners of the Balanced Living with Diabetes Advisory Board. You all were always willing to help and truly made this research possible. Also, thank you High Street Baptist Church for your help. To all my study participants, thank you so much.

Ivy, Patricia, and Narges we are the fab four and it's been wonderful having our sisterhood of science. May we continue to work together, inspire each other, and believe in social justice and science. Mrs. Jones, you always looked out for me. Thank you so much.

Table of Contents

Abstract ii
Dedication iv
Acknowledgements v
Chapter 1 1

Introduction 1

Background: Lifestyle-Related Chronic Disease 1

Lifestyle-Related Chronic Disease in Minority Communities 2

Addressing Health and Health Behaviors in Minority Communities through Faith-Based Health Programs 3
Aims and Objectives 6

References 8
Chapter 2 13
Literature Review 13
Addressing Health and Health Behavior through Religion and Faith-Based Health Programs 13
Collaborative Partnerships: Impact of FBO Involvement on Faith-Based Health Programs 14
Characteristics and Outcomes of Faith-Based Health Programs 16
Evaluation Strategies of Faith-Based Health Programs: Methods, Measures, and Analysis 17
Key Characteristics and Elements of Successful Faith-Based Health Programs 20
- Partnership 20
- Commitment and Active Involvement in Health Promotion 21
- Faith-based Resources: Services and Facilities 22
- Theoretical Backing of Program Design 22
- Community Focused Interventions 23
- Supportive Social Relationships 24

Importance of Capacity and Readiness: From Addressing Health Needs to Achieving Health Outcomes 24
- Review of Capacity Theory and Models 24
  - Individual Capacity 24
  - Organizational Capacity 25
  - Community Capacity 25

Review of Readiness Theory and Models 27
Readiness and Capacity Needs Assessment and Evaluation Methods 29
- Application and Evaluation of Capacity Measures 29
  - Individual Capacity 29

Organizational Capacity 31
Community Capacity 32
Application and Evaluation of Readiness Measures 33
Conclusion: Application of Capacity and Readiness Needs Assessments and Evaluation Methods to Faith-Based Organizations 34
References 38
Chapter 3 44
A Case Study: Exploring the Influence of Capacity and Readiness Factors on Partner Experience in Implementing a Collaborative Faith-Based Health Program 44
Abstract 44
Introduction 45
Methods 48
Participants 48
Development of the Assessment Tools 50
Data Collection and Analysis 51
Results 53
Personal Experience (Individual Capacity) 53
Organizational Experience (Organizational Capacity) 55
Balanced Living with Diabetes Program Experience (Key Aspects of Successful Programs) 56
Partnership Synergy 59
Collaborative Readiness 60
Interpretation of Experience (Community Readiness) 61
Discussion 62
References 66
Chapter 4 70
Capacity and Readiness Church Health Assessment (CRCHA): Developing and Piloting a Questionnaire to Assess Organizational Capacity and Readiness of FBO to Implement Lifestyle Related Health Programs 70
Abstract 70
Introduction 71
Methods 74
Development of Capacity and Readiness Church Health Assessment (CRCHA) 74
Participants 74
Recruitment Strategy and Sampling Methods 74
Data Collection & Analysis 76
Results 77
Discussion 79
References 86
Chapter 5 89
Piloting the Capacity and Readiness Church Health 89

Assessment (CRCHA): An Exploratory Study to Assess Faith-Based Organizations Organizational Capacity and Readiness to Implement Lifestyle Related Health Programs
Abstract ……………………………….89
Introduction ……………………………….90
Methods ……………………………….94
Capacity and Readiness Church Health Assessment (CRCHA) ……………………………….94
Participants ……………………………….95
Recruitment and Sampling Methods ...……………………………..95
Data Collection and Analysis Procedures ……………………………….97
Results ……………………………….98
Outcomes for Church Health and Wellness Resources ……………………………….99
Built Environment for Physical Activity, Eating, and Food Preparation/Service ……………………………….99
Physical and Administrative Resources to Support Health and Wellness Activities. ……………………………….99
Health Professional and Communication Resources …………………………....100
Outcomes for Church Availability and Calendar …………………………....100
Church Calendar Operation and Church Availability for Health and Wellness Activities …………………………....100
Outcomes for Church Health and Wellness Activities …………………………....100
Partnerships and Identifying and Developing Health and Wellness Activities …………………………....100
Health-Related Activities …………………………....101
Leadership Involvement to Support Health and Wellness Activities …………………………....101
Existence of Health-Related Policies and Availability of Healthy Options …………………………....102
Outcomes for Congregation Health …………………………....102
Exploring the Relationship Between Churches and Organizational Capacity and Readiness Factors …………………………....103
Church Size and Health Ministry …………………………....103
Health and Wellness Mission Statement, Policies, and Activities …………………………....103
Discussion …………………...………104
References …………………...………107
Chapter 6 …………………...………111
Summary …………………...………111
References …………………...………116
Chapter 7 …………………...………117
Conclusion and Implications …………………...………117
Appendix A: Chapter 3 IRB Approval Letter …………………...………119
Appendix B: Visual Chart of Balanced Living w Diabetes Partners …………………...………120

Appendix C: Participant Eligibility Criteria 121
Appendix D: Participant Recruitment Letter 122
Appendix E: Implied Consent Form 124
Appendix F: Community Advisory Board Recruitment Letter 127
Appendix G: Capacity and Readiness Questionnaire 128
Appendix H: Capacity and Readiness Interview Script 135
Appendix I: Simplified Capacity and Readiness Script 150
Appendix J: Summary of Capacity and Readiness Factors Rated '10' 155
Appendix K: Breakdown of Capacity and Readiness Factors Rated '10' by Partner Level 157
Appendix L: Major Themes and Supporting Meaning Units Related to Capacity and Readiness Factors Rated '10' 161
Appendix M: Challenges and Benefits Experienced Related to Capacity and Readiness Factors Rated '10' 169
Appendix N: Chapter 4 IRB Approval Letter 174
Appendix O: Recruitment Flyer 175
Appendix P: Informed Consent Form 177
Appendix Q: Focus Group Interview Guide 180
Appendix R: Individual Feedback Questionnaire Individual Follow-up Questionnaire 181
Appendix S: CRCHA Questionnaire 183
Appendix T: Chapter 5 IRB Approval Letter 206
Appendix U: BGCVA Announcement Tabling Script 207
Appendix V: Participant Recruitment Flyer 209
Appendix W: Recruitment & Consent Script 210

List of Tables

CHAPTER 2

Literature Review

Table 1. Evaluation Components Coded and/or Reported in Systematic Reviews 37

CHAPTER 4

Table 1. Major Findings To Improve Content, Format, And Implementation Of The CRCHA: Initial Data Collection Session 82
Table 2. Major Findings To Improve Content, Format, And Implementation Of The CRCHA: Follow-Up Data Collection Session 85

Chapter 1

Introduction

Background: Lifestyle-Related Chronic Disease

Individual health behavior associated with or influenced by lifestyle choices is responsible for about 70% of all premature deaths in the United States.[1-3] In particular, behaviors such as diet and physical activity are some of the most prominent contributors to the development of lifestyle-related chronic diseases which are the leading cause of mortality and morbidity in both the United States and the world.[4,5] Lifestyle-related chronic diseases are non-communicable illnesses that can be relatively slow in progression but are rarely cured completely. Examples of chronic diseases include heart disease, cancer, stroke, and diabetes.

In the United States: a) approximately one in two adults live with a chronic disease; b) chronic disease accounts for seven out of ten deaths annually; and c) 7% of children suffer from a chronic disease.[5] Globally, a) cardiovascular disease, cancer, and diabetes account for more than 63% of deaths and b) approximately 9 million out of 36 million deaths from chronic disease each year occur in adults under 60- even though the mean life expectancy age is 78.[6,7] When stratified across chronic diseases that are the leading causes of death: a) the total prevalence of diabetes in the United States is currently estimated at 19.8 million and is projected to be 29 million by 2050; b) annually 795,000 people have a stroke, approximately one stroke every four minutes; c) an average of one American dies every 39 seconds from cardiovascular disease; and d) annually more than 350,000 people are diagnosed with breast, cervical, or colorectal cancer- two of which are associated with obesity.[8-11] Despite incremental successes to decrease prevalence and increase prevention, health behaviors and lifestyle choices continue to be the

primary factors that influence premature morbidity, disability, and mortality associated with lifestyle-related chronic disease. [2-4, 6, 12]

Even though lifestyle- related chronic diseases (cardiovascular disease, cancer, respiratory disease, and diabetes) are the leading causes of death, they are also considered the most preventable through modifiable health behavior.[4, 6, 12-14] Poor nutrition, physical inactivity, tobacco use, and alcohol consumption are the four leading health behaviors most attributable to the onset and continued development of lifestyle- related chronic disease. [12-14] In 2009, 76% of adults consumed less than five fruits and vegetables daily. [15] In 2013, less than 50% of Americans participated in 150 minutes of physical activity per week, 20% of adults never had their cholesterol checked and approximately 19% (estimated 46.6 million) of adults were active smokers. [15, 16]

Lifestyle-Related Chronic Disease in Minority Communities

Racial and ethnic minorities, women, persons with humble income and humble education, and individuals older than 45 disproportionately carry the burden of lifestyle-related chronic disease and adverse health outcomes associated with poor health behavior. [15, 17- 19] According to a 2005 study, there are approximately 133 million Americans living with at least one chronic disease. [20] Twenty-nine million people have diabetes, 935,000 people die from a heart attack annually, and nearly 1.6 million new cases of cancer were projected be diagnosed by 2013. [21, 22, 23] In 2012, 13 % of African Americans and Hispanics were diagnosed with diabetes in comparison to 8% of non-Hispanic whites. [24] Additionally, Hispanics had a 66% percent higher risk of being diagnosed with diabetes in comparison to non-Hispanic white adults. [19, 21, 24] Within

the Hispanic population, Puerto Ricans had a 94% higher risk of being diagnosed with diabetes. [19, 21, 24]

A 2011 study shows that education and income level are both inversely associated with coronary heart disease, hypertension, and stroke.[25] Further, low socioeconomic status has been shown to be inversely related to depressive symptoms, and twice as many coronary heart disease patients with a major depressive disorder have been shown to experience at least one major cardiac event in comparison to patients that were not depressed. [26] Heart disease is the leading cause of mortality in most communities of color and is responsible for 24.5% of African American and 23.2% of Asian/Pacific Islander deaths annually.[27] Heart disease is also the number one killer of African American and white women in the United States, causing one in four deaths in women annually.[28] Approximately 6% of all white women and 8% of all black women have coronary heart disease. [28]

A 2012 report shows that 77% of people diagnosed across most cancers occur in individuals 55 years or older. [23] In 2008, African American men had the highest incidence rate for cancer and had a higher likelihood of dying from cancer when compared to any other group.[29] Prostate cancer is the most common form of cancer experienced by men and the second leading cancer that causes death in men. [30] However, Hispanic and African American men, ages 65 to 74, were less likely to be screened for prostate cancer. [30]

Addressing Health and Health Behaviors in Minority Communities through Faith-Based Health Programs

Despite the overwhelming statistical and empirical research that shows the significant burden of lifestyle-related chronic disease, it is apparent that minority communities experience

disproportionate risk, incidence, prevalence, adverse outcomes, and cost associated with these diseases when compared to the majority population. The implementation of lifestyle-related interventions in minority communities has become a public health and research priority. [31, 32]

Lifestyle-related interventions can effectively address health behaviors and adverse health outcomes associated with chronic disease. [33-35] Interventions such as behavior modification and health education programs help participants gain the knowledge and skills necessary to achieve gradual and permanent lifestyle behavior change. [33-35] These interventions can be especially useful in minority communities that must navigate behavior change in the midst of physical-environmental, political, and economic disadvantages. [36, 37] Implementing interventions in partnership with community organizations that understand these disadvantages and/or serve the target community can enhance program relevancy, appropriateness, and effectiveness. [38-40]

Collaborative partnerships with faith-based organizations (FBO) present a unique and emerging platform to implement lifestyle-related interventions that aim to improve health and health behaviors in minority populations. [41-43] Growing empirical evidence continues to link religion to health as well as identify the advantages of implementing lifestyle-related interventions with FBO. [44,45] Multiple studies have shown faith-based health programs can be effective and produce positive health and health behavior outcomes in minority communities. [42, 43, 46] For example, a significant percentage of faith-based health studies have been conducted in partnership with churches in African American communities. [42, 47-52] FBO also have inherent characteristics such as: established credibility in vulnerable communities, commitment to community health, change agents, opinion leaders, services and facilities, human resources, organizational structure and operations, policies/mission, and social support networks that are

recognized as some of the key attributes that influence program success within such communities. [41-43, 46, 53, 54] Therefore, FBO are positioned as promising health partners and leads, and as a result there is increased interest of FBO to actively engage and lead multiple phases of the research partnership and program process to improve and sustain outcomes.

Although the benefits and opportunities that collaborative partnerships with FBO present are apparent, studies continue to show FBO involved solely as the site to recruit, host, and test health programs. [43, 46] This may be in part due to a growing need to improve FBO capacity and readiness, more specifically FBO organizational capacity and readiness. [43, 46] Additionally, a great deal of attention has been placed on the efficacy and effectiveness of faith-based health programs as opposed to the processes and factors that also influence such outcomes.[43] Collectively, this has resulted in limited understanding regarding the role the FBO has in shaping partner, program, and health outcomes within context of collaborative partnerships and faith-based health programs. Several studies have articulated a growing need to improve FBO capacity and readiness to: 1) more actively lead and partner in such health and wellness efforts; and 2) to design, evaluate, and sustain programs more effectively [42, 43, 46, 53] There have also been some conclusions and recommendations made about characteristics necessary to plan, implement, evaluate, and disseminate effective programs. [42, 53-64] However, even with this information, few studies have 1) explored and contextualized capacity and readiness factors in the context of FBO and health and wellness efforts; and 2) assessed FBO capacity and readiness as an evaluative component of faith-based health program and partnership efforts. This has established a greater need to identify and explore FBO capacity and readiness as well as develop comprehensive assessment tools and measures that can do so in the context of health promotion efforts. Such information would help to further identify capacity and readiness factors to

facilitate active FBO participation in the development and implementation of effective lifestyle-related health and wellness programs. Thus, FBO would be better positioned to actively lead and/or partner in faith-based health programs that address their community's most pressing health issues.

Aims and Objectives

The overarching aim of this research was to identify and explore FBO capacity and readiness to develop, implement, and sustain lifestyle-related health and wellness programs, especially in collaboration with academic, health, and community organizations. This research includes three phases:

Preliminary Research

Chapter 3: *A Case Study: Exploring the Influence of Capacity and Readiness Factors on Partner Experience in Implementing a Collaborative Faith-Based Health Program*

Purpose: Gain the perspective of FBO, community, health and research partners actively involved in development and implementation of a collaborative lifestyle-related faith-based health program and to further explore capacity and readiness factors that influences partners experience implementing such a programs

Formative Research

Chapter 4: *Capacity and Readiness Church Health Assessment (CRCHA): Developing and Piloting a Questionnaire to Assess Organizational Capacity and Readiness of FBO to Implement Lifestyle Related Health Programs*

Purpose: Develop, pilot, revise, and improve content, format, and implementation of a mixed methods questionnaire that will identify and assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs, particularly in partnership with community, health, and academic organizations.

Culminating Research

Chapter 5: *Piloting the Capacity and Readiness Church Health Assessment (CRCHA): An Exploratory Study to Assess Faith-Based Organizations Organizational Capacity and Readiness to Implement Lifestyle Related Health Programs*

Purpose: Pilot the CRCHA with descriptive and statistical analysis of associations between church characteristics and health programming. Pilot the Capacity and Readiness Church Health Assessment (CRCHA) to assess FBO organizational capacity and readiness to implement lifestyle related health programs, particularly in partnership with community, health and academic organizations.

References

1. Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health Social Behavior*, Spec No, 80-94.
2. Center for Disease Control (CDC). (2009). Leading causes of death. Retrieved from http://www.cdc.gov/nchs/fastats/lcod.htm.
3. American Public Health Association. (2015). Public health and chronic disease: Cost savings and return on investment. Retrieved from https://www.apha.org/~/media/files/pdf/factsheets/chronicdiseasefact_final.ashx.
4. Bauer, U. E., Briss, P. A., Goodman, R. A., & Bowman, B. A. (2014). Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the USA. Lancet, 384(9937), 45-52.
5. World Health Organization (WHO). (2011). Chronic diseases. Retrieved from http://www.who.int/topics/chronic_diseases/en/.
6. Center for Disease Control (CDC). (2012). Chronic disease: The power to prevent, the call to control: At a glance 2009.Retrieved from http://www.cdc.gov /chronicdisease/ resources /publications/aag/chronic.htm.
7. United States Census Bureau. (2008). Life expectancy by sex, age, and race: 2008. Retrieved from http://www.census.gov/compendia/statab/2012/tables/12s0105.pdf.
8. Boyle, J., Honeycutt, A., Jarayan, V., Hoerger, T. J., Geiss, L. S., Chen, J., & Thompson, T.J. (2001). Projection of diabetes burden through 2050. *Diabetes Care*, 24 (11), 1936-40.
9. Geiss, L., Wang, J., & Gregg, E. (2007). Long-term trends in the prevalence and incidence of diagnosed diabetes. *Diabetes Care*, 56 (Suppl 1), A33.
10. Roger, V. L., Go, A. S., Lloyd-Jones, D. M., Benjamin, E. J., Berry, J. D., Borden, W. B., & et al. (2012). Heart disease and stroke statistics—2012 update: A report from the American Heart Association. *Circulation*, 125(1), e2–220.
11. Eheman, C., Henley, S. J., Ballard-Barbash, R., Jacobs, E. J., Schymura, M. J., Noone, A.M., & et al. (2012). Annual report to the nation on the status of cancer, 1975–2008, featuring cancers associated with excess weight and lack of sufficient physical activity. *Cancer,* 118(9), 2338-66.
12. United States Department of Health and Human Services. (2015). Healthy people 2020: Leading health indicators: Nutrition, physical activity, and obesity. Retrieved from http://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Nutrition-Physical-Activity-and-Obesity
13. Danaei, G., Ding, E. L., Mozaffarian, D., Taylor, B., Rehm, J., & et al. (2009). The preventable causes of death in the United States: Comparative risk assessment of dietary, lifestyle, and metabolic risk factors. *PLoS Medicine*, 6(4), e1000058.
14. Mokdad, A. H., Marks, J. S., Stroup, D. F., & Gerberding, J.L. (2004). Actual causes of death in the United States. *JAMA*, 291(19), 1238–45.
15. Center for Disease Control (CDC). (2011). Behavioral risk factor surveillance system: BRFSS prevalence and trends data. Retrieved from http://www.cdc.gov/brfss/brfssprevalence/index.html.
16. American Lung Association. (2012). General smoking facts. Retrieved from http://www.lung.org/stop-smoking/about-smoking/facts-figures/general-smoking-facts.html.

17. Stanton, A. L., Revenson, T. A., & Tennen, H. (2007). Health psychology: Psychological adjustment to chronic disease. *Annual Review of Psychology,* 58, 565-92.
18. Center for Disease Control (CDC). (2012). Prevalence and trend data 2010. Retrieved from http://apps.nccd.cdc.gov/brfss.
19. United States Department of Health and Human Services. Agency for Healthcare Research and Quality. (2009). Demographic and clinical variations in health status. Retrieved from http://meps.ahrq.gov/data_files/publications/mr15/mr15.pdf.
20. Bodenheimer, T., Chen, E., & Bennett, H. D. (2009). Confronting the growing burden of chronic disease: Can the US health care workforce do the job? *Health Affairs,* 28(1), 64-74.
21. Center for Disease Control (CDC). (2014). National Diabetes Statistics Report, 2014. Retrieved from http://www.cdc.gov/diabetes/pdfs/library/diabetesreportcard2014.pdf
22. American Heart Association (AHA). Heart disease and stroke statistics 2013 update: A report from the American heart association. Retrieved from http://circ.ahajournals.org/content/early/2012/12/12/CIR0b013e31828124ad.
23. American Cancer Society. (2013). Cancer facts and figures 2013. Retrieved from http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-036845.pdf
24. Center for Disease Control (CDC). (2014). Diabetes 2014 report card. Retrieved from http://www.cdc.gov/diabetes/pdfs/library/diabetesreportcard2014.pdf.
25. National Health Interview Survey (CDC). (2014). Summary health statistics for U.S. adults: National health interview survey, 2012. Retrieved from http://www.cdc.gov/nchs/data/series/sr_10/sr10_260.pdf.
26. Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist*, 49(1), 15.
27. Center for Disease Control (CDC). (2012). America's heart disease burden. Retrieved from http://www.cdc.gov/heartdisease/facts.htm.
28. Mosca, L., Mochari-Greenberger, H., Dolor, R. J., Newby, L. K., & Robb, K. J. (2010). Twelve-year follow-up of American women’s awareness of cardiovascular disease risk and barriers to heart health. *Circulation: Cardiovascular Qualities and Outcomes,* 3(2), 120-7.
29. Cancer and Prevention Control (CDC). (2012). Cancer rates by race and ethnicity. Retrieved from http://www.cdc.gov/cancer/dcpc/data/race.htm.
30. United States Department of Health and Human Services. Agency for Healthcare Research and Quality. (2009).Screening for prostate cancer with the prostate-specific antigen test—United States. Retrieved from http://meps.ahrq.gov/mepsweb/data_files /publications/st233/stat233.pdf.
31. United States Department of Health and Human Services. The Office of Minority Health. (2011). HHS action plan to reduce racial and ethnic health disparities. Retrieved from http://minorityhealth.hhs.gov/npa/files/Plans/HHS/HHS_Plan_complete.pdf.
32. Center for Disease Control (CDC). (2012). Racial ethnic approaches to community health (REACH). Retrieved from http://www.cdc.gov/reach/about.htm.
33. Lindstrom, J., Louheranta, A., Mannelin, M., Rastas, M., Salminen, V., Eriksson, J., Uusitupa, M., & Tuomilehto, J. (2003). The Finnish Diabetes Prevention Study Group

(DPS): Lifestyle intervention and 3-year results on diet and physical activity. *Diabetes Care*, 26(12), 3230-3236.

34. Roumen, C., Blaak, E. E., & Corpeleijn, E. (2009). Lifestyle interventions for prevention of diabetes: Determinants of success for future implementation. *Nutrition Reviews*, 67(3), 132-146.
35. Lisovicz N, Wynn T, Fouad M, Partridge EE. (2008). Cancer health disparities: What we have done. *American Journal of Medicine Science*, 335(4), 254-9.
36. Sloane, D., Nascimento, L., Flynn, G., Lewis, L., Guinyard, J. J., Galloway-Gilliam, L., & Yancey, A. K. (2006). Assessing resource environments to target prevention interventions in community chronic disease control. *Journal of Health Care for the Poor and Underserved*, 17(2), 146-158.
37. Edberg, M. C. (2010). *Essential readings in health behavior theory and practice*. Sudbury, MA: Jones and Bartlett Publishers.
38. Israel, B. A., Eng, E., Schultz, A. J., & Parker, E. A. (2005). *Methods in community based participatory research for health.* San Fransico, Ca: Jossey Bass.
39. Israel, B. A., Schulz, A., Parker, E. A., & Becker, A. B. (1998). Review of community based research: Assessing partnership approaches to improve public health. *Annu Rev Public Health*, 19(1), 173-202.
40. Minkler, M. (2008). *Community-based participatory research for health* (2nd edition.). San Francisco, CA: Jossey Bass.
41. Chatters, L. M., Levin, J. S., & Ellison, C. G. (1998). Public health and health education in faith communities. *Health Education & Behavior*, 25(6), 689-699.
42. Campbell, M. K., Hudson, M. A., Resnicow, K., Blakeney, N., Paxton, A., & Baskin, M. (2007). Church-based health promotion interventions: Evidence and lessons learned. *Annual. Review of Public Health*, 28, 213-234.
43. DeHaven, M. J., Hunter, I. B., Wilder, L., Walton, J. W., & Berry, J. (2004). Health programs in faith-based organizations: Are they effective? *American Journal of Public Health*, 94(6), 1030.
44. Levin, J. S. (1994). Religion and health: Is there an association, is it valid, and is it causal? *Social Science & Medicine*, 38(11), 1475-1482.
45. Williams, D. R., & Sternthal, M. J. (2007). Spirituality, religion and health: Evidence and research directions. *Medical journal of Australia*, 186(10), 47.
46. Lasater, T. M., Becker, D. M., Hill, M. N., & Gans, K. M. (1997). Synthesis of findings and issues from religious-based cardiovascular disease prevention trials. *Annals of Epidemiology,* 7(7), S46-S53.
47. Sanders II, E. C. (1997). New insights and interventions: Churches uniting to reach the African American community with health information. *Journal of Health Care for the Poor and Underserved*, 8(3), 373.
48. Dodani, S., Kramer, M. K., Williams, L., Crawford, S., & Kriska, A. (2009). Fit body and soul: A church-based behavioral lifestyle program for diabetes prevention in African Americans. *Ethnicity & disease,* 19(2), 135.
49. Dodani, S., & Fields, J. Z. (2010). Implementation of the fit body and soul, a church- based life style program for diabetes prevention in high-risk African Americans. A feasibility study. *The Diabetes Educator*, 36(3), 465-472.

50. Davis, D. T., Bustamante, A., Brown, C.P., Wolde-Tsadik, G., Savage, E. W., Cheng, X., & Howland, L(1994). The urban church and cancer control: A source of social influence in minority communities. Pu*blic Health Reports.* 109(4), 500-6.
51. Newlin, K., Dyess, S. M., Allard, E., Chase, S., & Melkus, G. D. E. (2009). A methodological review of faith-based health promotion literature: Advancing the science to expand delivery of diabetes education to black Americans. *Journal of Religion and Health*, 1-23.
52. Van Olphen, J., Schulz, A., Israel, B., Chatters, L., Klem, L., Parker, E., Williams, D.& (2003). Religious involvement, social support, and health among African-American women on the east side of Detroit. *Journal of General Internal Medicine*, 18(7), 549-57.
53. Carter-Edwards, L., Hooten, E. G., Bruce, M. A., Toms, F., Lloyd, C. L., & Ellison, C. (2012). Pilgrimage to wellness: An exploratory report of rural African American clergy perceptions of church health promotion capacity. *Journal of Prevention & Intervention in the Community*, 40(3), 194-207.
54. Peterson, J., Atwood, J. R., & Yates, B. (2002). Key elements for church-based health promotion programs: Outcome-based literature review. *Public Health Nursing,* 19(6), 401-411.
55. Taylor R. J., & Chatters, L. M. (1988) Church members as a source of social support. *Review of Religious Research,* 30(2), 193-203.
56. Sallis, F. J., Owen, N., & Fisher, B.E. (2008). Ecological models of health behavior. In K. Glanz, K. B. Rimer, & K. Viswanath (Eds.), Health behavior and health education: Theory, research, and practice (pp 465-485). San Francisco, CA: Jossey-Bass.
57. Carter-Edwards, L., Jallah, Y. B., Goldmon, M. V., Roberson Jr, J. T., & Hoyo, C. (2006). Key attributes of health ministries in African American churches: An exploratory survey. NC Med J, 67(5), 345-50.
58. Sowa, J. E., Selden, S. C., & Sandfort, J. R. (2004). No longer unmeasurable? A multidimensional integrated model of nonprofit organizational effectiveness. Nonprofit and Voluntary Sector Quarterly, 33(4), 711-728.
59. Lempa, M., Goodman, R. M., Rice, J., & Becker, A. B. (2008). Development of scales measuring the capacity of community-based initiatives. Health Education & Behavior, 35(3), 298-315.
60. Jones, J. & Barry, M. M. (2011). Developing a scale to measure synergy in health promotion partnerships. Global Health Promotion, 8(2), 36–44
61. FRIDE (2006). The individual as an agent of change: The empowerment process. Retrieved from www.fride.org/descarga/BGR_IndiviCamb_ENG_dic06.pdf.
62. Israel, B. A., Checkoway, B., Schulz, A., & Zimmerman, M. (1994). Health education and community empowerment: Conceptualizing and measuring perceptions of individual, organizational, and community control. *Health Education & Behavior,* 21(2), 149-170.
63. Andrews, J. O., Cox, M. J., Newman, S. D., & Meadows, O. (2011). Development and Evaluation of a toolkit to assess partnership readiness for community-based participatory research. *Progress in Community Health Partnerships*, 5(2), 183.

64. Labin, S. N., Duffy, J. L., Meyers, D. C., Wandersman, A., & Lesesne, C. A. (2012). A Research synthesis of the evaluation capacity building literature. *American Journal of Evaluation,* 33(3), 307-338.

Chapter 2

Literature Review

Addressing Health and Health Behavior through Religion and Faith-Based Health Programs

Ninety-five percent of Americans believe in a deity or higher power; 70% are members of a religious institution (church, synagogue, mosque, etc.); 60% consider religion to be an important and central part of their lives; and many utilize religion as a common coping strategy when dealing with illness. [1, 2] A 2008 survey of approximately 54,000 Americans showed that approximately 80% of the participants identify with a religion, with Christianity as the highest reported religious denomination practiced(76.7%). [3]

Over the past century, extensive empirical research has been dedicated to the relationship between religion and health. [4-8] Factors such as religious involvement, beliefs, attitudes, and concerns have been positively associated with improved health. [4, 7] More specifically, studies have consistently shown: a) lower health risk for lifestyle-related chronic disease in certain denominations (i.e. Mormons, Seventh-day Adventists, Muslims, Orthodox Jews), possibly due to health promoting behaviors; and b) statistically significant associations between participation in organized religious activities and improved health outcomes (i.e. mortality, cancer incidence, hypertension, subjective health), possibly due to factors such as enhanced social support and faith in health and healing. [7, 9]

As a result, FBO have become increasingly invested in utilizing their pivotal social and cultural role in their communities to influence health behavior and effectively address health issues through faith-based health programs. [4-6] This role has become even more vital in minority

communities that disproportionately experience the burden of disease and lack of health resources. [10] Additional factors such as: a) centralized support networks; b) established interpersonal relationships; c) identified change agents and opinion leaders; and d) accessible programmatic resources further positions FBO as an essential partner that can impact program effectiveness and success. [4-6] Public health practice and research sectors have become equally aware that the utilization of collaborative partnerships to implement faith-based health programs can expand the role of FBO to address community health needs more effectively. [4-6]

Collaborative Partnerships: Impact of FBO Involvement in Faith-Based Health Programs

Two systematic reviews assessed and categorized the extent of FBO involvement in faith-based health programs to capture how level of involvement may be associated with implementation success, program effectiveness, and changes in outcome(s). [6, 11] Dehaven and colleagues conducted a systematic review of faith-based health programs between 1990 and 2000. [6] Programs were categorized according to level of involvement, reported program outcomes and number of participants. The authors justified determining the level of involvement as an essential factor in the review due to analytical agreement that "…collaboration is necessary for the success of faith-based health and community programs." [6] Almost all programs were based in a church, therefore involvement was categorized as "faith placed" if the church was involved solely as the site and population to test the program; "faith based" if the program was implemented as an extension of an existing health ministry; or "collaborative" if faith placed and faith based features were combined.

Approximately 43% of involvement fell into "faith placed," 30% into "collaborative," and 25% into "faith based." [6] Half of the studies reviewed did not provide outcome measures, but

when provided, outcome measures were significantly related to church involvement. Of these studies 75% of “faith placed” programs reported outcome data followed by 37.5% of “collaborative” programs. [6] Collectively, about 70% of the “faith placed,” “faith based,” and “collaborative” programs with reported outcomes demonstrated positive or statistically significant intervention effects. [6] The authors acknowledged that faith-based health programs can be effective and produce positive health effects. However, there is a major gap in knowledge regarding the effectiveness of “faith-based” and “collaborative” health programs. This may be due in part to the limited number of “faith-based” and “collaborative” studies that included evaluation strategies. The authors recommended a greater level of collaboration between FBO and health and research professionals, as well as a need to increase the evaluative capacity of FBO accustomed to delivering but not evaluating health programs. [6]

Lasater and colleagues conducted a systematic review of FBO and health partnerships that utilized rigorous scientific methodology to implement cardiovascular disease-related faith-based health programs. [11]The authors justified assessing involvement due to the paucity of research that has formally evaluated cardiovascular disease studies implemented through faith-based health programs. [11] Involvement was categorized into four levels. Level one involved the church only as a recruitment site. Level two involved the church mainly as the program delivery site. Level three included and trained congregation members to deliver the program and research protocols. Level four involved the church and spiritual elements of the church in the program.

Only six studies were reviewed with level three and four programs being the least implemented but recommended as having the greatest potential to utilize the strengths of faith-based partners to achieve prioritized outcomes.[11] Level two involvement amongst a diverse group of FBO was also encouraged to enhance recruitment and reach of the program in high risk

communities. Level three involvement showed effectiveness in both partner and health outcomes and as a result authors recommended a greater need for collaboration, research designs, and evaluation strategies for future faith-based health programs. [11]

Characteristics and Outcomes of Faith-Based Health Programs

Systematic reviews by Dehaven and Lasater acknowledged faith-based health programs can be effective and produce positive health effects. [6, 11]Both reviews also showed a greater need for studies to provide more detailed information about program design and measured outcomes. Systematic reviews by Dehaven, Lasater, Chatters, and Campbell can be used collectively to better identify characteristics and outcomes of faith-based health programs to date. [1, 2, 6-8]

A large portion of faith-based health studies reviewed provided a description of the program but did not consistently provide comprehensive detailed information about program development, design, and implementation. This may be a result of few studies utilizing a study design, testing a hypothesis, and/or including a rigorous evaluation strategy to measure outcomes. [5, 6, 11] A number of studies did not specify the utilization of a theoretical framework, but when specified, the Social Cognitive Theory and Transtheoretical Model were most frequently used. [5] Dehaven noted that when one or more of these components were included in the study, programs were more likely to be developed and implemented by health and research professionals outside of the FBO (faith placed). Dehaven further noted that 7 of 15 studies that reported statistically significant findings utilized a quasi-experimental or experimental design. Six of those 7 studies were categorized as "faith placed." [6] Campbell specifically filtered articles to identify studies that reported an experimental or quasi-experimental design with outcome data and statistics. Only 20% of the 60 articles originally identified met these criteria. [5]

Faith-based health programs mainly targeted African American adults, were implemented in churches, and were intended for members of the targeted church's congregation. This may be a result of African American communities experiencing a disproportionate burden of health disparities; African American churches providing significant health services in resource deprived minority communities; and church being a traditional location for community members to socialize and congregate in concentrated numbers. [4-6]

Lifestyle-related chronic diseases, along with mental health, were the most targeted diseases. [4-6] Dietary habits, smoking cessation, cancer screening, blood pressure reduction, cholesterol reduction, and weight loss were the most targeted health behaviors.[71-73] Programs focused primarily on primary prevention strategies (such as screening or education) followed by secondary prevention strategies that aimed to adjust behavior to further prevent the onset or progression of complications associated with the disease. [5, 6]

Evaluation Strategies of Faith-Based Health Programs: Methods, Measures, and Analysis

As previously mentioned by Campbell, Lasater, and Dehaven, a limited number of studies utilized and/or described evaluation strategies and outcome measures. However, when studies provided this, information reviews reported limited detail regarding the actual evaluation strategy components. As outlined in Table 1, data collection tool(s) (i.e. questionnaire, survey, anthropometric), and data measures (i.e. behavior change data, health status indicators, attitude/knowledge change) were the most common components to be reported. [5, 6, 11] Campbell specifically reported: a) evaluation design (i.e. quasi-experimental, experimental); b) data collection tool; and c) data measures. [5] Lasater reported: a) data collection tools; b) data collection process (i.e. pre-post, baseline follow-up); c) data measures; and d) evaluation design.

[11] However, these components were presented as methodological details within the summary of the study and context of FBO involvement as opposed to specifically coded and reported data of the review. Dehaven specifically reported: a) data measures; b) statistical significance of results; and c) evaluation type (i.e. process, impact, outcome) but did not code or report data collection tool or data analysis method.[6] Evaluation type, data collection process, data type, and data analysis method were the components least likely to be reported .

To better understand the evaluative strategies used in faith-based health programs, a targeted literature review was conducted. PubMed was used as the major database since a large portion of studies reviewed by Dehaven, Campbell, and Lasater were identified utilizing this database. A combination of independently identified terms and terms identified in the systematic reviews were used to perform the search. Search terms included: health promotion, intervention, and faith based. Articles were filtered to identify only evaluation studies, studies conducted in the United States, and studies published in the past 10 years. Of the initial studies identified (n=58), articles were filtered to identify only studies with full text (n=29). Titles and abstracts were used to identify studies that focused on faith-based health programs and reported evaluation strategies. Studies were excluded if they were program descriptions, did not provide outcome data, or did not describe the evaluation strategy. As a result 13 studies were reviewed. Although an exhaustive review was beyond the scope of this study, findings represent the characteristics of evaluation strategies within the most current faith-based health program studies. These findings also support conclusions supported by Dehaven, Campbell, and Lasater.

Similar to the findings by Campbell, Lasater, and Dehaven, studies reviewed (n=13) focused on lifestyle-related chronic diseases and targeted health behavior and/or attitude and knowledge change. Studies focused mainly on African American adults in church-based settings.

Programs focused principally on primary and secondary prevention strategies. Outcome data evaluated health behavior, biological outcomes (i.e. weight, cholesterol), and/or attitude and knowledge change measures derived from impact evaluations. Process evaluations were the next notable evaluation type utilized to evaluate programs. A majority of measures were quantitative in nature and collected data utilizing anthropometric tools (i.e. scale, blood pressure instrument) and self-report questionnaires or surveys.

More than half of studies evaluated the effects of a program intervention (n=8). [12-19] Out of these eight studies, six used a quasi-experimental design to evaluate the intervention, and impact evaluations were the most common type of evaluation used within this design to assess the immediate and/or short term effect of the program on the prioritized outcome (n=4). [13-17, 19] The two remaining studies used an experimental design to evaluate the intervention deriving measures from an impact evaluation as well.[12, 18] Studies using a quasi-experimental design equally utilized pretest/ posttest (n=2),[13, 14] baseline/follow-up (n=2), [17-19] and multiple follow-up (n=2) data collection processes. [15, 16]

Five of the eight studies used quantitatively driven data collection tools such as questionnaires and surveys that relied heavily on self-reported measures. [12, 14, 15, 17, 20] Only one study included a process evaluation regarding programmatic outcomes such as program fidelity. [17] Studies utilizing mixed methods (n=3) collected qualitative data utilizing semi-structured and open-ended interviews. [13, 16, 19] Only one of these studies included a process evaluation regarding partnership and programmatic outcomes such as training satisfaction and partner satisfaction with program content and implementation. [13]

It is challenging to draw overall conclusions from the remaining studies due to limited uniformity in objectives and evaluation methods. However, a few observations can be made. Three of the five studies specifically utilized process evaluations to gather data regarding program and partnership outcomes. [21-23] One of these studies utilized quantitative methods to gather and analyze data. [21] The two remaining studies collected baseline data about the attitudes and perspectives of the target population to inform interventions (formative). [24, 25]

Key Characteristics and Elements of Successful Faith-Based Health Programs

Although studies have synthesized characteristics and outcomes of faith-based health programs, it remains apparent that a variety of strategies have been used to design, implement, evaluate, and report programs. [4-6, 11] Further, strategies appear to vary even when comparing studies that have achieved effective outcomes. Despite differences, several key characteristics and elements have been critical in the development and implementation of faith-based health programs that yield desired partnership, programmatic, and/or health outcomes.

Partnership

Active involvement of FBO in various phases of the project has been identified as one of the most key elements of successful faith-based health program implementation. [5, 10, 26, 27] A recent study revealed that one of the most common actions of churches interested in addressing community health issues is to build collaborative external and internal partnerships to execute the program. [10] However, it is important that external partner(s) establish themselves as a credible and trustworthy source within the partnership and serviced community. [5, 26, 27] This can better signify a genuine effort to address community concerns as opposed to relying on the credibility of the faith-based partner, and these genuine efforts have been found to be especially

important in minority, under-resourced, and vulnerable communities that have been historically exploited by research and underserved by medical professionals. [27] Using participatory partnership methods and approaches better ensures that: a) prioritized health issues are clearly identified; b) purposeful inclusion of the FBO and community extend beyond "faith placed;" c) program development, implementation, and evaluation are conceptualized within community context; d) more formalized strategies are used to measure effectiveness and success; and e) partner preparedness and capacity are enhanced independently and collaboratively. [4-6, 10, 11, 26, 27]

Commitment and Active Involvement in Health Promotion

Studies that demonstrated a clear commitment and active involvement of church members and leaders in the implementation of the health program consistently showed positive or significant effects. [5,6, 26, 27] When church and community members were trained to lead or implement various aspects of the program, study participants appeared more motivated to participate in the program, experienced positive or significant health improvements, and demonstrated positive health values. [26-31] Further, the opportunity to develop new or expand existing skillsets can improve program effectiveness, perceived ownership, and capacity to sustain efforts. [5, 26, 27] More specifically, studies showed that active commitment and involvement by church leaders such as pastors or clergy can have a greater impact on personal, congregational, and community-wide behavior change. [26, 27]

Faith-based Resources: Services and Facilities

Availability and accessibility of FBO resources was identified as another key element in successful faith-based health programs. [10, 26] For example, churches facilities are ideal locations to host multiple components of the program (meetings, education sessions, assessments) seeing

that, traditionally, most basic church structures include bathrooms, a kitchen, and meeting area(s). Additionally, FBO are readily visible in almost every community. Therefore, health programs hosted at the facility can reach community members that are more isolated, uncomfortable, or disconnected from traditional health services. [26] Existing services such as a health ministry, kitchen staff, volunteer network, funding mechanism, and program coordinator/ team also contribute to successful health promotions. These services have also been identified as the greatest needs or barriers affecting FBO capacity to implement health programs more effectively. [80]

Theoretical Backing of Program Design

Limited research that has specifically assessed and compared the effectiveness of faith-based health programs categorized by program design, let alone identify or draw major conclusions regarding the theoretical backing of successful faith-based health programs. As previously mentioned, a variety of strategies have been used to design, implement, and evaluate faith-based health programs. Also, studies did not consistently report or specify the use of a theoretical framework.

Health behavior research literature shows that the Health Belief Model (HBM), Social Cognitive Theory, Transtheoretical Model, and Theory of Reasoned Action/Theory of Planned Behavior appear to be used most often in programs or research to address health behaviors influential in lifestyle-related chronic disease. [32, 33] Despite this fact, several reviews also acknowledge the limitations and paucity in research regarding the extent these theories have been used in intervention development and evaluation. [33-35] A systematic review by Painter classified research or intervention projects into four categories: 1) informed by theory with no or

limited application of theory; 2) applied theory utilizing specific constructs of the theory; 3) tested theory with more than half of the constructs applied and measured; and 4) building/creating theory by expanding how constructs were used, measured, and analyzed. Approximately 70% of the research reviewed used theory to inform the study while less than 20% of research applied more than half of the theoretical framework to the study. [33] Although a majority of the research reviewed is based on "faith-placed" theory, it is assumed that these conclusions may also extend to faith-based health studies which are inclusive in health behavior research literature.

Community Focused Interventions

Studies that have conducted formative research to inform program design have been shown to have positive or significant effects on prioritized outcomes. [5, 26, 27] Knowledge gained from these assessments better identify intrapersonal, interpersonal, sociocultural, political, economic, and physical-environmental influences on behavior and health within community context. [5, 26, 27] Traditionally qualitative in nature, formative research can also provide a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target population aiding program appropriateness and relevancy. [5, 26, 27] For example, Fit Body and Soul is a faith-based diabetes prevention program aimed to reduce BMI through improved dietary and physical activity habits. Formative research was used to tailor the program design to the target population. The pilot study showed positive improvements in BMI reduction. [36, 37]

Supportive Social Relationships

Social support networks are an inherent strength of most FBO. Faith-based health programs that build on this inherent characteristic can have a more positive effect on

behavior. [38, 39] Guidance, acceptance, goods, and self-worth are common types of social support employed by FBO to overcome social and environmental barriers to improve health. [40, 41]

Importance of Capacity and Readiness: From Addressing Health Needs to Achieving Health Outcomes

Review of capacity theory and models

A multitude of factors and resources are needed to engage in efforts that require independent and collaborative work. [42-45] Individual, organizational, and community capacity are integral to the execution and maintenance of efforts that use partnerships and programs to address community needs and improve community outcomes more effectively. [45] Even though each level of capacity is uniquely defined, definitions collectively acknowledge that capacity influences ability to act and function in a manner that is conducive to effectiveness. [42-45]

Individual capacity. Individual capacity refers to an individual's ability to use personal knowledge, skills, and attitudes for personal benefit as well as collective benefit. [46] Individual capacity is also described within the context of individual empowerment which generally refers to an individual's ability to make decisions and have control over their life.[42, 47] The utilization of these terms interchangeably and examination within various occupational fields and social science disciplines have yielded similar definitions with competing conceptualizations of the role of capacity on the path to empowerment. [42, 46-50]

For example, community psychology studies describe individual empowerment as the process in which people gain control over their life, within social and environmental context, and are further empowered to use this control to effect social change in their community. [47, 49, 51] Believed capacity to effect change influences action to gain control. [49] Capacity in this manner is

also identified as self-efficacy or self-esteem. [49, 52, 53] Health education studies refer to individual empowerment as an individual's capacity to become aware of and utilize their personal power to control and make decisions that meet personal objectives (i.e. health behavior change) as well as achieve social change in their community.[42, 46] As capacity increases, empowerment advances and vice versa. [46] Both fields ultimately agree that an empowered individual with enhanced capacity is better positioned to actively influence individual efforts that can impact organizational efforts that further influence community change. [46-48]

Organizational capacity. Organizations vary by structure, function, and objectives. Similar to individual capacity, organizational capacity is defined differently across disciplines. Therefore, it is important to account for these differences with a capacity definition that is applicable to organizations that are complex in nature (multidimensional/multilevel). According to non-profit management literature, capacity is often described in relation to organizational effectiveness. [43] As a sub-dimension, capacity influences organizational effectiveness on two levels- management and programs. [43, 54] Coalition and collaborative literature describe organizational capacity as a primary construct with influential sub-dimensions. [55] A strong but diverse leadership base, internal and external relationships, and vision to actively leverage interests are sub-dimensions of organizational capacity and affect an organization's ability to organize members in a productive manner. [55, 56] Both disciplines acknowledge that structures and processes are central to capacity and organizational capacity is reciprocal of member capacity (individual) which ultimately influences the organizations effectiveness. [43, 54, 55]

Community capacity. Community capacity can be described as a community's ability to identify problems, mobilize efforts, and reduce disparities by leveraging resources including social and human capital. [44, 56-61] A large number of community capacity studies have been

executed within the community coalition literature to examine capacity characteristics as indicators of coalition effectiveness or coalition development. [44, 59, 62-64] Coalitions are an effective way to address individual and ecological issues through collective partnership and program implementation. [56, 57, 61] Because multiple factors and resources are needed to develop effective coalitions, capacity acts as an integral factor in coalition progression and maintenance which further influences desired and sustainable program implementation and community outcomes. [65, 66] Theoretical models such as the Community Coalition Action Theory (CCAT) describe three main stages of coalition development (formation, implementation, and sustainability). [66-68] Various community capacity dimensions can act as key factors that influence the processes and outcomes experienced within each stage, which can further affect coalition effectiveness. [56, 61, 66, 67]

Ten dimensions appear to be key across the community capacity literature (participation, community power, resources, sense of community, problem assessment, leadership, organizational structure, partnership, skills, critical reflection. [44, 60, 62- 65] *Participation* is described involvement or collective action. [44, 60, 62- 65] *Community power* is described as the ability of people who share common interest to change or resist change. [44, 60, 62- 65] *Resources/skills* are the attributes that aid in individual, organizational, and community effectiveness. [44, 60, 62- 65] *Sense of community* is described as the mutual aspect amongst community members. [44, 60, 62- 65] *Problem assessment* is the ability to identify, solve, and act a problem. [44, 60, 62- 65] *Leadership* is the ability to guide, direct, and influence change when need be. [44, 60, 62- 65] *Organizational structure* is the way rules, roles, processes, and structures are formed and work. [44, 60, 62- 65] *Partnership* is described as the relationship between organization members

to collectively address the issue. [44, 60, 62- 65] Lastly, *critical reflection* is defined as the interpretation and meaning of the participant's experience over time and in the future. [44, 60, 62- 65]

Review of Readiness Theory and Models

Across all levels, capacity is described as the individual, organizational, and community characteristics, structures, and processes that influence the ability to effectively address and solve issues. [43, 44, 46, 54-61] Readiness also occurs on multiple levels (individual, group, community, and collaborative) and is described as the extent to which an individual, group, and community is appropriately prepared to take action and address the issue effectively. [69, 70, 45, 71-73] There are multiple models that theorize the concept of readiness on the individual, organizational, community, and collaborative level such as the Transtheoretical Model, Diffusion of Innovation Theory, Community Readiness Model, and the CBPR Partnership Readiness Model. [69, 70, 45, 73, 74-76] Individual readiness is based on psychological needs and perception between what is expected and realistic in order to take action. [74] Group readiness is described as the comprehensive and cohesive processes used to identify problems and examine solutions in order to take action. [74] Community readiness includes the group processes, organization, and characteristics relevant to individual and group readiness to implement efforts effectively and continue to sustain efforts by community support. [70, 72, 74] Collaborative readiness can be described as the readiness of transdisciplinary, interdisciplinary, or multidisciplinary partnerships to act on an issue using collaborative efforts. [69, 45, 77, 78]

The Transtheoretical Model explains the steps, actions, and processes people take to change their behavior over time. Six stages of change act as core constructs that predict an individual's readiness to gradually adopt the behavior based on various processes that

continuously progress them through each stage. [32, 79, 75] The *precontemplation stage* proposes that an individual has no intention to change while the *contemplation stage* begins the process of thinking about change. The *preparation stage* refers to active planning for change while the *action stage* proposes the individual has adopted the new behavior. Lastly the *maintenance stage* refers to continued practice of the behavior for more than 6 months and the *termination stage* refers to extremely high confidence and desire to maintain the adopted behavior and not relapse to the old behavior.

Diffusion of Innovation Theory conceptualizes five steps in the decision making process from knowledge of an innovation to readiness to adopt and fully use the innovation. [73, 76] 1) *Knowledge* is the initial awareness of the innovation. 2) *Persuasion* is an attitude change regarding the innovation. 3) *Decision* is adoption of the idea. 4) *Implementation* is the utilization of the innovation. 5) *Confirmation* is the decision to fully use the innovation as the most effective plan of action. [73, 76]

The Community Readiness Model theorizes that nine stages are imperative to a community's readiness to take action against an issue. [70, 71, 73] 1) *No awareness* occurs when the community does not recognize the issue and views the problem behavior as a norm. 2) Denial occurs when the issue is not identified as a community problem. 3) *Vague awareness* occurs when there is acknowledgement of the problem but there is no motivation to address it. 4) *Preplanning* occurs when leaders and organizations recognize and agree to act on the problem. 5) *Preparation* occurs when a strategic plan is put into place. 6) *Initiation* occurs when action has begun. 7) *Stabilization* occurs when programs have been launched and are supported by trained staff and administration. 8) *Confirmation* is when efforts have been standardized,

expanded, and improved. 9) *Professionalization* occurs when efforts are detailed, sophisticated, and inclusive of the community. [70, 71, 73]

The CBPR Partnership Readiness model acts as a cyclical and iterative theoretical framework that assesses the degree that an academic-community partnership has the fit, capacity, and operations necessary to plan, implement, evaluate, and disseminate CBPR projects. [69, 45] These factors can further influence program implementation and targeted health outcomes in the community. There are three theorized dimensions of readiness: 1) *goodness of fit* (the compatibility of the partnership for the proposed project); 2) *capacity* (ability and capability of the partners to conduct CBPR and sustain change); and 3) *operations* (operating structures and processes). [69, 45] "Goodness of fit" acts as the precursor to both capacity and operations dimensions, and if not apparent in the partnership, could limit the accomplishment and sustainability of desired outcomes. [69, 45]

Readiness and Capacity Needs Assessment and Evaluation Methods

Application and Evaluation of Capacity Measures

Individual capacity. Individual capacity was not specifically defined or measured within individual empowerment evaluations but conceptually inclusive or reflective of the constructs identified as most critical and measured. Empowerment can be measured as a process (steps to empowerment) or an outcome with most studies evaluating the latter. [50] The most common steps that lead to empowerment are: 1) *social disturbances existing*; 2) *conscientizing*; 3) *mobilizing*; 4) *maximizing*; and 5) *creating a new social order*. [50] The conscientizing process specifically requires people to become aware of their limited power and the potential to change these circumstances by enhancing individual power.

The majority of empowerment research assessed individual empowerment. Self-determination, self-efficacy, competence, mastery, participation, access to information, agency, and impact are the most critical components. [46, 47, 49, 50] Self-determination is considered the most reported and critical component of individual empowerment. [50] *Self-determination* is an individual's ability to make conscious and confident decisions to accomplish personal goals or rights. [50] *Self-efficacy* is the believed capacity to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges. [46, 47, 49, 50, 52] *Competence* is a personal belief in one's ability to perform a task well. *Mastery* is the increased level of skill and capacity to make decisions that minimize negative outcomes and increase positive outcomes. [47, 49, 50] *Participation* is described as an individual's opportunity to actively engage in social change through social inclusion. [46, 47, 49] *Access to information* is the described as the availability to open and transparent information that inform rights, opportunities, and accountability. [46, 49] *Agency* is the ability to use motivation and decision making skills to define and act on objectives. [46, 49] *Impact* refers to a sense of contribution to individual and organizational impact. [46, 50]

Although common and critical constructs of individual empowerment have been identified, there is a paucity of research that has synthesized program design, evaluation methods, assessment tools, and reporting strategies most common in empowerment studies. Several studies have responded to this dilemma with recommendations or models that would help refine assessment and reporting strategies. [47, 80] A 2012 systematic review of empowerment assessment tools for people with disabilities provides a bit of insight because resulting studies evaluated empowerment on the individual level and disabilities that were inclusive of chronic disease, such as diabetes. [80] Less than half of the studies used an empowerment scale, and when

reported, more than half the studies utilized an evaluation tool known as the Rogers Empowerment Scale. [80, 81] Rogers Empowerment Scale is a quantitative tool that measures five pre-identified constructs (self-efficacy, self-esteem, power, righteous anger, community activism) and multiple sub dimensions of empowerment using a Likert scale to identify the presence of and relationship between factors. [81] The remaining studies evaluated empowerment with self-generated scales. [80] Empowerment was typically measured as an outcome and included measures on the individual level. [80] Measures included feelings, behavior (i.e. organizational involvement), agency, self-determination, and self-efficacy. [80] Lastly, a combination of quantitative (i.e. questionnaires) and qualitative tools (i.e. semi-structured interview) have been used to measure individual empowerment processes and outcomes. [47, 48, 80]

Organizational capacity. The Organizational Capacity Assessment Tool (OCAT) is a validated measurement tool that identifies the constructs most critical to organizational capacity as well as methods for evaluation. [82] Two additional studies confirm several constructs identified by the OCAT. [43, 55] 1) *Aspirations* are described as the “vision, mission, and goal” to accomplish major organizational objectives [43, 82]. 2) *Strategy* is the methods and means needed to achieve organizational aspirations. [43, 55, 82] 3) *Organizational skills* are the processes used to develop, implement, and measure programs and operations. [55, 82] 4) *Human resources* are the personnel, volunteers, and partners needed to execute strategies. [43, 55, 82] 5) *Infrastructure* is the process and systems that aid in individual and organizational effectiveness. [55, 82] 6) *Organizational structure* is the design of roles and responsibilities that support organizational systems, human resources, aspirations, and strategies. [55, 82] 7) *Culture* is the core values, beliefs, norms, and performance that influence effectiveness. [82] To evaluate capacity, OCAT collects quantitative data using a closed-ended questionnaire with a Likert Scale to rate the organization within each construct and

sub-dimensions. Resulting data can be used to identify areas of greatest need or improvement, inform additional research of prioritized areas, or develop a strategic plan to improve capacity.

Community capacity. The differences in coalition structure, development, operation, and purpose have resulted in a variation of designs and evaluation strategies that have been used to better understand dimensions of community capacity within the context of collaborative coalitions. [66] Evaluations range from designs aimed to gather information about coalition development, functioning, and outcomes (i.e. formative, process, outcome, impact) data collection tool development and validation, to experimental study designs that compare coalition outcomes or processes. [57, 66, 71] Multiple studies utilized participatory methods such as the community based participatory research (CBPR) approach to develop and further progress coalition efforts. [83, 84, 66, 85, 86, 87] CBPR traditionally utilizes community-academic partnerships to collectively address issues prioritized by the community to develop and implement appropriate and relevant initiatives. [83, 84, 66, 87] The community is an equitable partner in all phases of the research project to enhance the community's capacity and power to sustain efforts with minimal dependence on the academic partner. [83, 84, 66]

Similar to individual and organizational capacity, community capacity is a) evaluated as both a process and an outcome; and b) is used interchangeably or as a sub-dimension of effectiveness (community/coalition). [57,58, 61, 62, 86] Additional studies have reported the development and utilization of existing and self-generated community capacity evaluation tools, but a limited number of these studies have reported validity and reliability outcomes, specified validation measures, or included a theoretical framework to guide tool and measure development. [44, 60, 63, 66, 87] Qualitative, quantitative, and mixed methods have been used to collect data. However, outcome indicators vary and few studies use rigorous evaluation methods

to gather data. [57, 66] Individual and group characteristics are measured the most with outcome and impact measured the least. [66] Additionally, there have been consistent recommendations to increase the utilization of mixed or qualitative methods to gain a deeper understanding of the complexities related to coalition development, functioning, and effectiveness characteristics contextualized within individual partner and broader community context. [57, 58, 65, 66, 88] For example, several studies that have quantitatively evaluated dimensions of community capacity as indicators of coalition effectiveness utilized data collection measures that minimized dimensions to simple constructs that limited contextualization within coalition development and effectiveness. [62-64] Several other studies that have qualitatively evaluated community capacity captured varying perceptions and complexities within each dimension. [89-91]

Application and Evaluation of Readiness Measures

Various methods have been used to evaluate readiness levels. Key informant interviews, readiness rating scales, rating statements, focus groups, and semi-structured interviews appear to be a common method across data collection. [69, 70, 45, 73, 74,] The rating technique has been used often to evaluate community and collaborative readiness using pre-existing or self-generated indicators or statements for each stage of readiness. [70, 73, 74] Experts in the field or key informants (knowledgeable community members) helped to develop the scales or statements. [42, 73, 69, 45] Qualitative data analysis w used to identify, code, and categorize themes from the data. These data were then interpreted to identify relationships and linkages that further explained readiness or were used to inform the development of additional data collection tools or efforts. [42, 73, 69, 45]

Other readiness assessment tools have been developed and implemented to evaluate additional levels, programs, and structures. [45, 92] The United States Department of Health and

Human Services has adapted a readiness checklist that evaluates individual, community, and collaborative readiness. [92] The checklist also includes measures for community capacity. [92] If 50% of the indicators or constructs have been checked within each section, communities or partnerships are better prepared to move forward in the project. Even though this scale does not use a scientifically rigorous evaluation process it provides a valuable tool for community partners to assess readiness using indicators and constructs identified in the literature. [92]

As a last example, the CBPR Readiness Toolkit is a validated readiness assessment tool that utilizes qualitative assessment to guide individual, group, and collaborative assessments, discussions, and strategic readiness planning. [45, 93] This toolkit also includes measures for other model constructs capacity and goodness of fit. [45, 93] The assessment process uses individual and collective input with a combination of open-ended questions and Likert scale rankings to gather a comprehensive understanding of readiness, capacity, and fit indicators. [45, 93]

Conclusion: Application of Capacity and Readiness Needs Assessments and Evaluation Methods to Faith-Based Organizations

Developing, implementing, evaluating and sustaining efforts to effectively address health needs and achieve health outcomes can greatly rely on individual, group/organizational, community, or collaborative capacity and readiness. More specifically, community and collaborative efforts to address complex individual and community health needs greatly rely on the reciprocal relationship between individual, group/organizational, community, and collaborative capacity and readiness to execute effective partnerships and achieve desired health outcomes. Organizations such as FBO and collaborative partnerships that are inclusive of community organizations such as FBO can be complex in nature, which can present challenges

unique to projected efforts. However, complex organizations and partnerships have also shown promise as an effective method to leverage diverse resources, knowledge, skills, motivation and power to address complex health issues on a community-wide level within ecological context. FBO have become an emerging and unique partner to implement lifestyle-related interventions that address complex health issues and improve partnership, programmatic, and health outcomes. Increased acknowledgement of an association between religion and health; inherent factors that can influence capacity such as identified change agents, support networks, and resources; social and cultural influence in communities; and increased interest and responsibility to address health issues further positions FBO as an essential partner in health program implementation.

Faith-based health programs have been shown to produce effective and positive health effects. Studies have also synthesized key characteristics that yield desired partnership, programmatic, and/or health outcomes. Despite these factors, FBO may still lack the capacity and readiness to effectively address social and health needs faced by their community- especially within the context of a collaborative or research-based process. As a result, study recommendations promote: a) an increased interest to engage FBO in multiple phases of the program process; and b) a need to improve FBO capacity and readiness to design, deliver, and evaluate health programs more effectively. Therefore, there is a growing need to understand the context of capacity and readiness specific to FBO and within such collaborative partnerships.

Although various capacity dimensions and readiness indicators have been defined, few studies reviewed have identified, explored, and contextualized capacity and readiness factors unique to FBO or applicability of identified factors to FBO. [10, 21, 36, 37, 94, 95] Further, there is a limited research that has identified and compared measures and evaluative strategies to identify and understand these factors within the complex context of FBO in collaborative partnerships to

implement faith-based health programs. Lastly, there is lagging information regarding theoretical frameworks that explain, predict, or hypothesize capacity and readiness variables specific to FBO and collaborative partnership to implement programs. [163] Collectively such paucities in research has created limited understanding regarding the influence of organizational characteristics, partnership characteristics, dynamics, operating functions, and resources influential of outcomes.

Overall, implications for future research show a need to: 1) assess the effectiveness of faith-based health programs in subgroups other than African Americans; 2) execute more formative and process evaluations inclusive of capacity and readiness measures; 3) include the community as active partners throughout the project and/or research process; 4) identify and come to stronger conclusions about theoretical frameworks and preferred research, methods, and program design to achieve greater faith-based program effectiveness; 5) develop evaluation tools and measures that can assess FBO capacity and readiness in the context of health promotion efforts; and 6) develop a tool that FBO can use to assess the readiness of external partners interested in collaborative health initiatives.

Capacity and readiness research can provide a more thorough understanding of FBO roles in addressing health needs through health programming and further expanding knowledge regarding the relationship between faith and health. [4, 5] Exploring the influence of capacity and readiness within this context can also reveal FBO role in shaping health behaviors and outcomes. Formative and process research can be used to further confirm or newly identify capacity and readiness characteristics, indicators, and dimensions applicable to FBO interested in collaborative partnership to implement a health program. Additional research can explore the influence of these factors on FBO ability to address health and health needs-within the greater

context of the community and partnership.[4, 5] Results would provide ability to better assess what factors are present, needed, or can be expanded to position faith-based organizations as a better partner or catalyst to address health needs.

Table 1. Evaluation Components Coded and/or Reported in Systematic Reviews

Evaluation Component	Campbell	Lasater	Dehaven
Evaluation Design (i.e. quasi-experimental, experimental, time series)	x	x	
Evaluation Type (i.e. process, impact, outcome)			x
Data Collection Process (i.e. pre-post, baseline follow-up)		x	
Data Type (i.e. qualitative, quantitative, mixed method)			
Data Collection Tool(s) (i.e. survey, questionnaire, interview, anthropometric)	x	x	
Data Measures (i.e. behavior change data, attitude/knowledge change, health indicator)	x	x	x
Data Analysis Method (i.e. statistical analysis, qualitative coding)			

References

1. Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist,* 58(1), 24.
2. Gallup, G. Jr., & Lindsay, D. M. (1999). *Surveying the religious landscape: Trends in U.S. beliefs*. Harrisburg, PA: Morehouse.
3. Kosmin, B. A., & Keysar, A. (2009).American religious identification survey summary report. Retrieved from http://commons.trincoll.edu/aris/files /2011/08 /ARIS_Report_2008.pdf.
4. Chatters, L. M., Levin, J. S., & Ellison, C. G. (1998). Public health and health education in faith communities. *Health Education & Behavior*, 25(6), 689-699.
5. Campbell, M. K., Hudson, M. A., Resnicow, K., Blakeney, N., Paxton, A., & Baskin, M. (2007). Church-based health promotion interventions: Evidence and lessons learned. *Annual. Review of Public Health*, 28, 213-234.
6. DeHaven, M. J., Hunter, I. B., Wilder, L., Walton, J. W., & Berry, J. (2004). Health programs in faith-based organizations: Are they effective? *American Journal of Public Health,* 94(6), 1030.
7. Levin, J. S. (1994). Religion and health: Is there an association, is it valid, and is it causal? *Social Science & Medicine*, 38(11), 1475-1482.
8. Williams, D. R., & Sternthal, M. J. (2007). Spirituality, religion and health: Evidence and research directions. *Medical journal of Australia*, 186(10), 47.
9. George, L. K., Ellison, C. G., & Larson, D. B. (2002). Explaining the relationships between religious involvement and health. *Psychological Inquiry,* 13(3), 190-200.
10. Carter-Edwards, L., Hooten, E. G., Bruce, M. A., Toms, F., Lloyd, C. L., & Ellison, C. (2012). Pilgrimage to wellness: An exploratory report of rural African American clergy perceptions of church health promotion capacity. *Journal of Prevention & Intervention in the Community*, 40(3), 194-207.
11. Lasater, T. M., Becker, D. M., Hill, M. N., & Gans, K. M. (1997). Synthesis of findings and issues from religious-based cardiovascular disease prevention trials. *Annals of Epidemiology,* 7(7), S46-S53.
12. Baruth, M., Wilcox, S., & Condrasky, M. D. (2011). Perceived environmental church support is associated with dietary practices among African-American adults. *Journal of the American Dietetic Association*, 111(6), 889-893.
13. Griffith, D. M., Campbell, B., Allen, J. O., Robinson, K. J., & Stewart, S. K. (2010). Your blessed health: An HIV-prevention program bridging faith and public health communities. *Public Health Reports,* 125(Suppl 1), 4.
14. Drake, B. F., Shelton, R., Gilligan, T., & Allen, J. D. (2010). A church-based intervention to promote informed decision-making for prostate cancer screening among African-American men. *Journal of the National Medical Association,* 102(3), 164.
15. Villablanca, A. C., Arline, S., Lewis, J., Raju, S., Sanders, S., & Carrow, S. (2009). Outcomes of national community organization cardiovascular prevention programs for high-risk women. *Journal of cardiovascular Translational Research*, 2(3), 306-320.
16. Schoenberg, N. E., Hatcher, J., Dignan, M. B., Shelton, B., Wright, S., & Dollarhide, K. F. (2009). Faith moves mountains: An Appalachian cervical cancer prevention program. *American Journal of Health Behavior*, 33(6), 627.

17. Whitt-Glover, M. C., Hogan, P. E., Lang, W., & Heil, D. P. (2008). Pilot study of a faith-based physical activity program among sedentary blacks. *Preventing Chronic Disease,* 5(2), A51.
18. Fitzgibbon, M. L., Stolley, M. R., Ganschow, P., Schiffer, L., Wells, A., Simon, N., & Dyer, A. (2005). Results of a faith-based weight loss intervention for black women. *Journal of the National Medical Association*, 97(10), 1393-402.
19. Hoyo, C., Reid, L., Hatch, J., Sellers, D. B., Ellison, A., Hackney, T., & Parrish, T. (2004). Program prioritization to control chronic diseases in African-American faith-based communities. *Journal of the National Medical Association*, 96(4), 524-32.
20. Fitzgibbon, M. L., Stolley, M. R., Ganschow, P., Schiffer, L., Wells, A., Simon, N., & Dyer, A. (2005). Results of a faith-based weight loss intervention for black women. *Journal of the National Medical Association,* 97(10), 1393.
21. Monay, V., Mangione, C. M., Sorrell-Thompson, A., & Baig, A. A. (2010). Services delivered by faith-community nurses to individuals with elevated blood pressure. *Public Health Nursing,* 27(6), 537-543.
22. Reifsnider, E., Hargraves, M., Williams, K. J., Cooks, J., & Hall, V. (2010). Shaking and rattling: developing a child obesity prevention program using a faith-based community *Approach. Family & Community Health*, 33(2), 144.
23. Rodriguez, E. M., Bowie, J. V., Frattaroli, S., & Gielen, A. (2009). A qualitative exploration of the community partner experience in a faith-based breast cancer educational intervention. *Health Education Research,* 24(5), 760-771.
24. Lindley, L. L., Coleman, J. D., Gaddist, B. W., & White, J. (2010). Informing faith-based HIV/AIDS interventions: HIV-related knowledge and stigmatizing attitudes at Project FAITH churches in South Carolina. *Public Health Reports*, 125(Suppl 1), 12.
25. Bopp, M., Lattimore, D., Wilcox, S., Laken, M., McClorin, L., Swinton, R., & Bryant, D. (2007). Understanding physical activity participation in members of an African American church: A qualitative study. *Health Education Research,* 22(6), 815-826.
26. Peterson, J., Atwood, J. R., & Yates, B. (2002). Key elements for church-based health promotion programs: Outcome-based literature review. *Public Health Nursing,* 19(6), 401-411.
27. Sanders II, E. C. (1997). New insights and interventions: Churches uniting to reach the African American community with health information. *Journal of Health Care for the Poor and Underserved*, 8(3), 373.
28. Lefebvre, R. C., Lasater, T. M., Carleton, R. A., & Peterson, G. (1987). Theory and delivery of health programming in the community: The Pawtucket Heart Health Program. *Preventive Medicine*, 16(1), 80-95.
29. Kumanyika, S. K., & Charleston, J. B. (1992). Lose weight and win: A church-based weight loss program for blood pressure control among black women. *Patient Education and Counseling*, 19(1), 19-32.
30. McNabb, W., Quinn, M., Kerver, J., Cook, S., & Karrison, T. (1997). The PATHWAYS church-based weight loss program for urban African-American women at risk for diabetes. *Diabetes Care*, 20(10), 1518-1523.
31. Kennedy, B. M., Paeratakul, S., Champagne, C. M., Ryan, D. H., Harsha, D. W., & et al. (2005). A pilot church-based weight loss program for African-American adults using church members as health educators: A comparison of individual and group intervention. *Ethnicity and Disease*, 15(3), 373-8.

32. Glanz, K. & Bishop, D. B. (2010). Science theory in development and implementation of public health interventions. *Annual Review Public Health*, 31, 399–418.
33. Painter, J. E., Borba, C., Hynes, M., Mays, d., & Glanz, K. (2008).The use of theory in health behavior research from 2000 to 2005: A systematic review. *Annals of Behavior Medicine*, 35, 358-362.
34. Institute of Medicine (US) Committee on Health and Behavior: Research, practice, and policy. Health and behavior: The interplay of biological, behavioral, and societal influences. (2001). Washington, DC: National Academies Press. Retrieved from http://www.ncbi.nlm.nih.gov/books/NBK43749
35. Oldenburg, B. F., Sallis J. F., French, M. L., & Owen, N. (2000). Health behavior research: The quality of the evidence base. *American Journal of Health Promotion*, 14(4), 253.
36. Dodani, S., Kramer, M. K., Williams, L., Crawford, S., & Kriska, A. (2009). Fit body and soul: A church-based behavioral lifestyle program for diabetes prevention in African Americans. *Ethnicity & disease,* 19(2), 135.
37. Dodani, S., & Fields, J. Z. (2010). Implementation of the fit body and soul, a church- based life style program for diabetes prevention in high-risk African Americans. A feasibility study. *The Diabetes Educator*, 36(3), 465-472.
38. Davis, D. T., Bustamante, A., Brown, C.P., Wolde-Tsadik, G., Savage, E. W., & et al. (1994). The urban church and cancer control: A source of social influence in minority communities. Pu*blic Health Reports.* 109(4), 500-6.
39. Newlin, K., Dyess, S. M., Allard, E., Chase, S., & Melkus, G. D. E. (2009). A methodological review of faith-based health promotion literature: Advancing the science to expand delivery of diabetes education to black Americans. *Journal of Religion and Health*, 1-23.
40. Taylor R. J., & Chatters, L. M. (1988) Church members as a source of social support. *Review of Religious Research,* 30(2), 193-203.
41. Van Olphen, J., Schulz, A., Israel, B., Chatters, L., Klem, L., & et al. (2003). Religious involvement, social support, and health among African-American women on the east side of Detroit. *Journal of General Internal Medicine*, 18(7), 549-57.
42. Freudenberg, N., Eng, E., Flay, B., Parcel, G., Rogers, T., & Wallerstein, N. (1994). Strengthening individual and community capacity to prevent disease and promote health: In search of relevant theories and principles. *Health Education & Behavior*, 22(3), 290-306.
43. Sowa, J. E., Selden, S. C., & Sandfort, J. R. (2004). No longer unmeasurable? A multidimensional integrated model of nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly,* 33(4), 711-728.
44. Goodman, R. M., Speers, M. A., McLeroy, K., Fawcett, S., Kegler, M., Parker, E., & Wallerstein, N. (1998). Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Education & Behavior*, 25(3), 258-278.
45. Andrews, J. O., Newman, S. D., Meadows, O., Cox, M. J., & Bunting, S. (2012). Partnership readiness for community-based participatory research. *Health Education Research*, 27(4), 555-571.
46. FRIDE (2006). The individual as an agent of change: The empowerment process. Retrieved from www.fride.org/descarga/BGR_IndiviCamb_ENG_dic06.pdf.

47. Israel, B. A., Checkoway, B., Schulz, A., & Zimmerman, M. (1994). Health education and community empowerment: Conceptualizing and measuring perceptions of individual, organizational, and community control. *Health Education & Behavior,* 21(2), 149-170.
48. Speer, P. W., & Hughey, J. (1995). Community organizing: An ecological route to empowerment and power. *American Journal of Community Psychology*, 23(5), 729-748.
49. Becker, J., Kovach, A. C., & Gronseth, D. L. (2004). Individual empowerment: How community health workers operationalize self-determination, self-sufficiency, and decision-making abilities of low-income mothers. *Journal of Community Psychology,* 32(3), 327-342.
50. Hur, M. H. (2006). Empowerment in terms of theoretical perspectives: Exploring a typology of the process and components across disciplines. *Journal of Community Psychology*, 34(5), 523-540.
51. Peterson, N.A., Lowe, J.B., Aquilino, M.L., & Schnider, J.E. (2005). Linking social cohesion and interactional empowerment: Support and new implications for theory. *Journal of Community Psychology*, 33(2), 233–244.
52. Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44.
53. Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164-180.
54. Herman, R. D., & Renz, D. O. (2003). Nonprofit organizational effectiveness: Contrasts between especially effective and less effective organizations. *Nonprofit Management and Leadership*, 9(1), 23-38.
55. Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building collaborative capacity in community coalitions: A review and integrative framework. *American Journal of Community Psychology*, 29(2), 241-261.
56. Butterfoss, F. D., Goodman, R. M., &Wandersman, A. (1996). Community coalitions for prevention and health promotion: Factors predicting satisfaction, participation, and planning. *Health Education Quarterly*, 23(1), 65–79.
57. Berkowitz, B. Studying the outcomes of community-based coalitions. (2001) *American Journal of Community Psychology,* 29(2), 213-239.
58. Butterfoss, F. D., & Francisco, V. T. (2004) Evaluating community partnerships and coalitions with practitioners in mind. *Health Promotion Practice*, 5(2), 108-114.
59. Chaskin, R., Brown, P., Venkatesh, S., & Vidal, A. (2001). Community capacity and capacity building: A definitional framework. *Urban Affairs Review*, 36(3), 291-323.
60. Lempa, M., Goodman, R. M., Rice, J., & Becker, A. B. (2008). Development of scales measuring the capacity of community-based initiatives. *Health Education & Behavior*, 35(3), 298-315.
61. Zakocs, R. C., & Edwards, E. M. (2006). What explains community coalition effectiveness: a review of the literature. *American Journal of Preventive Medicine*, 30(4), 351.
62. Gibbon, M., Labonte, R., & Laverack, G. (2002). Evaluating community capacity. *Health & Social Care in the Community,* 10(6), 485-491.
63. MacLellan-Wright, M. F., Anderson, D., Barber, S., Smith, N., Cantin, B., Felix, R., & Raine, K. (2007). The development of measures of community capacity for community-based funding programs in Canada. *Health Promotion International*, 22(4), 299-306.
64. Mizrahi, T., & Rosenthal, B. B. (2001). Complexities of coalition building: Leaders' successes, strategies, struggles, and solutions. *Social Work*, 46(1), 63-78.

65. Motley, M., Holmes, A., Hill, J., Plumb, K., & Zoellner, J. (2013). Evaluating community capacity to address obesity in the Dan River Region: A case study. *American Journal of Health Behavior*, 37(2), 208-217.
66. Granner, M. L., & Sharpe, P. A. (2004). Evaluating community coalition characteristics and functioning: a summary of measurement tools. *Health Education Research*, 19(5), 514-532.
67. Kegler, M. C., & Swan, D. W. (2011). An initial attempt at operationalizing and testing the community coalition action theory. *Health Education & Behavior*, 38(3), 261-270.
68. Butterfoss, F.D. & Kegler, M.C. (2002). Toward a comprehensive understanding of community coalitions: Moving from practice to theory. In DiClemente, R.J., Crosby, R.A. and Kegler, M.C. (eds), *Emerging Theories in Health Promotion Practice and Research*. Jossey-Bass,San Francisco, CA, pp. 157–193.
69. Andrews, J. O., Cox, M. J., Newman, S. D., & Meadows, O. (2011). Development and evaluation of a toolkit to assess partnership readiness for community-based participatory research. *Progress in Community Health Partnerships*, 5(2), 183.
70. Oetting, E. R., Jumper-Thurman, P., Plested, B., & Edwards, R. W. (2001). Community readiness and health services. *Substance Use & Misuse,* 36(6-7), 825-843.
71. Stith, S., Pruitt, I., Dees, J., Fronce, M., Green, N., Som, A., & Linkh, D. (2006). Implementing community-based prevention programming: A review of the literature. *The Journal of Primary Prevention*, 27(6), 599-617
72. Hull, P. C., Canedo, J., Aquilera, J., Garcia, E., Lira, I., & Reyes, F. (2008). Assessing community readiness for change in the Nashville Hispanic community through participatory research. *Progress in Community Health Partnerships*, 2(3), 185-194.
73. Edwards, R. W., Jumper-Thurman, P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of Community Psychology*, 28(3), 291-307.
74. Donnermeyer, J. F., Plested, B. A., Edwards, R. W., Oetting, G., & Littlethunder, L. (1997). Community readiness and prevention programs. *Community Development*, 28(1), 65-83.
75. Prochaska, J. O., Velicer, W. F., Rossi, J. S., Goldstein, M. G., Marcus, B. H., Rakowski, W., & Rossi, S. R. (1994). Stages of change and decisional balance for 12 problem behaviors. *Health Psychology*, 13(1), 39-46.
76. Rogers, E. M., & Shoemaker, F. F. (1971). Communication of innovations; A cross-cultural approach. Retrieved from https://studieninteressierte.uni-hohenheim.de/uploads/tx_uniscripts/25720/A7020_KIM_2011.pdf.
77. Hall, K. L., Stokols, D., Moser, R. P., Taylor, B. K., Thornquist, M. D., Nebeling, L. C., & Jeffery, R. W. (2008). The collaboration readiness of transdisciplinary research teams and centers: findings from the National Cancer Institute's TREC year-one evaluation study. *American Journal of Preventive Medicine*, 35(2 Suppl), S161.
78. Stokols, D., Misra, S., Moser, R. P., Hall, K. L., & Taylor, B. K. (2008). The ecology of team science: understanding contextual influences on transdisciplinary collaboration. *American Journal Preventative Medicine,* 35(2S), S96-S115.
79. Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Health behavior and health education. Theory, research, and practice*. San Francisco, CA: Jossey-Bass
80. Bakker, L., & Van Brakel, W. H. (2012). Empowerment Assessment tools in people with disabilities in developing countries. A systematic review. *Leprosy Review*, 83, 129-153.

81. Rogers, E. S., Ralph, R., & Salzer, M. (2010). Validating the empowerment scale with a multisite sample of consumers of mental health services. *Psychiatric Services*, 61(9), 933-936.
82. McKinsey and Company. (2001). Effective capacity building in non-profit organizations. Retrieved from http://www.vppartners.org/sites/default/files/reports/full_rpt.pdf.
83. Israel, B. A., Eng, E., Schultz, A. J., & Parker, E. A. (2005). *Methods in community based participatory research for health.* San Fransico, Ca: Jossey Bass.
84. Minkler, M. (2008). *Community-based participatory research for health* (2nd edition.). San Francisco, CA: Jossey Bass.
85. García-Ramírez, M., Paloma, V., Suarez-Balcazar, Y., & Balcazar, F. (2009). Building international collaborative capacity: Contributions of community psychologists to a European network. *American Journal of Community Psychology*, 44(1), 116-122.
86. Tumiel-Berhalter, L. M., Mclaughlin-Diaz, V., Vena, J., & Crespo, C. J. (2007). Building community research capacity: Process evaluation of community training and education in a community-based participatory research program serving a predominately Puerto Rican community. *Progress in Community Health Partnerships*, 1(1), 89.
87. Wallerstein, N. (2000). A participatory evaluation model for healthier communities: Developing indicators for New Mexico. *Public Health Reports*, 115(2-3), 199.
88. Butterfoss, F. D., Cashman, S., Foster-Fishman, P., & et al. (2001). Roundtable discussion and final comments. *American Journal of Community Psychology,* 29(2), 229-239.
89. Anderson-Lewis, C., Cuy-Castellanos, D., Byrd, A., Zynda, K., Sample, A., Reed, V. B., & Yadrick, K. (2011). Using mixed methods to measure the perception of community capacity in an academic–community partnership for a walking intervention. *Health Promotion Practice*, 13(6), 788-796.
90. Boydell, K. M., & Volpe, T. (2004). A qualitative examination of the implementation of a community–academic coalition. *Journal of Community Psychology*, *32*(4), 357-374.
91. Rogers, P. J., Stevens, K., & Boymal, J. (2009). Qualitative cost–benefit evaluation of complex, emergent programs. *Evaluation and Program Planning*, 32(1), 83-90.
92. United States Department of Health and Human Services. (2012). Checklists for assessing readiness to undertake community collaboration. Retrieved from http://captus.samhsa.gov/access-resources/resource-types/ta-tools?tid=All&tid_1=All&term_node_tid_depth=All&term_node_tid_depth_1=All&title=readiness.
93. Andrews, J. O., Newman, S. D., Cox, M. J., & Meadows, O. (2010). Are we ready: Partnership readiness for community-based participatory research (CBPR) toolkit. Retrieved from https://sctr.musc.edu/images/stories/2012_Toolkit_Final_10.18.12.pdf.
94. Zahner, S. J., & Corrado, S. M. (2004). Local health department partnerships with faith-based organizations. *Journal of Public Health Management and Practice*, 10(3), 258-265.
95. Stajura, M., Glik, D., Eisenman, D., Prelip, M., Martel, A., & Sammartinova, J. (2012). Perspectives of community-and faith-based organizations about partnering with local health departments for disasters. *International Journal of Environmental Research and Public Health*, 9(7), 2293-2311.
96. Tangenberg, K. M. (2005). Faith-based human services initiatives: Considerations for social work practice and theory. *Social Work*, 50(3), 197-206.

Chapter 3

A Case Study: Exploring the Influence of Capacity and Readiness Factors on Partner Experience in Implementing a Collaborative Faith-Based Health Program

Abstract

Objective: 1) gain the perspectives of FBO, community, and research partners actively involved in a collaborative faith-based health program; and 2) further explore capacity and readiness factors influence on partners experience implementing such a program. **Participants:** Faith, health, community, and research partners of a collaborative faith-based lifestyle- related program called *Balanced Living with Diabetes (BLD).* BLD advisory committee recognized varying readiness and capacity among churches and faith-based partners to deliver BLD program. Partners that could provide a comprehensive perspective of their experience based on consistent participation in multiple phases of the BLD program were invited to participate. **Methods:** Participants were asked to complete a questionnaire to rate capacity or readiness factors that may have influenced their BLD experience followed by an interview to further discuss factors they rated most important. Basic descriptive statistical analysis, thematic coding analysis, and qualitative and mixed methods research analysis software was used to synthesize, organize, and interpret data. **Results:** Eighteen out of 31 capacity and readiness factors presented were collectively rated as '10' (extremely important) to participant's role and partnership experience in the BLD program. Additional data further contextualizes capacity and readiness factors influence on the processes and strategies that shaped partner recruitment and participation in program design and delivery. **Conclusion:** At minimum, these 22 factors should be further explored to determine appropriate strategies and areas of improvement to better position FBO to

more actively participate and lead such work. Resulting data further affirmed existing observations as well as generated additional hypotheses to expand this research beyond the sample population. Continued exploration can help to identify strategies that will move FBO beyond recruitment and hosting, as well as enhance their capacity and readiness to implement and sustain work beyond the research agenda.

Introduction

Individual health behaviors associated with or influenced by lifestyle choices are some of the most prominent contributors to the development of lifestyle-related chronic disease- the leading cause of mortality and morbidity in the United States.[1-3] In particular, behaviors such as diet and physical activity are some of the most significant contributors to the development of lifestyle-related chronic diseases which are the leading cause of mortality and morbidity in both the United States and the world.[4] Lifestyle-related chronic diseases such as cardiovascular disease, cancer, and diabetes account for more than 63% of deaths.[5]

Racial minorities, women, persons with humble income and humble education, individuals older than 45, and individuals at the intersections of these identities, disproportionately carry the burden of lifestyle-related chronic disease and adverse health outcomes associated with poor health behavior.[6-9] Heart disease is the leading cause of mortality in most racial communities of color and is responsible for 24.5% of African American and 23.2% of Asian/Pacific Islander deaths annually.[10] Heart disease is also the number one killer of African American and white women in the United States, causing one in four deaths in women annually. [11] Additionally, 8% of all black women have coronary heart disease. [11] racial minorities experience significantly higher risk of cancer diagnosis in later stages due to low rates of

insurance coverage. [12, 13] Lastly, the prevalence of type 2 diabetes among adults in the United States has increased dramatically since the 1990's and the trend continues.[14] African Americans suffer disproportionately from type 2 diabetes and its complications.[4, 9, 15, 16] In 2009, when compared to other racial groups, 12.6 % of African Americans had been diagnosed with diabetes in comparison to 7.1% of non-Hispanic whites.[4, 9, 15, 16] Within the Hispanic population, Puerto Ricans have a 94% higher risk of being diagnosed with diabetes.[4, 9, 15, 16]

Implementation of lifestyle-related interventions in collaboration with community organizations that aim to improve health and health behaviors in minority populations has become a public health practice and research priority.[6, 17] Interventions such as behavior modification and education programs help participants gain the knowledge and skills necessary to achieve gradual and permanent lifestyle behavior change.[18-20] These interventions can be especially useful in minority communities that must navigate behavior change in the midst of physical-environmental, political, and economic disadvantages.[21, 22] Implementing interventions in partnership with community organizations that understand these disadvantages and/or serve the targeted community can enhance program relevancy, appropriateness, and effectiveness.[23-25]

Collaborative partnerships with community organizations such as faith-based organizations (FBO) present a unique and emerging platform to implement lifestyle-related health interventions.[26] Growing empirical evidence continues to link religion to health as well as identify the advantages of implementing lifestyle-related interventions with FBO.[27, 28] Multiple studies have also shown faith-based health programs to be effective and produce positive health and health behavior outcomes in minority communities. [29-31]

FBO have become increasingly invested in utilizing their pivotal social and cultural role in their communities to influence and effectively address health issues.[26, 29-31] This role has become even more vital in minority communities that disproportionately experience the burden of disease and lack of health resources. Additional inherent characteristics such as established credibility in vulnerable communities, commitment to community health, change agents, opinion leaders, services and facilities, human resources, organizational structure and operations, policies and mission statements, and social support networks that are recognized as key attributes that influence program success within such communities and further position FBO as an essential partner.[29-33] As a result, public health leaders, practitioners and researchers have shown increased interest in: 1) lifestyle-related faith-based health programs implemented via collaborative partnerships with FBO; and 2) active engagement of FBO in multiple phases of the program development and implementation.[26, 29-33]

More attention has been placed on the efficacy and effectiveness of faith-based health programs as opposed to process evaluations.[29] Process evaluations can provide information that more fully reveal the processes and factors influential in program, partnership and prioritized health outcomes. A multitude of factors are important to yield successful faith-based programs.[32-34] For example, multilevel capacity and readiness (i.e. individual, organizational, community, collaborative), along with partnership synergy, are integral in the independent and collaborative ability of partners to develop, implement, evaluate and sustain program and partnership outcomes.[35-56]

Studies have recommended improving FBO capacity and readiness to design, evaluate, and sustain programs more effectively.[29, 31, 34] However, there is a paucity of research that has: 1) identified and explored capacity and readiness factors in the context of FBO; and 2) assessed

capacity and readiness of FBO and partners (including research partners) implementing a collaborative faith-based health research program. Therefore, the overall purpose of this study is to: 1) gain the perspectives of FBO, community, and research partners actively involved in a collaborative faith-based health program; and 2) further explore capacity and readiness factors influence on partners experience implementing such a program. Results can provide valuable information that addresses the limited exploration and understanding of these issues.

Methods

All research procedures in this study were approved by the Institutional Review Board at Virginia Tech and the Baptist General Convention of Virginia (Please See Appendix A: IRB approval letter).

Participants

Overall recruitment efforts were targeted towards FBO, community, and research partners of a collaborative faith-based lifestyle- related program called *Balanced Living with Diabetes (BLD)*. BLD is a community-based type 2 diabetes education program. A five-year study funded by the National Institute for Nursing Research aimed to determine the effect of BLD, with and without support groups, on glycemic control, diabetes self-care including nutrition behavior, self-efficacy, and self-regulation within the African American Community. A community-based participatory research approach was used to tailor the program to the target audience, and is delivered to local churches in partnership among a community agency (Virginia Cooperative Extension), local health professionals (Virginia Department of Health), academic institution (Virginia Tech), state-wide association of African American churches (Baptist General Convention of Virginia), and health ministry programs of the local churches (Please See

Appendix B: Visual Chart of BLD partners). Community, health, and faith partners of the BLD advisory committee recognized varying readiness and capacity exist among churches and faith-based partners for delivering such a program, within the context of research design and evaluation methodologies. This further solidified the appropriateness and relevancy of this sample population to address study objectives.

It was important that partners from the target population were able to provide a comprehensive perspective of their experience based on consistent participation in multiple phases of the BLD program. Therefore, a purposeful criterion sample method was used to identify the participants (n=27) from each partner level based on the eligibility criteria outlined in Appendix C. A convenience sample was used to recruit participants. Eligible participants were initially contacted by the Primary Investigator (PI), who was also a member of the BLD advisory committee, to introduce the study. Participants were then contacted via email, by the Co-Primary Investigator (Co-PI) or a trained graduate student, and invited to participate in the study. Once recruited, participants were emailed and mailed a participant letter, a copy of the questionnaire, and the implied consent form (Please See Appendix D: Participant Recruitment Letter) (Please See Appendix E: Implied Consent Form). To better ensure participants understood the items provided to them, full disclosure of the complete study, including its purpose, questions, risks, and benefits, time completion, confidentiality and consent, assistance available to complete the questionnaire, incentives, and steps to submit the questionnaire was provided during a follow-up phone call by the Co-PI or trained graduate student.

Development of the Assessment Tools

Readiness and capacity factors, key characteristics and elements of successful faith-based health programs, and partnership synergy factors were used to develop an exploratory list for data collection.[32-62] Factors that appeared to be most critical across the literature and relevant to the investigation were used to prioritize and synthesize factors, generate initial questions, and organize those questions into overarching sections. Existing capacity and readiness tools were then used to help guide overall organization and format of the information into a questionnaire and semi-structured interview script.[44, 45, 48, 51, 52]

To better ensure relevancy and appropriateness of the data collection tools, study design, and methods, a community advisory board (CAB) was developed. Members from the BLD community advisory board, that did not participate in the study but who understood the research topic, were invited to participate (Please See Appendix F: Community Advisory Board Recruitment Letter). Three CAB members were recruited to help: 1) provide feedback to improve content, format, clarity, and implementation of data collection tools; and 2) review and provide suggestions about the overall study to ensure relevancy and appropriateness of study design, methods, and data collection tools. Formative research was conducted and initial data collection tools were piloted with participants (n=1 clergy member; n=1 church coordinator) who were available and interested in participating in early stages of the project to test tools and make revisions before full launch of the project. Resulting information was reviewed with the CAB and used to revise and finalize the tools.

Data Collection and Analysis

At a place and time most convenient to them, participants individually completed the questionnaire in regards to their experience implementing BLD (Please See Appendix G: Capacity and Readiness Questionnaire). The questionnaire was formatted into five major sections:1) personal and organizational experience with program; 2) BLD program experience; 3) partnership synergy; 4) collaborative readiness; and 5) interpretation of experience: changes in BLD experience over time. Within each section, a list and description of the capacity or readiness factors that may influence that experience were provided. Based on the description, participants where then asked to rate the factors they thought had been most important to their experience using a Likert Scale (1 signifies "least importance" and 10 signifies "extremely important").

Once participants submitted their questionnaire, the Co-PI scheduled the one-on-one in person follow-up interview. A semi-structured interview script was also formatted into the same four major sections as the questionnaire, along with the same list and description of the capacity and readiness factors within each section. The script included additional questions such as: 1) how the participant became involved in the BLD program; 2) benefits, opportunities, challenges, barriers related to the specific capacity or readiness factor; 3) importance of the capacity or readiness factor in previous health and wellness experience before their involvement with BLD; and 4) most important lessons for their role and for the partnership (Please See Appendix H: Capacity and Readiness Interview Script)

Participants were interviewed about factors within each section that they rated with a 9 or 10. A simplified copy of the interview script that marked the factors they rated with a 9 or 10

was provided to participants at least 48 hours prior to the interview (Please See Appendix I: Simplified Capacity and Readiness Script) Participants were informed that they would only be interviewed about these factors. The Co-PI, and a trained graduate student conducted the interviews. Interviews lasted approximately 60 to 90 minutes. Interviews were audio recorded, and interviewers took additional field notes.

All recordings were transcribed verbatim by the Co-PI, trained graduate student that conducted the interviews, or a professional transcription service experienced with research-based data. The Co-PI coordinated and led two data analysis teams. All data analysis team members participated in a data analysis training workshop to ensure inter-rater reliability and consistency in implementation of data analysis protocols. Prior to qualitative analysis, basic descriptive statistics were used to identify the factors that partners collectively rated "10" extremely important. This information was used to narrow the focus of qualitative analysis.

A data analysis team member was recruited to help the Co-PI develop the analysis codes. The leads independently reviewed all transcripts to identify emerging themes and patterns. The leads then resolved discrepancies to reach consensus and synthesize patterns and themes. The same process was repeated for each partner level to capture themes and patterns more specific to their group experience and role. Codes were then formalized into a coding matrix with an overarching coding scheme across all partners and subthemes for each partner level. The leads then formalized a protocol to identify and code meaning units with the data analysis teams. Transcripts were independently coded using a line-by-line method to identify quotes or "meaning units" to support identified codes. Following this process, the team met to share coding, resolve discrepancies, and gain consensus in the coding of meaning units. Data were further reduced, organized, and interpreted by verifying the accuracy of themes and meaning. After analysis was

completed, the Co-PI used qualitative and mixed methods research analysis software (Dedoose) to comparatively code, quantify, and further interpret the data.

Results

Of 27 eligible participants, 20 participated in the study (state health ministry administrator=1out of 1 (100%); area church coordinator=4 out of 4 (100%); local church coordinator=6 out of 11 (55%); clergy=3 out of 3 (100%); cooperative extension personnel=2 out of 4 (50%); researcher=4 out of 4 (100%)). Data from the clergy member and church coordinator who participated in the formative phase were included in the full study because review of their data did not reveal major variations or inconsistencies compared with participants from the full study. Out of 31 capacity and readiness factors presented, participants collectively rated 18 (58%) as ‘10’ (extremely important) to their role and partnership experience in the BLD program. A summary of presented findings is provided in: 1) Appendix J: Summary of Capacity and Readiness Factors Rated ‘10’; 2) Appendix K: Breakdown of Capacity and Readiness Factors Rated ‘10’ by Partner Level; and 3) Appendix L: Major Themes and Supporting Meaning Units Related to Capacity and Readiness Factors Rated ’10’; and (4 Appendix M: Challenges and Benefits Experienced Related to Capacity and Readiness Factors Rated ’10’). Major findings regarding the factors rated most important across all the partners are presented. The selected data are most relevant to the purpose of this study.

Personal Experience (Individual Capacity)

Four of eight factors in the personal experience (individual capacity) category were collectively rated as ’10.’ Individual capacity is described as an individual’s personal knowledge, skills, and attitudes that can shape personal experiences as well as organizational experiences.

Self-determination, confidence, information, and impact were rated as most important to participant's experience. [36-39, 41, 42] **Self-determination** is the ability to make conscious and confident decisions to accomplish personal goals. [36-39] Participants perceived having a personal and/or professional goal to improve control and prevent diabetes as a significant influence on self-determination. A notable motivator of self-determination was when participants and partners learned more about diabetes as the program continued. Notable challenges regarding self-determination were motivating participants to participate and learning the information to understand and talk about BLD program. Both challenges were experienced mainly by faith partners. **Confidence** is the perceived ability to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges. [36-39] Interest, investment in, and outcomes of program strengthened confidence. A notable challenge experienced by faith partners was maintaining confidence despite barriers to launch program. One faith partner noted "I think as a challenge, I would have to say keeping people motivated to participate, especially when they know that they have to complete a lot of paperwork…the surveys were long and there were persons there who wanted to participate, but didn't necessarily want to fill out the paperwork." **Information** is described as the availability of accessible and easy to understand information that informs opportunities. [36-39] Participants perceived adaption of materials and customization of program important for effectiveness and implementation. One participant noted "…our focus groups were very important because one of the things we did in our early meetings was look at the consent form and we kept on adapting the consent form because we had to make sure people understood it." Another participant noted, "…it made it wonderful for me as an area coordinator, and even better for me as a church coordinator, because all I had to do was to assist...I mean, everything was just available. It was right there and I didn't

have to do anything, so getting the information out was excellent." **Impact** is the sense of contribution to individual and organizational objectives. [36-39] Participants perceived helping multiple communities contributes to impact. Two participants noted "I am getting the research accomplished at the same time I'm meeting the needs of people out in the communities" and "part of my interest is in the accomplishment that we've made in getting this small group of African-American, under-served, largely fairly elderly adults to see science in a totally different light, that we've approached them about being in a research project."

Organizational Experience (Organizational Capacity)

Three of six factors in the organizational experience (organizational capacity) category were collectively rated as '10.' Organizational capacity is described as an organization's structure, operations, and objectives can be used to achieve organizational, individual, and program goals. [43, 49, 50, 57] **Aspirations** is described as the "vision, mission, and goal" to accomplish major objectives. [43, 49, 57] Participants perceived that BLD fits the vision, mission and goals of the churches, BGCVA and its health ministry, and individuals involved in the project.. This is in part because FBO offer needed health services in the community that support their aspirations. As one participant noted "I would think that many churches would incorporate this program because we do not only care for the spiritual aspects of one's life, but we must encourage the physical as well." **Human resources** can be described as the personnel, volunteers, and partners needed to execute strategies. [43, 49, 57] Participants perceived FBO volunteers and personnel important to implement the program as one participant noted "Obviously, it varies by church, but they are pivotal…recruitment of participants wouldn't happen…coordination of all logistics…educating church members along the way in terms of this process and how it's going to benefit them wouldn't happen. I mean, it's just—they're vital."

Organizational structure is described as the systems, roles, and responsibilities that support effectiveness. [43, 49, 57] Participants perceived organizational structures in place to support launch and implementation of program as one of the most important aspects of organizational structure. "My pastor has been very supportive. I mean, they've let us use the church without any problems and he's been very supportive of the program. He actually, was a participant in the program himself because he's a diabetic. He talks about the program during church…and financially they've been supportive with anything that I needed."

Balanced Living with Diabetes Program Experience (Key Aspects of Successful Programs)

Five of six factors in the BLD program experience (key aspects of successful programs) category were collectively rated as '10.' Several key characteristics and elements are considered critical in planning and implementing faith-placed health programs such as BLD to create desirable program and partnership outcomes. [32-34, 58, 59] **Partnership** is described as the relationship between BLD partners that also actively involves the faith-based partner (i.e. church, Baptist General Convention) to implement various phases of the BLD program. [32-34] Collaborative effort of partners to implement program was perceived as most important and a participant noted "The partnership relationships are key in my view because every partner brings a different perspective to the table." Another participant noted "Baptist General Convention knows its member organizations better than we do. They have trusted relationships with those organizations; they know historically what has happened from a health perspective or other perspective that we would not know. Um, the, you know, extension agents know their communities where they come from, um, and, you know, the culture, the—where people eat [LAUGHS], you know, what kinds of foods they eat are different, different areas of the state, so they bring that critical perspective, um, and I'm sure others I'm missing. Um, and then I think

Virginia Tech brings a strong—you know, the research, um, design—um, a strong public health perspective in nutrition and public health and diabetes prevention and control. **Involvement** is clear commitment and active involvement of church members and leaders to implement the BLD program. [32-34] Participants perceived involvement and support of church members and leaders as very important to program outcomes and one of the most important aspects that influenced involvement. One participant shared, "I went through them, the leaders, to get their members involved. So being in a partnership with the leaders of the church was very instrumental in them getting their members to cooperate with us." A notable challenge regarding involvement was ensuring those who were not members of the church, but participating in the program, were just as supported and received consistent communication to continue involvement in the program. Two participants shared "those who are not members here and just making sure that the communication was given to them because…we wanted to be assured that they were also contacted and reminded of what we were about" and "…people got to mix up with people that they didn't know …they didn't always mix with the people they didn't know. They stayed with their own group. That's another reason why I felt like it was important that you move around, because the host church has to be friendly and be welcoming to the visitors." **Resources** can be described as the availability and accessibility of the partner's resources such as kitchen, meeting areas, etc. [32-34] Participants perceived access to church resources as most important for program success. One participant noted, "It's been great because the lady (extension agent) that comes in to prepare the meals needs somewhere to prepare it…when you have a kitchen committee, sometimes they don't want anybody in the kitchen but the committee. They have been very warm and receptive to someone else coming in and using the facility and that means a lot and I don't think we have had any problems with that at all." **Community Focused** can be described

as a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target community to tailor the program design to be more effective and relevant. Participants perceived knowing what will work with the community as key to program implementation and program outcomes. [32-34] A participant noted "I marked that as really important, because that's one of the basic hallmarks of community-based participatory research. So, we did a lot of background research with the community advisory board, and did some recipe testing and all of that, and tried to tailor the general curriculum to reach this target population. Another participant noted "So a lot of the community in the area and the adults that we're working with love taste. If it doesn't taste right and…sometime it doesn't look right to them they shy away from it. Their taste buds are the most important thing to them and even surpasses being healthy or not. I want it to taste good." **Social supportive networks** can be described as the mutual respect, support, and generosity amongst community members, church members, and partners. [59] Participants perceived social support networks most important to program implementation and participant/ partner participation. A participant noted "I think it's very important that everyone be on board, be on the same agenda…everything fell in place because you started at the top. You started where the church was identified and the pastor bought into it, the health ministry bought into it, the membership, the church…one particular church even on a Sunday had another guest speaker to come in to talk about diabetes to the membership. Not to just the group who was taking the Balanced Living with Diabetes class. So that extra effort was put into play because they wanted the entire church membership to know that if there was a need that any of them could, and were able to receive this education." Another participant noted "the people in the class already know each other, already know each other's challenges, and they support each other. And, also will almost give social pressure to each other."

Partnership Synergy

Three of seven factors in the partnership synergy experience category were collectively rated as '10.' Synergy can be described as working together in partnership to achieve more by combining complementary strengths, perspectives, values, and resources of all the partners in the search for better solutions. [35] **Energy** can be described as buzz, passion, and enthusiasm. [35] Participants perceived good energy influenced participants' excitement about the program and having help with diabetes. One participant noted, "…even those foods that some would eat or bring up and it was something that we were seeing they should not have, nobody was jumped on and nobody was scolded "you don't supposed to be eating that." It was brought across in a manner as saying, "Well, what can we do with that to make it better." Another participant noted "…the coordinator was excited, the coordinator was motivated. So that energy was transferred over to them because of the fact that the coordinator energized and excited about what he or she is doing." **Outcomes** can be described as achieving goals and making progress. [35] Tangible results and incremental progress important for the program, partners, and participants was perceived as most important to outcomes. A participant stated "It's been very important, I know from session to session… the tests were taken and everybody anxiously awaited the results of their test to see if they were doing better, about the same or doing worse, and that was a very special part of the program. "I felt like goals were achieved. From week to week, we're making progress, as evidenced by the participants showing up because I think, at most meetings, the persons were there." **All benefit** is described as all partners (including the target community) are getting something out of the partnership. [35] Participants perceived getting something positive out of program important to participants and partners. Two participants stated participant stated "When people can see there are tangible benefits that benefit everyone, I think that that helps the

program survive and continue" and "I think we did. I think my church has grown tremendously in the year that the program was there. I feel like that the partners benefited by getting good information and good feedback from the program."

Collaborative Readiness

Three of ten factors in the collaborative readiness category were collectively rated as '10.' Collaborative readiness can be described as a partnership's fit, readiness, capacity, and operations are necessary to plan, implement, evaluate, and disseminate programs. [51, 53] **Goodness of fit** can be described as the compatibility of the partners to conduct the proposed project together. [51, 53] Participants perceived complementary objectives, goals, and desired outcomes are important to goodness of fit. One participant shared "Baptist General Convention, with their Spices Health Ministry, is a perfect fit, because that's what Spices Health Ministry is supposed to do, is maximize health of the, the members of the congregation." Another participant shared "I think that all had to do with sitting down and looking at, "Here's what we propose to do. How does that fit with what you already have in place or what you can put in place?" I think it worked very well." **Operations** is described as the roles, responsibilities, structure, and processes the BLD partnership uses to operate. [51, 53] Participants perceived clear roles and responsibilities for partners helped with operations. One participant stated "…the roles and responsibilities were all defined out, so really everybody kind of knew their role and knew what their responsibilities were so that the program could run smoothly." **Readiness** can be described as the extent to which an individual, group, and community is appropriately prepared to take action and address an issue effectively. [51, 53] Partners perceived helping prepare other partners for program and readiness of partners influenced success of program implementation. One participant noted "We've had sort of a variety at the church level of involvement of the pastor and encouragement

of the pastor. Sometimes it's the coordinator going to the pastor saying "You know I want to do this, can we do this?" Other times it's the pastor saying "I pick you and I want you to do this." Another participant stated "…their openness was probably essential. Their readiness… probably not that important. We were happy to work them through it. You know, if they were open to becoming involved in the program, did not really require that much from them. We were pretty much able to put into place or help them put in place anything that we needed to happen."

Interpretation of Experience (Community Readiness)

Three of nine factors in the interpretation of experience (community readiness) category were collectively selected as most applicable to their experience with health /wellness program planning and partnership over the course of the BLD program. Community readiness is the group processes, organization, and characteristics relevant to individual and group readiness to implement efforts effectively and continue to sustain efforts by community support. Prior to implementing the BLD program, many participants stated that they had "little awareness" about diabetes and healthy habits in most of the BGCVA churches the BLD program was planning to serve. **Little awareness** is described as acknowledgement of the problem but there is no motivation to address it. [60-62] Participants perceived there to be awareness of problem but didn't want to talk about it as a church, limited knowledge of how to address diabetes, or accepted health issues/diabetes as inevitable problem. For example, one participant stated "… I think the fact that they have seen it occurring generation after generation, I think there's some of the inevitability in there… and I hear it in my own family. They sort of expect to get certain things because other people in the family did…and many have seen diabetics just watch it progress from one stage to the next, but seen very little of people doing behavior change in order to slow it down, or maybe they even remove themselves from symptoms at some point. That's the part

that people are not aware of… I don't think people think in terms of, "If I start my children exercising and eating properly, they may not ever go into type 2 diabetes, even if they're somewhat predisposed."

Once involved in the BLD program participant stated there was "action" about diabetes and healthy habits in most of the BGCVA churches the BLD program was serving. **Action** is described as action has begun. [60-62] One participant shared "Because they were involved with our research program, they did have a program at their church, which I would consider taking action. They had people in the church involved."

Lastly, participants shared over the next year, if they were to continue involvement in the BLD program or launch another diabetes-related program with the same BGCVA churches, there would be "program implementation" about diabetes and healthy habits in most of the BGCVA churches the BLD program served. Program **Implementation** is described as programs have been launched and are supported by personnel, [60-62] staff, or volunteers. Enhanced knowledge, resources, access to volunteers and professionals to launch future programs was considered an important aspect of this perspective. For example, one participant shared "It would be an encouragement for all churches to implement such a program. Because we want to live as long as we can, and any help that we can get would be a plus for us. So we do plan to continue the process with better health, better living with diabetes."

Discussion

Collaborative partnerships with FBO are an emerging strategy to address health issues in the most marginalized communities. However, there is limited information about the capacity and readiness of partners, especially FBO, to actively partner and participate in such work. FBO

consist of and/or directly serve minority and marginalized communities prioritized in faith-based health research. Yet, FBO are traditionally utilized solely to recruit participants and host the program at their facility. Therefore, continuing to examine the efficacy and effectiveness of faith-based programs will produce growing information that such programs can produce positive health outcomes, but with minimal knowledge regarding how and why programs are effective.

In this study, participants perceived 18 out of 31 capacity and readiness factors extremely important to their personal, organizational, community and collaborative ability and readiness to actively participate in the development and implementation of the BLD program. Across partners, the majority of themes and supporting meaning units that were identified relate to a powerful effect contributed by these factors to an overall positive experience with BLD (Please See Results and Appendix L). These data also solidifies assumptions generated by the BLD steering committee and scientific literature that varying capacity and readiness of churches and faith-based partners contributed to challenges regarding the launch, implementation, and continuation of BLD in some congregations (Please See Appendix M: Perceived Challenges and Benefits). [31, 33]

At minimum, these 18 factors should be further explored to determine appropriate strategies and areas of improvement to better position FBO to more actively participate and lead such work. For example, a higher percentage of factors in the BLD experience and collaborative readiness categories were rated highly in comparison to the other sections. Organizational capacity factors directly contribute or create challenges for the factors list in both sections. For example, participants believed that the compatibility of BLD partners contributed to their success implementing the BLD program. This was in part due to the complementary objectives, goals, and outcomes partners shared with each other. Participants also believed that the BLD program

fit within each organizations vision, mission, and goals. Collectively, both factors contribute to the organizational and collaborative capacity of partners to implement BLD.

Information from this study may not be generalizable to all collaborative partnerships. However, the methodical approach used to develop data collection tools and implement the research protocol contributed to the study's effectiveness and validity. Also, the purpose of this study was to navigate the initial steps of identifying, synthesizing, and exploring capacity and readiness in the context of collaborative faith-based partnerships. Partners from the BLD program were best positioned to do so, as evidenced by resulting data that helped to further affirm existing observations as well as generate additional hypotheses to expand this research beyond the sample population. Additionally, the factors that were not rated highly also yielded valuable information worthy of further exploration regarding capacity and readiness. For example, "program design" in the BLD experience was rated low by faith-based partners but rate much higher by researchers. Program design is described as the utilization of specific strategy and theory, to design, implement, and evaluate the program. Theoretical approaches such as community-based and participatory frameworks can improve the level of FBO participation and partnership within research based studies. However, if faith partners are unaware and unfamiliar with such methodologies, there may be limited ability to advocate for such inclusion. Consequently, incorporating such approaches becomes heavily dependent on the choice of the researchers.

Active interest of FBO to have a more active lead in collaborative efforts that address lifestyle-related health issues is a promising strategy to better address the needs of marginalized communities. Continued exploration of this research topic can help identify strategies that will

move FBO beyond recruitment and hosting, as well as enhance their capacity and readiness to implement and sustain work beyond the research agenda.

References

1. Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health Social Behavior*, Spec No, 80-94.
2. Stokols D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion,* 10(4), 282-298.
3. United States Department of Health and Human Services. (2010). Healthy people 2010: Understanding and improving health, Washington, DC: United States Government Printing Office. Retrieved from http:// www.healthypeople.gov /Document /pdf/uih /2010uih.pdf.
4. Center for Disease Control (CDC). (2011). Behavioral risk factor surveillance system: Prevalence and trends data. Retrieved from http://www.cdc.gov/brfss/.
5. Center for Disease Control (CDC). (2009). Leading causes of death. Retrieved from http://www.cdc.gov/nchs/fastats/lcod.htm.
6. United States Department of Health and Human Services. The Office of Minority Health. (2011). HHS action plan to reduce racial and ethnic health disparities. Retrieved from http://minorityhealth.hhs.gov/npa/files/Plans/HHS/HHS_Plan_complete.pdf
7. United States Census Bureau. (2008). Life expectancy by sex, age, and race: 2008. Retrieved from http://www.census.gov/compendia/statab/2012/tables/12s0105.pdf.
8. Center for Disease Control (CDC). (2012). Prevalence and trend data 2010. Retrieved from http://apps.nccd.cdc.gov/brfss.
9. United States Department of Health and Human Services. Agency for Healthcare Research and Quality. (2009). Demographic and clinical variations in health status. Retrieved from http://meps.ahrq.gov/data_files/publications/mr15/mr15.pdf.
10. Center for Disease Control (CDC). (2012). America's heart disease burden. Retrieved from http://www.cdc.gov/heartdisease/facts.htm.
11. Mosca, L., Mochari-Greenberger, H., Dolor, R. J., Newby, L. K., & Robb, K. J. (2010). Twelve-year follow-up of American women's awareness of cardiovascular disease risk and barriers to heart health. *Cardiovascular Qualities and Outcomes*, 3(2), 120-7.
12. Cancer and Prevention Control (CDC). (2012). Cancer rates by race and ethnicity. Retrieved from http://www.cdc.gov/cancer/dcpc/data/race.htm.
13. American Cancer Society. (2012). Cancer facts and figures 2012. Retrieved from http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-031941.pdf.
14. Boyle, J., Honeycutt, A., Jarayan, V., Hoerger, T. J., Geiss, L. S., Chen, J., & Thompson, T.J. (2001). Projection of diabetes burden through 2050. *Diabetes Care,* 24 (11), 1936-40.
15. Center for Disease Control (CDC). (2011). 2011 National diabetes fact sheet. Retrieved from http://www.cdc.gov/diabetes/pubs/factsheet11.htm?loc=diabetes-statistics.
16. Center for Disease Control (CDC). (2011). Diagnosed and undiagnosed diabetes in the United States, all ages, 2010. Retrieved from http://www.cdc.gov/diabetes/pubs/estimates11.htm#4.

17. Center for Disease Control (CDC). (2012). Racial ethnic approaches to community health (REACH). Retrieved from http://www.cdc.gov/reach/about.htm.
18. Lindstrom, J., Louheranta, A., Mannelin, M., Rastas, M., Salminen, V., Eriksson, J., Uusitupa, M., & Tuomilehto, J. (2003). The Finnish Diabetes Prevention Study Group (DPS): Lifestyle intervention and 3-year results on diet and physical activity. *Diabetes Care*, 26(12), 3230-3236.
19. Roumen, C., Blaak, E. E., & Corpeleijn, E. (2009). Lifestyle interventions for prevention of diabetes: Determinants of success for future implementation. *Nutrition Reviews*, 67(3), 132-146.
20. Lisovicz N, Wynn T, Fouad M, Partridge EE. (2008). Cancer health disparities: What we have done. *American Journal of Medicine Science*, 335(4), 254-9.
21. Sloane, D., Nascimento, L., Flynn, G., Lewis, L., Guinyard, J. J., Galloway-Gilliam, L., & Yancey, A. K. (2006). Assessing resource environments to target prevention interventions in community chronic disease control. *Journal of Health Care for the Poor and Underserved,* 17(2), 146-158.
22. Edberg, M. C. (2010). Essential readings in health behavior theory and practice. Sudbury, MA: Jones and Bartlett Publishers.
23. Israel, B. A., Eng, E., Schultz, A. J., & Parker, E. A. (2005). Methods in community based participatory research for health. San Fransico, Ca: Jossey Bass.
24. Israel, B. A., Schulz, A., Parker, E. A., & Becker, A. B. (1998). Review of community based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health*, 19(1), 173-202.
25. Minkler, M. (2008). Community-based participatory research for health (2nd edition.). San Francisco, CA: Jossey Bass.
26. Chatters, L. M., Levin, J. S., & Ellison, C. G. (1998). Public health and health education in faith communities. *Health Education & Behavior,* 25(6), 689-699.
27. Levin, J. S. (1994). Religion and health: Is there an association, is it valid, and is it causal? *Social Science & Medicine*, 38(11), 1475-1482.
28. Williams, D. R., & Sternthal, M. J. (2007). Spirituality, religion and health: Evidence and research directions. *Medical journal of Australia*, 186(10), 47.
29. DeHaven, M. J., Hunter, I. B., Wilder, L., Walton, J. W., & Berry, J. (2004). Health programs in faith-based organizations: Are they effective? *American Journal of Public Health*, 94(6), 1030.
30. Lasater, T. M., Becker, D. M., Hill, M. N., & Gans, K. M. (1997). Synthesis of findings and issues from religious-based cardiovascular disease prevention trials. *Annals of Epidemiology*, 7(7), S46-S53.
31. Campbell, M. K., Hudson, M. A., Resnicow, K., Blakeney, N., Paxton, A., & Baskin, M. (2007). Church-based health promotion interventions: Evidence and lessons learned. *Annual. Review of Public Health*, 28, 213-234.
32. Peterson, J., Atwood, J. R., & Yates, B. (2002). Key elements for church-based health promotion programs: Outcome-based literature review. *Public Health Nursing*, 19(6), 401-411.

33. Carter-Edwards, L., Jallah, Y. B., Goldmon, M. V., Roberson Jr, J. T., & Hoyo, C. (2006). Key attributes of health ministries in African American churches: an exploratory survey. *North Carolina Medical Journal*, 67(5), 345-50.
34. Carter-Edwards, L., Hooten, E. G., Bruce, M. A., Toms, F., Lloyd, C. L., & Ellison, C. (2012). Pilgrimage to wellness: An exploratory report of rural African American clergy perceptions of church health promotion capacity. *Journal of Prevention & Intervention in the Community*, 40(3), 194-207.
35. Jones, J. & Barry, M. M. (2011). Developing a scale to measure synergy in health promotion partnerships. *Global Health Promotion*, 8(2), 36–44
36. FRIDE (2006). The individual as an agent of change: The empowerment process. Retrieved from www.fride.org/descarga/BGR_IndiviCamb_ENG_dic06.pdf.
37. Israel, B. A., Checkoway, B., Schulz, A., & Zimmerman, M. (1994). Health education and community empowerment: Conceptualizing and measuring perceptions of individual, organizational, and community control. *Health Education & Behavior,* 21(2), 149-170.
38. Becker, J., Kovach, A. C., & Gronseth, D. L. (2004). Individual empowerment: How community health workers operationalize self-determination, self-sufficiency, and decision-making abilities of low-income mothers. *Journal of Community Psychology,* 32(3), 327-342.
39. Hur, M. H. (2006). Empowerment in terms of theoretical perspectives: Exploring a typology of the process and components across disciplines. *Journal of Community Psychology*, 34(5), 523-540.
40. Peterson, N.A., Lowe, J.B., Aquilino, M.L., & Schnider, J.E. (2005). Linking social cohesion and interactional empowerment: Support and new implications for theory. *Journal of Community Psychology*, 33(2), 233–244.
41. Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44.
42. Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164-180.
43. Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building collaborative capacity in community coalitions: A review and integrative framework. *American Journal of Community Psychology*, 29(2), 241-261.
44. Goodman, R. M., Speers, M. A., McLeroy, K., Fawcett, S., Kegler, M., Parker, E., & Wallerstein, N. (1998). Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Education & Behavior*, 25(3), 258-278.
45. Lempa, M., Goodman, R. M., Rice, J., & Becker, A. B. (2008). Development of scales measuring the capacity of community-based initiatives. *Health Education & Behavior*, 35(3), 298-315.
46. Zakocs, R. C., & Edwards, E. M. (2006). What explains community coalition effectiveness: a review of the literature. *American Journal of Preventive Medicine*, 30(4), 351.
47. Gibbon, M., Labonte, R., & Laverack, G. (2002). Evaluating community capacity. *Health & Social Care in the Community*, 10(6), 485-491.

48. Motley, M., Holmes, A., Hill, J., Plumb, K., & Zoellner, J. (2013). Evaluating community capacity to address obesity in the Dan River Region: A case study. *American Journal of Health Behavior,* 37(2), 208-217.
49. Sowa, J. E., Selden, S. C., & Sandfort, J. R. (2004). No longer unmeasurable? A multidimensional integrated model of nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 33(4), 711-728.
50. Herman, R. D., & Renz, D. O. (2003). Nonprofit organizational effectiveness: Contrasts between especially effective and less effective organizations. *Nonprofit Management and Leadership*, 9(1), 23-38.
51. Andrews, J. O., Cox, M. J., Newman, S. D., & Meadows, O. (2011). Development and evaluation of a toolkit to assess partnership readiness for community-based participatory research. *Progress in Community Health Partnerships*, 5(2), 183.
52. United States Department of Health and Human Services. (2012). Checklists for assessing readiness to undertake community collaboration. Retrieved from http://captus.samhsa.gov/access-resources/resource-types/ta-tools?tid=All&tid_1=All&term_node_tid_depth=All&term_node_tid_depth_1=All&title =readiness.
53. Andrews, J. O., Newman, S. D., Cox, M. J., & Meadows, O. (2010). Are we ready: Partnership readiness for community-based participatory research (CBPR) toolkit. Retrieved from https://sctr.musc.edu/images/stories/2012_Toolkit_Final_10.18.12.pdf.
54. Hull, P. C., Canedo, J., Aquilera, J., Garcia, E., Lira, I., & Reyes, F. (2008). Assessing community readiness for change in the Nashville Hispanic community through participatory research. Progress in Community Health Partnerships, 2(3), 185-194.
55. Edwards, R. W., Jumper-Thurman, P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of Community Psychology*, 28(3), 291-307.
56. Oetting, E. R., Jumper-Thurman, P., Plested, B., & Edwards, R. W. (2001). Community readiness and health services. *Substance Use & Misuse*, 36(6-7), 825-843
57. McKinsey and Company. (2001). Effective capacity building in non-profit organizations. Retrieved from http://www.vppartners.org/sites/default/files/reports/full_rpt.pdf.
58. Painter, J. E., Borba, C., Hynes, M., Mays, d., & Glanz, K. (2008).The use of theory in health behavior research from 2000 to 2005: A systematic review. *Annals of Behavior Medicine*, 35, 358-362.
59. Taylor R. J., & Chatters, L. M. (1988) Church members as a source of social support. *Review of Religious Research,* 30(2), 193-203.
60. Oetting, E. R., Jumper-Thurman, P., Plested, B., & Edwards, R. W. (2001). Community readiness and health services. *Substance Use & Misuse,* 36(6-7), 825-843.
61. Stith, S., Pruitt, I., Dees, J., Fronce, M., Green, N., Som, A., & Linkh, D. (2006). Implementing community-based prevention programming: A review of the literature. *The Journal of Primary Prevention*, 27(6), 599-617
62. Edwards, R. W., Jumper-Thurman, P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of Community Psychology*, 28(3), 291-307.

Chapter 4

Capacity and Readiness Church Health Assessment (CRCHA): Developing and Piloting a Questionnaire to Assess Organizational Capacity and Readiness of FBO to Implement Lifestyle Related Health Programs

Abstract

Objective: Develop, pilot, revise, and improve content, format, and implementation of a mixed methods questionnaire that will identify and assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs, particularly in partnership with community, health, and academic organizations. **Participants:** Church health ministry coordinator and congregants from a church with an active health ministry and experience in faith-based health programs. Congregants with knowledge of the demographics, activities, interest, and resources at their church were invited to participate. **Methods:** Participants completed a questionnaire followed by a focus group discussion to provide suggestions for questionnaire improvement. Selective transcription method was used to document relevant ideas, feedback, and issues raised by participants. Additional study data was triangulated with participant results to revise the questionnaire. Participants completed the revised questionnaire along with a follow-up questionnaire to verify accuracy and appropriateness of revisions. **Results:** Resulting data yielded valuable feedback and suggestions that improved the content, format, and implementation of the CRCHA. The revised CRCHA is formatted into four major sections and thirteen subsections that gather information about factors, characteristics, and attributes deemed relevant to FBO organizational capacity and readiness to actively lead and/or partner in lifestyle-related faith-based health programs. **Conclusion:** The

CRCHA demonstrated potential to assess FBO attributes that influence organizational capacity and readiness in the context of health and wellness programs. CRCHA should be implemented in a diverse sample of churches to better understand its generalizability and ability to successfully assess organizational capacity and readiness to implement lifestyle-related health programs.

Introduction

Individual health behaviors associated with or influenced by lifestyle choices are some of the most prominent contributors to the development of lifestyle-related chronic disease- the leading cause of mortality and morbidity in the United States. [1-3] In particular, behaviors such as diet and physical activity are some of the most significant contributors to the development of lifestyle-related chronic diseases which are the leading cause of mortality and morbidity in both the United States and the world. [4] Lifestyle-related chronic diseases such as cardiovascular disease, cancer, and diabetes account for more than 63% of deaths. [5, 6]

The implementation of lifestyle-related interventions in collaboration with community organizations that aim to improve health and health behaviors in minority populations has become a public health practice and research priority. [6] Collaborative partnerships with community organizations such as faith-based organizations (FBO) present a unique and emerging platform to implement lifestyle-related interventions that aim to improve health and health behaviors in minority populations. [7] Multiple studies have shown faith-based health programs can be effective and produce positive health and health behavior outcomes in minority communities. [8-10] For example, a significant percentage faith-based health studies have been conducted in partnership with churches in African American communities.[10] These types of interventions can be even more effective when: 1) social and cultural elements of FBO

environment are included in the program; and 2) the program is implemented as an extension of new or existing health ministry/committee activities and resources. [8-10] Further, theoretical frameworks such as the socioecological model suggest that many of the lifestyle-related interventions that focus on individual behavior/lifestyle change and are successful in faith-based settings must be reinforced with supportive social, cultural, and physical environments, within the organization, that also promote health. [2, 11, 12]

FBO have inherent characteristics such as: established credibility in vulnerable communities, commitment to community health, change agents, opinion leaders, services and facilities, human resources, organizational structure and operations, policies/mission, and social support networks that are recognized as some of the key attributes that influence program success within such communities. [7-10, 13, 14] These factors are also integral to organizational and collaborative capacity and readiness that further influence desired and sustainable organizational effectiveness and program implementation. [15-30] Organizational capacity can be described as an organization's structure, operations, and objectives used to achieve individual, organizational, and program goals. [15-23] Organizational readiness can be described as the processes and characteristics relevant to the extent an organization is prepared to take action and address an issue effectively.[24-30] Therefore, FBO are positioned as promising health partners and leads, and as a result there is increased interest of FBO to actively engage and lead multiple phases of the research partnership and program process to improve and sustain individual and ecological health outcomes. However, studies continue to show FBO involved solely as the site to recruit, host, and test health programs. This may be in part due to a growing need to improve FBO organizational capacity and readiness, more specifically FBO organizational capacity and readiness. [8-10]

Although various organizational capacity and readiness factors for health programming have been identified, few studies have explored and contextualized these factors within the context of FBO. [15, 31] More specifically, there is a paucity of research that assesses organizational capacity and readiness of the FBO as an evaluative component of faith-based health research programs. This has resulted in limited understanding regarding the influence of FBO organizational characteristics, partnership characteristics, dynamics, operating functions, activities, resources, etc. within faith-based health programs. This has established a greater need to identify and explore the influence of these factors on FBO organizational capacity and readiness as well as to develop comprehensive assessment tools and measures that can do so in the context of health promotion efforts.

Therefore, the overall purpose of this study is to develop, pilot, revise, and improve content, format, and implementation of a mixed methods questionnaire that will identify and assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs, particularly in partnership with community, health, and academic organizations. It is believed that this tool has potential utility for individual churches for self-assessment and capacity and readiness building and for researchers to identify church characteristics most strongly associated with effective health programming. Using this information may facilitate more active participation by FBO in development and implementation of health programs in the context of collaborative partnerships. FBO would then be better positioned to actively lead and/or partner in faith-based health programs that address their community's most pressing health issues.

Methods

All research procedures in this study were approved by the Institutional Review Board at Virginia Tech (Please See Appendix N: Chapter 4 IRB Approval Letter).

Development of Capacity and Readiness Church Health Assessment (CRCHA)

Key capacity and readiness factors identified in preliminary dissertation research and faith-based health research that align with fore mentioned information that have been critical in the development and implementation of successful faith-based health programs were used to: 1) develop the exploratory list of items to be included in the questionnaire; and 2) identify overarching sections and generate initial questions. [13-30, 32-35] Existing faith-based health assessment questionnaires developed by the Virginia Department of Health, faith-partnered *Balanced Living with Diabetes* research program, and Michigan Healthy Communities Collaborative were used to further develop and synthesize questions, and help guide overall organization and format of the questionnaire. [36, 37]

Participants

Recruitment strategy and sampling methods. A purposeful criterion sample method was used to identify the sample population. Therefore, overall recruitment efforts were targeted towards a church with an active health ministry that participated in the initial development and tailoring of a collaborative faith-based lifestyle-related program, *Balanced Living with Diabetes (BLD)*. BLD is a community-based type 2 diabetes lifestyle education program. A five-year study funded by the National Institute for Nursing Research aimed to determine the effect of BLD, with and without support groups, on glycemic control, diabetes self-care including nutrition behavior, self-efficacy, and self-regulation within the African American Community. A

community-based participatory research approach was used to tailor the program to the target audience, and is delivered to local churches in partnership among a community agency (Virginia Cooperative Extension), local health professionals (Virginia Department of Health), academic institution (Virginia Tech), state-wide association of African American churches (Baptist General Convention of Virginia), and health ministry programs of the local churches.

To ensure that participants were capable of providing comprehensive information for the study, the health ministry coordinator of the church, who also had an active role in the development and tailoring of the BLD program, led the process to identify and recruit congregants using a convenience sampling method. It was believed that the health ministry coordinator's role and experience with BLD provided them with a strong understanding of church attributes integral to organizational capacity and readiness needed for health and wellness program planning. This positioned them to identify congregants who could provide comprehensive in-depth feedback to improve content, format, and implementation of the CRCHA to better identify and assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs. Eligibility criteria for congregants included: 1) active member of the church, and 2) some knowledge of the demographic characteristics, ministry/auxiliary/committee activities (e.g., youth ministry, health ministry, kitchen committee, etc.), and resources at their church.

The church and church coordinator were contacted via email by the Primary Investigator (PI) and invited to participate. Once the church coordinator agreed to participate the Co-Primary Investigator (Co-PI) worked with the health ministry coordinator to provided full disclosure of the complete study, including its purpose, questions, risks and benefits, time commitment, confidentiality, assistance to complete the questionnaire during data collection, and incentives.

Incentives were outlined as: 1) a light meal provided at each data collection session; and 2) each participant would receive $15 after completion of all data collection sessions. A recruitment flyer was developed to assist the health ministry coordinator during recruitment (Please See Appendix O: Recruitment Flyer). Once recruited, participants were placed into two groups based on their availability to complete study activities and provided with an informed consent document one week prior to data collection (Please See Appendix P: Informed Consent Form). All study activities were conducted at a location and time that was most convenient for each group.

Data Collection & Analysis

The Co-PI and PI led the consent process prior to beginning the data collection session so participants had the opportunity to ask any questions. Within their groups, participants completed the CRCHA individually. The CRCHA was verbally administered to any participant that needed assistance. Once all questionnaires were completed, each group participated in a one-hour focus group discussion to: 1) review the content, format, and wording of each question, 2) provide suggestions to improve the questionnaire, and 3) provide insight about their experience and thoughts while completing the questionnaire A semi-structured focus group interview guide was used to help facilitate the discussion (Please See Appendix Q: Focus Group Interview Guide). The Co-PI moderated the discussion, while the PI took detailed notes, managed the audio recording equipment, kept the time, and addressed special needs from participants. Both investigators were trained to conduct focus groups. Following the focus group, the moderator reviewed the field notes and provided additional information.

A selective transcription method was used to document relevant ideas, feedback, and issues raised by participants. [38] Audio recordings were transcribed by the moderator. Field notes

were also used to ensure that responses by participants were accurately represented. [39] With oversight from the PI, the Co-PI independently reviewed the data to identify emerging patterns. [40] To further ensure validity of analysis, a health professional from the BLD steering committee who was not involved with data collection, was asked to provide major feedback regarding content, format, and implementation of the CRCHA. [41] Lastly, notes from a BLD steering committee meeting regarding the CRCHA were reviewed for relevant feedback. [41] All responses were triangulated, and the Co-PI and PI worked to resolve discrepancies, interpret, sort, organize, and solidify data into major themes within each question. Resulting data was used to revise the questionnaire.

To verify accuracy and appropriateness of revisions, participants (in the same groups) participated in a second data collection session to individually complete the revised questionnaire. Upon completion of the questionnaire, participants had the option to provide individual feedback about the CRCHA improvements via a one page follow-up questionnaire (Please See Appendix R: Individual Feedback Questionnaire). On average, completion of the follow-up questionnaire took less than 10 minutes. With oversight from the PI, the Co-PI independently reviewed the feedback to identify emerging patterns and organized the data into final suggestions that were used to further refine and finalize the CRCHA for subsequent research.

Results

All of the 20 eligible congregants recruited by the church health ministry coordinator of the participating church agreed to participate. One congregant was unable to participate due to a schedule conflict. As previously mentioned, participants were placed into two groups (Group 1,

n= 9 out of 10 (90%); Group 2, n=10 out of 10 (100%)). Nineteen congregants participated in the first data collection session and focus group. Completion of the CRCHA took approximately one hour. Fifteen congregants participated in the second data collection session (Group 1, n= 7 out of 10 (70%); Group 2, n=8 out of 10 (80%)) and provided feedback via the individual follow-up questionnaire. Completion of the revised CRCHA took approximately 30 to 45 minutes.

Participants included members that participated in various church activities such as bible study and activities sponsored by the church's community center. Participants were also actively involved in various church ministries such as the youth ministry, adult choir, kitchen committee, health ministry, etc. All participants identified as African American and were older than 40 years of age. Three of 19 participants (16%) were male.

The resulting data yielded valuable feedback and suggestions that improved the content, format, and implementation of the CRCHA. The revised CRCHA is formatted into four major sections (church health and wellness resources, availability/church calendar, church health and wellness activities, and congregation health) and thirteen subsections that gather information about factors, characteristics, and attributes deemed most appropriate for this research and theorized to be most relevant to FBO organizational capacity and readiness to actively lead and/or partner in lifestyle-related faith-based health programs (Please See Appendix S: CRCHA Questionnaire).

CRCHA subsections are as follows: 1) built environment for physical activity, eating, and food preparation/service; 2) physical and administrative resources to support health and wellness activities (i.e. personnel, budget, volunteers, meeting space, mission statement, health ministry or committee); 3) health resources (i.e. health professionals in congregation, health

ministry/committee, health lead); 4) communication resources (i.e. internet, newsletter, email); 5) inclusion of health messages in services and activities (i.e. sermons, bulletins, website, newsletters, posters/flyers, etc.); 6) church calendar operation and church availability for health and wellness activities; 7) types of community organizations partnered for health and wellness activities; 8) frequency of health-related activities (i.e. health screenings, health education programs, healthy food activities, physical activity programs and opportunities); 9) leadership involvement to support health and wellness activities (i.e. clergy, church board, church auxiliary/committee/ministry); 10) existence of health-related policies (smoking, healthy food/beverage options at church functions, opportunity for physical activity at church functions); 11) physical activity opportunities for youth, adults, and families; 12) availability of healthy food and beverages at church and community outreach functions; and 13) demographic information for the congregation (church size, age distribution of congregants, health behaviors, health status).

A summary of findings are provided in Table 1 and Table 2. Major themes and findings within each of the four major sections that are most reflective of information provided by participants are presented.

Discussion

FBO have been positioned as promising partners to effectively address pressing health issues in our most marginalized communities. However, there has been a paucity of studies that aim to understand and address the noted organizational capacity and readiness limitations that continue to position FBO solely as the recruitment, host, and/or test site for faith-based health programs. Therefore, it was important to prioritize the utility of the CRCHA for individual

churches to use as a self-assessment tool that provided information useful for capacity and readiness building.

Study design and data collection yielded valuable information that strengthened the validity of the CRCHA. For example, theoretical frameworks, pre-existing and evidence-based questionnaires, and previous dissertation research was used to develop the CRHA. Next, the CRCHA was piloted with a knowledgeable population that could determine if the major sections, subsections, and measures used to gather information about factors, characteristics, and attributes were most appropriate and relevant to FBO organizational capacity and readiness to actively lead and/or partner in lifestyle-related faith-based health programs (content & face validity). Triangulating additional input from health, community, faith, and research professionals familiar with this type research, but not a part of the data collection process, could further determine if the questionnaire's content, format, and implementation was appropriate.

Due the exploratory nature of this study, it is understood that results may not be generalizable to all churches due to the small sample size and specificity of the group used to conduct this study. However, there was a much greater need for the development of this tool and this is the preliminary phase of this process. To better ensure the CRCHA was comprehensive enough to collect all the information needed to address the purpose of this study, the participating church needed to have established ministries, experience with lifestyle-related and broader health and wellness programs, and a church ministry health coordinator.

Resulting data yielded valuable information regarding: 1) methods to improve questionnaire implementation; 2) possible challenges participants may experience completing CRCHA; and 3) further understanding regarding such challenges. For example, many

participants found it challenging to complete the "congregation health section." However, many participants stated that even if they did not have an answer for one of these questions, simply being asked the question helped them think about the need to assess health and wellness of the congregants more clearly. Additionally, participants shared that this was one of the few, if not first times, they had thought about the overall health of the church and that this information could be used to better prioritize health needs and initiatives to address them.

The CRCHA has potential to assess FBO attributes that influence organizational capacity and readiness in the context of health and wellness programs and should be implemented in a diverse sample of churches to better understand its generalizability and ability to successfully assess organizational capacity and readiness to implement lifestyle-related health programs. Additionally, piloting this tool within a larger sample can also determine its utility as a promising research tool that can capture frequencies, variations, and consistencies. Such utility may increase the likelihood that more research and external partners will incorporate organizational capacity and readiness assessment as a method to guide program and partnership development. Resulting information can be used to develop strategies that may facilitate more active participation by FBO in development and implementation of health programs in the context of collaborative partnerships. FBO would then be better positioned to actively lead and/or partner in faith-based health programs that address their community's most pressing health issues.

Table 1. Major findings to improve content, format, and implementation of the CRCHA

Initial Data Collection Session	
Church Health & Wellness Resources	
How can we improve the format of this section of the questionnaire so that it is easier to complete?	• Ensure tables are on one page with clear tabs showcasing choice options • Revisit order of questions • Ask "How Often" questions over a course of 12 months versus 6 months. Six months often not enough time for church to gauge efforts due to year-long activities calendar
How can we improve the wording in this section of the questionnaire so that it is easier to understand?	• Reformat questions from "Do you…" to "Does your church have…"
Were there any questions that were difficult to understand?	• No
Were there any questions that most people would have a hard time answering or would not know, etc.?	• No
What questions should have been asked in this section of the questionnaire but weren't?	• Add follow-up questions to get more insight about use and access to the resources. For example, "Does your church have a dining hall? If yes, how many?" "How many people do they seat? " "Can the dining hall be used by individuals or groups external to the church?"
What are other suggestions you would provide to improve this section of the survey?	• None
Availability/Church Calendar	
How can we improve the format of this section of the questionnaire so that it is easier to complete?	• Provide option to provide additional information regarding church availability
How can we improve the wording in this section of the questionnaire so that it is easier to understand?	• Questions should not be worded to focus on days and times that are best to host activities based on congregant's availability. Instead the questions should focus on the days and times church facilities are available. For example, "Based on the day, what times are the church facilities available to offer health and wellness activities?"
Were there any questions that were difficult to understand?	• No
Were there any questions that most people would have a hard time answering or would not know, etc.?	• No
What questions should have been asked in this section of the questionnaire but weren't?	• Is it possible to change or add activities to the church calendar? If yes, how far in advance must the activity be submitted for the calendar?
What are other suggestions you would provide to improve this section of the survey?	• None
Church Health and Wellness Activities	

How can we improve the format of this section of the questionnaire so that it is easier to complete?	• Provide space on tables to list specific activities church is doing within each category • Revisit order of questions • Ask "How Often" questions over a course of 12 months versus 6 months. Six months often not enough time to church gauge efforts due to year-long activities calendar
How can we improve the wording in this section of the questionnaire so that it is easier to understand?	• Frequency options to report "How Often" an activity was done in the past 12 months need to be easy to understand and select. For example, a) 6 or more times, b) 3 to 5 times, c) 1 or 2 times, d) rarely or none, e) don't know or not applicable. • Be sure to provide examples or clarification for questions with answer options that can be interpreted differently. For example, church ministry, church association, health education programs, healthy food activities, etc.
Were there any questions that were difficult to understand?	• No
Were there any questions that most people would have a hard time answering or would not know, etc.?	• Multiple people would need to answer this section
What questions should have been asked in this section of the questionnaire but weren't?	• Need to ask if any changes have happened in the church that have presented opportunities or challenges for health and wellness activities. Sometimes churches go through transitional periods with the pastor, church board, health lead, etc. and may effect current and future activities • Ask which programs were for the community, congregation, community focused-open to congregation, congregation focused open to the community
What are other suggestions you would provide to improve this section of the survey?	• None
Congregation Health	
How can we improve the format of this section of the questionnaire so that it is easier to complete?	• Place this section last in the questionnaire because challenging to answer and may be too discouraging to complete other sections if put first • Remove write in responses and provide options that can be circled
How can we improve the wording in this section of the questionnaire so that it is easier to understand?	• Instead of asking "how many" ask "approximately, what percentage…" and provide options such as "less than half" " about half" "more than half" or " I don't know"
Were there any questions that were difficult to understand?	• No
Were there any questions that most people would have a hard time answering or would not know, etc.?	• Many people would not know about congregational health unless it is the pastor or health coordinator/lead. Some people see health as a very private matter, but good to ask these questions
What questions should have been asked in this section of the questionnaire but weren't?	• Ask positive health questions that would promote good health or assess how the church is improving health "What percentage of the congregation exercise?" "What percentage

	of the congregation include fruits and vegetables in the diet?" What percentage of the congregation would you say are healthy?" • Ask questions about mental health, disability, etc.
What are other suggestions you would provide to improve this section of the survey?	• Divide this section into questions that ask about youth, adults, and seniors
Instructions	
What are other suggestions you would provide to improve this section of the survey?	• Use lighter colors for tables • Provide options how to complete questionnaire • Place estimated time to complete questionnaire • Describe who is most capable of completing questionnaire
Completion of Questionnaire	
In your opinion, if the questionnaire was sent to the church to be completed by someone there, who would be most capable to complete the questionnaire?	• Health ministry coordinator, parish nurse, committee leaders or ministry leaders • Clergy
Would it be better for the church to ask a group of people to do it, one person do it alone, or one person do it but ask others as needed?	• Rep from each ministry, committee, or group within church-sit at table to complete it together

Table 2. Major findings to improve content, format, and implementation of the CRCHA Follow-Up Data Collection Session

Question	Findings
What questions should have been asked in the questionnaire but weren't?	• Well covered and questions related to all areas of health • Questions about who is filling out questionnaire
If at all, how did the revised format of the questionnaire make it easier to complete?	• Format changes better • Easier
If at all, how did the revised format of the questionnaire make more challenging to complete?	• Congregational health section still challenging
If at all, did the revised wording of the questionnaire make it easier to understand?	• Yes • Questions were simpler and liked yes/no format of some questions • More options to circle answers vs write-in
If at all, how did the revised wording of the questionnaire make more challenging to complete?	• Minimal challenges due to wording
What other suggestions would you provide to improve the questionnaire?	• Increase the font size • Less questions
In your opinion, what type of people would be most capable of completing this survey within the church?	• Health ministry, parish nursing coordinator/staff • Diverse group of people actively involved in church • Teens/Young Adults • Middle age or older

References

1. Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health Social Behavior*, Spec No, 80-94.
2. Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion,* 10(4), 282-298.
3. United States Department of Health and Human Services. (2010a). Healthy People 2010: Understanding and Improving Health Washington, DC: United States Government Printing Office. Retrieved from http:// www.healthypeople.gov /Document /pdf/uih /2010uih.pdf.
4. Center for Disease Control (CDC). (2011). Behavioral risk factor surveillance system: Prevalence and trends data. Retrieved from http://www.cdc.gov/brfss/.
5. Center for Disease Control (CDC). (2009). Leading causes of death. Retrieved from http://www.cdc.gov/nchs/fastats/lcod.htm.
6. United States Department of Health and Human Services. The Office of Minority Health. (2011). HHS action plan to reduce racial and ethnic health disparities. Retrieved from http://minorityhealth.hhs.gov/npa/files/Plans/HHS/HHS_Plan_complete.pdf.
7. Chatters, L. M., Levin, J. S., & Ellison, C. G. (1998). Public health and health education in faith communities. *Health Education & Behavior*, 25(6), 689-699.
8. DeHaven, M. J., Hunter, I. B., Wilder, L., Walton, J. W., & Berry, J. (2004). Health programs in faith-based organizations: Are they effective? *American Journal of Public Health*, 94(6), 1030.
9. Lasater, T. M., Becker, D. M., Hill, M. N., & Gans, K. M. (1997). Synthesis of findings and issues from religious-based cardiovascular disease prevention trials. *Annals of Epidemiology*, 7(7), S46-S53.
10. Campbell, M. K., Hudson, M. A., Resnicow, K., Blakeney, N., Paxton, A., & Baskin, M. (2007). Church-based health promotion interventions: Evidence and lessons learned. *Annual Review of Public Health*, 28, 213-234.
11. Sallis, F. J., Owen, N., & Fisher, B.E. (2008). Ecological models of health behavior. In K. Glanz, K. B. Rimer, & K. Viswanath (Eds.), Health behavior and health education: Theory, research, and practice (pp 465-485). San Francisco, CA: Jossey-Bass.
12. Baruth, M., Wilcox, S., & Condrasky, M. D. (2011). Perceived environmental church support is associated with dietary practices among African-American adults. *Journal of the American Dietetic Association*, 111(6), 889-893.
13. Peterson, J., Atwood, J. R., & Yates, B. (2002). Key elements for church-based health promotion programs: Outcome-based literature review. *Public Health Nursing*, 19(6), 401-411.
14. Carter-Edwards, L., Jallah, Y. B., Goldmon, M. V., Roberson Jr, J. T., & Hoyo, C. (2006). Key attributes of health ministries in African American churches: An exploratory survey. *North Carolina Medical Journal*, 67(5), 345-50.

15. Carter-Edwards, L., Hooten, E. G., Bruce, M. A., Toms, F., Lloyd, C. L., & Ellison, C. (2012). Pilgrimage to wellness: An exploratory report of rural African American clergy perceptions of church health promotion capacity. *Journal of Prevention & Intervention in the Community*, 40(3), 194-207.
16. Sowa, J. E., Selden, S. C., & Sandfort, J. R. (2004). No longer unmeasurable? A multidimensional integrated model of nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 33(4), 711-728.
17. Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building collaborative capacity in community coalitions: A review and integrative framework. *American Journal of Community Psychology*, 29(2), 241-261.
18. Goodman, R. M., Speers, M. A., McLeroy, K., Fawcett, S., Kegler, M., Parker, E., & Wallerstein, N. (1998). Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Education & Behavior*, 25(3), 258-278.
19. Lempa, M., Goodman, R. M., Rice, J., & Becker, A. B. (2008). Development of scales measuring the capacity of community-based initiatives. *Health Education & Behavior*, 35(3), 298-315.
20. Zakocs, R. C., & Edwards, E. M. (2006). What explains community coalition effectiveness: a review of the literature. *American Journal of Preventive Medicine*, 30(4), 351.
21. Gibbon, M., Labonte, R., & Laverack, G. (2002). Evaluating community capacity. *Health & Social Care in the Community*, 10(6), 485-491.
22. Motley, M., Holmes, A., Hill, J., Plumb, K., & Zoellner, J. (2013). Evaluating community capacity to address obesity in the Dan River Region: A case study. *American Journal of Health Behavior*, 37(2), 208-217.
23. Herman, R. D., & Renz, D. O. (2003). Nonprofit organizational effectiveness: Contrasts between especially effective and less effective organizations. *Nonprofit Management and Leadership*, 9(1), 23-38.
24. Andrews, J. O., Cox, M. J., Newman, S. D., & Meadows, O. (2011). Development and evaluation of a toolkit to assess partnership readiness for community-based participatory research. *Progress in Community Health Partnerships*, 5(2), 183.
25. Oetting, E. R., Jumper-Thurman, P., Plested, B., & Edwards, R. W. (2001). Community readiness and health services. *Substance Use & Misuse*, 36(6-7), 825-843.
26. Stith, S., Pruitt, I., Dees, J., Fronce, M., Green, N., Som, A., & Linkh, D. (2006). Implementing community-based prevention programming: A review of the literature. *The Journal of Primary Prevention,* 27(6), 599-617
27. Hull, P. C., Canedo, J., Aquilera, J., Garcia, E., Lira, I., & Reyes, F. (2008). Assessing community readiness for change in the Nashville Hispanic community through participatory research. *Progress in Community Health Partnerships*, 2(3), 185-194.
28. Edwards, R. W., Jumper-Thurman, P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of Community Psychology*, 28(3), 291-307.
29. Donnermeyer, J. F., Plested, B. A., Edwards, R. W., Oetting, G., & Littlethunder, L. (1997). Community readiness and prevention programs. *Community Development*, 28(1), 65-83.

30. Andrews, J. O., Newman, S. D., Meadows, O., Cox, M. J., & Bunting, S. (2012). Partnership readiness for community-based participatory research. *Health Education Research*, 27(4), 555-571.
31. Dodani, S., & Fields, J. Z. (2010). Implementation of the fit body and soul, a church- based life style program for diabetes prevention in high-risk African Americans. A feasibility study. *The Diabetes Educator*, 36(3), 465-472.
32. Tangenberg, K. M. (2005). Faith-based human services initiatives: Considerations for social work practice and theory. *Social Work*, 50(3), 197-206.
33. McKinsey and Company. (2001). Effective capacity building in non-profit organizations. Retrieved from http://www.vppartners.org/sites/default/files/reports/full_rpt.pdf.
34. MacLellan-Wright, M. F., Anderson, D., Barber, S., Smith, N., Cantin, B., Felix, R., & Raine, K. (2007). The development of measures of community capacity for community-based funding programs in Canada. *Health Promotion International*, 22(4), 299-306.
35. Catanzaro, A. M., Meador, K. G., Koenig, H. G., Kuchibhatla, M., & Clipp, E. C. (2007). Congregational health ministries: a national study of pastors' views. *Public Health Nursing*, *24*(1), 6-17.
36. Virginia Department of Health. (2009). Congregational health assessments. Retrieved from http://www.vdh.state.va.us/healthpolicy/primarycare/ruralhealth/health-assessment.htm.
37. Michigan Healthy Communities Collaborative. (2012) Walk by faith: Promoting healthy congregations assessment. Retrieved from http://mihealthtools.org/faith/default.asp?tab=about#3
38. Halcomb, E. J., & Davidson, P. M. (2006). Is verbatim transcription of interview data always necessary? *Applied Nursing Research*, 19(1), 38-42.
39. Patton, M.Q. (2002). Tips for tape-recording interviews: How to keep transcribers sane: After the interview. In Laughton, D.C. (Eds.), *Qualitative research and evaluation methods* (pp.380-384). Thousand Oaks, CA: Sage.
40. Patton, M.Q. (2002). Qualitative analysis and interpretation. In Laughton, D.C. (Eds.), *Qualitative research and evaluation methods* (pp.438-439, 447-449, 452-496). Thousand Oaks, CA: Sage.
41. Patton, M.Q. (2002). Enhancing the quality and credibility of qualitative analysis. In Laughton, D.C. (Eds.), *Qualitative research and evaluation methods* (pp.380-384). Thousand Oaks, CA: Sage.

Chapter 5

Piloting the Capacity and Readiness Church Health Assessment (CRCHA): An Exploratory Study to Assess Faith-Based Organizations Organizational Capacity and Readiness to Implement Lifestyle Related Health Programs

Abstract

Objective: Pilot the Capacity and Readiness Church Health Assessment (CRCHA) to assess FBO organizational capacity and readiness to implement lifestyle related health programs, particularly in partnership with community, health and academic organizations. **Participants:** Overall recruitment efforts were geared towards a network of churches within a state-wide association of churches called the Baptist General Convention of Virginia (BGCVA) (n=1,000). Simple random sampling was used to identify churches to participate within the BGCVA network (n=300). **Methods:** Participants were provided an electronic (via email) and hard copy (via mail) of the CRCHA and were given a minimum of two weeks to complete and submit the questionnaire via email or pre-postmarked envelope. The CRCHA is formatted into four major sections (i.e. church health and wellness resources, availability/church calendar, church health and wellness activities, and congregation health) and 13 subsections that gather information about factors, characteristics, and attributes theorized to be most relevant to FBO organizational capacity and readiness to actively lead and/or partner in lifestyle-related faith-based health programs. **Results:** Twenty-three churches completed the CRCHA. The Pastor, health ministry lead or member, and church clerk were the most common roles of the individuals that completed or helped complete the questionnaire. Slightly more than half of the questionnaires were completed by one person. The CRCHA successfully collected information that reported

frequencies and variation in responses to identify patterns and form hypotheses regarding most influential capacity and readiness factors. **Conclusion:** The CRCHA has potential to assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs. This information can be used in research settings and by individual churches for self-assessment to strengthen capacity for health programming. Continued use of the CRCHA in similar but larger populations is important for understanding its generalizability within this population.

Introduction

Individual health behaviors associated with or influenced by lifestyle choices are some of the most prominent contributors to the development of lifestyle-related chronic disease- the leading cause of mortality and morbidity in the United States.[1-3] In particular, behaviors such as diet and physical activity are some of the most significant contributors to the development of lifestyle-related chronic diseases which are the leading cause of mortality and morbidity in both the United States and the world.[4] Lifestyle-related chronic diseases such as cardiovascular disease, cancer, and diabetes account for more than 63% of deaths.[5, 6]

Racial minorities, women, persons with humble income and humble education, individuals older than 45, and individuals at the intersections of these identities, disproportionately carry the burden of lifestyle-related chronic disease and adverse health outcomes associated with poor health behavior.[7-9] Heart disease is the leading cause of mortality in most racial communities of color and is responsible for 24.5% of African American and 23.2% of Asian/Pacific Islander deaths annually.[10] Heart disease is also the number one killer of African American and white women in the United States, causing one in four deaths in women

annually.[11] Additionally, 8% of all black women have coronary heart disease. [11] In 2012, 13 % of African Americans and Hispanics were diagnosed with diabetes in comparison to 8% of non-Hispanic whites. [12] Racial minorities experience significantly higher risk of cancer diagnosis in later stages due to low rates of insurance coverage.[13, 14]

Implementation of lifestyle-related interventions in collaboration with community organizations that aim to improve health and health behaviors in minority populations has become a public health practice and research priority.[15] Collaborative partnerships with community organizations such as faith-based organizations (FBO) present a unique and emerging platform to implement lifestyle-related interventions that aim to improve health and health behaviors in minority populations.[16] Ninety-five percent of Americans believe in a deity or higher power; 70% are members of a religious institution (church, synagogue, mosque, etc.); and60% consider religion to be an important and central part of their lives; and many utilize religion as a common coping strategy when dealing with illness.[17, 18] A 2008 survey of more than 54,000 Americans showed that approximately 80% of the participants identify with a religion, with Christianity as the highest reported religion (76.7%). Of those identifying as Christian, 57% of women and 45% of African Americans followed Baptist Christian practices. Over half of Hispanics (59%) followed Catholic practices.[19]

Growing empirical evidence continues to link religion to health as well as identify the advantages of implementing lifestyle-related interventions with FBO. [20, 21] For example, studies have consistently shown: a) lower risk for lifestyle-related chronic disease in certain denominations (i.e. Mormons, Seventh-day Adventists, Muslims, Orthodox Jews) due to health promoting behaviors; and b) a statistically significant association between religious attendance

and health outcomes (i.e. mortality, cancer incidence, hypertension, subjective health) due to factors such as enhanced social support and faith in health and healing.[20, 21]

Multiple studies have shown that faith-based health programs can be effective and produce positive health behavior outcomes in minority communities.[22-24] For example, a significant percentage of faith-based health studies have been conducted in partnership with churches in African American communities.[24,] These types of studies can be even more effective when: 1) social and cultural elements of FBO environment are included in the program, and 2) the program is implemented as an extension of new or existing health ministry/committee activities and resources.[22-24] Further, theoretical frameworks such as the socioecological model suggest that many of lifestyle-related interventions that focus on individual behavior/lifestyle change and are successful in faith-based settings must be reinforced with supportive social, cultural, and physical environments, within the organization, that also promote health.[25, 26]

FBO have inherent characteristics such as: established credibility in vulnerable communities, commitment to community health, change agents, opinion leaders, services and facilities, human resources, organizational structure and operations, policies and mission statements, and social support networks that are recognized as key attributes that influence program success within such communities.[22-24, 27-29] Further, these characteristics influence organizational ability to promote health and healthy behaviors and are integral to organizational and collaborative capacity and readiness that facilitates desired and sustainable organizational effectiveness and program implementation.[30-44] Organizational capacity can be described as an organization’s structure, operations, and objectives used to achieve individual, organizational, and program goals.[31-38] Organizational readiness can be described as the processes and characteristics relevant to the extent an organization is prepared to take action and address an

issue effectively. [39-44] Therefore, FBO are positioned to be promising health partners and leads, and there is increased interest of FBO to actively engage and lead multiple phases of the research partnership and program process to improve and sustain individual and ecological health outcomes. However, studies continue to show FBO involved solely as the site to recruit, host, and test health programs.[22, 23] This may be in part due to the need to improve FBO capacity and readiness, more specifically FBO organizational capacity and readiness.[22, 24]

Although various organizational capacity and readiness factors have been identified, few studies have explored and contextualized these factors within the context of FBO.[30, 45] More specifically, there is a paucity of research that assesses organizational capacity and readiness of FBO as an evaluative component of faith-based health research programs. This has resulted in limited understanding regarding the influence of organizational characteristics, partnership characteristics, dynamics, operating functions, activities, resources, etc. within faith-based health programs. There is a need to identify and explore the influence of these factors on FBO organizational capacity and readiness and an even greater need to identify and explore the use of a tool that comprehensively assesses such factors within the context of FBO organizational capacity and readiness and health promotion efforts. Therefore, the overall purpose of this study is to pilot the "Capacity and Readiness Church Health Assessment (CRCHA) to assess FBO organizational capacity and readiness to implement lifestyle related health programs, particularly in partnership with community, health and academic organizations

Methods

All research procedures in this study were approved by the Institutional Review Board at Virginia Tech and Baptist General Convention of Virginia Health Ministry (Please See Appendix T: Chapter 5 IRB approval letter).

Capacity and Readiness Church Health Assessment (CRCHA)

The "Capacity and Readiness Church Health Assessment (CRCHA)" is a mixed methods questionnaire specifically designed to assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs, particularly in partnership with community, health and academic organizations. Pre-identified theoretical frameworks, pre-existing and evidence-based questionnaires, and previous dissertation research were used to develop the CRCHA. [27, 28, 35-37, 39, 41-43, 46, 47] The CRCHA is formatted into four major sections (i.e. church health and wellness resources, availability/church calendar, church health and wellness activities, and congregation health) with thirteen subsections that gather information about factors, characteristics, and attributes theorized to be most relevant to FBO organizational capacity and readiness to actively lead and/or partner in lifestyle-related faith-based health programs (Please See Appendix S: CRCHA Questionnaire).

The sections are as follows: 1) built environment for physical activity, eating, and food preparation/service; 2) physical and administrative resources to support health and wellness activities (i.e. personnel, budget, volunteers, meeting space, mission statement, health ministry or committee); 3) health resources (i.e. health professionals in congregation, health ministry/committee, health lead) 4) communication resources (i.e. internet, newsletter, email); 5) inclusion of health messages in services and activities (i.e. sermons, bulletins, website,

newsletters, posters/flyers, etc.); 6) church calendar operation and church availability for health and wellness activities; 7) types of community organizations partnered for health and wellness activities; 8) frequency of health-related activities (i.e. health screenings, health education programs, healthy food activities, physical activity programs and opportunities); 9) leadership involvement to support health and wellness activities (i.e. clergy, church board, church auxiliary/committee/ministry); 10) existence of health-related policies (smoking, healthy food/beverage options at church functions, opportunity for physical activity at church functions); 11) physical activity opportunities for youth, adults, and families; 12) availability of healthy food and beverages at church and community outreach functions; and 13) demographic information for the congregation (church size, age distribution of congregants, health behaviors, health status).

Participants

Recruitment and sampling methods. A purposeful criterion sampling method was used to identify the sample population. Overall recruitment efforts were geared towards a network of churches within a state-wide association of churches called Baptist General Convention of Virginia (BGCVA). BGCVA represents approximately 1,000 African American churches with 30 regional associations in the Commonwealth of Virginia. BGCVA houses a statewide health ministry that focuses on men's and women's health and offers support and resources to its churches. BGCVA previously housed a statewide health support network called "S.P.I.C.E.S. for Life". S.P.I.C.E.S. was located in 12 areas of Virginia, with 110 participating BGCVA churches. These church-based ministries provide BGCVA health representatives that helped each church coordinate health and wellness efforts- including health information, health screenings, and additional support via partnerships and collaborations with other community-based

organizations. Due to BGCVA's health ministry efforts, it was assumed that BGCVA churches and projected individuals/leaders within the church would have knowledge regarding their church's health and wellness resources, availability/church calendar, church health and wellness activities, and congregation health that influence organizational capacity and readiness to develop and deliver successful lifestyle-related health and wellness programs independently or via collaborative partnerships. To better ensure participants represented an array of churches varying in size, structure and operations, and experience regarding health and wellness resources and activities, simple random sampling was used to identify churches to participate within the BGCVA network (n=300).

The study was advertised and promoted at the BGCVA annual statewide conference by: 1) using flyers and word of mouth with visitors at the BGCVA/BLD partner table (Please See Appendix U: BGCVA Announcement Tabling Script).; 2) announcing the study during the conference community breakfast; and 3) placing flyers in participant handbags and conference programs (Please See Appendix V: Participant Recruitment Flyer). All verbal promotion and written advertisements shared that churches would be randomly selected to participate in the study and receive an invitation via mail, email, and/or telephone. Following the conference, a combination of telephone, mail, and/or email was used to further invite, introduce the study, and recruit churches using the randomly selected pool of 300 (Please See Appendix W: Recruitment and Consent Script). Once recruited, each church identified a lead/leads to complete the questionnaire. If needed, the lead also identified and recruited additional congregants to help complete the questionnaire.

Prospective respondents were supplied with information to ensure that they understood that completion and submission of the questionnaire acted as implied consent. With assistance

from a trained graduate student, the Co-Primary Investigator (Co-PI) led the recruitment and consent process. The implied consent process took place prior to the beginning of any study components to allow the opportunity to review and ask any questions prior to completion and submission of the questionnaire (Please See Appendix W: Recruitment and Consent Script). Full disclosure of the complete study, including its purpose, questions, risks, and benefits, time completion, confidentiality, assistance to complete the questionnaire, incentives, and steps to submit the questionnaire were provided to participants: 1) in the initial invitation email; and 2) verbally during the recruitment phone call. Participants also received a copy of the study recruitment flyer used at the BGCVA Annual Session and a copy of the CRCHA in the initial invitation email and as a hard copy via mail.

Data Collection and Analysis Procedures

Participants were provided an electronic (via email) and hard copy (via mail) of the CRCHA, were given a minimum of two weeks to complete and submit the survey via email or pre-postmarked envelop, and encouraged to complete the survey at a location and time that was convenient to them. Upon request, the survey was also verbally administered via telephone by the Co-PI or trained graduate student. Upon submission of the CRCHA, churches were entered into a raffle for a chance to win one of six $100 awards to support health programming at the church. Churches were encouraged to use the incentive towards health and wellness efforts but were at liberty to use it as they saw fit.

Quantitative and qualitative data were entered into SPSS version 23.0 for data analysis. Descriptive statistics such as frequencies and measures of central tendency were used to analyze nominal and scale data. Non-parametric test including chi-square and Fishers exact test ($p<.05$)

were used to explore associations between church characteristics and specific capacity and readiness factors.

Results

Major findings regarding: 1) implementation and completion of the CRCHA; and 2) outcomes within each of the four major sections are presented. These data were selected because they are most reflective of the information provided by the participants and provide valuable information that further supports the purpose of this study and significance of findings to the field.

Of the 300 eligible churches, 23 participated in the study (23%). Thirty-five churches had phone numbers that were no longer in service and updated telephone numbers could not be found. Two churches did not want to participate, five were not churches but church affiliated organizations, and one church was no longer a part of the BGCVA network. Two hundred and twenty-one churches received three different iterations of contact for recruitment and additional contact would have violated IRB participant recruitment policies. Of the 221 churches, 70 churches had a working telephone number but there was no voicemail system to leave a message, the voicemail was full and no additional messages could be left, no one answered the phone, there was a busy signal, and/or the voicemail message did not verify the church’s name. Continued recruitment of the remaining nine churches would have delayed implementation of remaining research phases as well as exceeded the capacity and resources of the Co-PI and graduate student to continue ongoing recruitment throughout the study.

Pastors, health ministry leads or members, church clerks, deacons, trustees, treasurers, active members, and leads or members of church ministries (i.e. kitchen, women’s, youth,

communications) completed the questionnaire. The Pastor, health ministry lead or member, and church clerk were the most common roles for individuals that completed or helped complete the questionnaire. A little more than half of the questionnaires were completed by one person (Pastor=6, church clerk=2, health ministry lead/member=3, active church member=2). Lastly, 17% of the questionnaire was completed by three people, and 13% by two people.

Outcomes for Church Health and Wellness Resources

Built environment for physical activity, eating, and food preparation/service. A majority of churches do not have snack or soda vending machines or a permanent/portable outdoor shelter (e.g. picnic or gathering structure) on their premises. All of the churches have at least one kitchen and dining hall that can be used for health and wellness programs, with the smallest dining hall seating approximately 12 people and the largest dining hall seating approximately 400 people. Additionally, a large percentage of churches stated that these facilities can be used by (kitchen=74%, dining hall=78%) as well as used to serve (kitchen=100%, dining hall=96%) individuals and groups external to the church. Eighty-seven percent of churches have a place to exercise such as a large room or auditorium, a little over half of churches have an indoor and/or outdoor walking path or space, and 30% of churches have a basketball court, ball field, and/or playgrounds on the premises.

Physical and administrative resources to support health and wellness activities. A large percentage of churches (≥85%) have church personnel (i.e. church secretary, church treasurer, maintenance person, etc.); sick/sick and shut in/ prayer lists, office equipment (i.e. computer, printer, scanner, fax); resource library, bulletin, table; classrooms/meeting spaces; and large meeting halls. Other resources varied. For example, 52% do not have a volunteer

list/database and 43% did; 43% do not have a health and wellness budget and 57% do; and 45% do not have a health and wellness mission statement, goals, and/or objectives while 55% do.

Health professional and communication resources. Although 78% of churches have health professionals in their congregation, only 57% of churches have a health ministry, committee, or group. Sixty-seven percent of the health ministry, committee, or group is led by a health professional or qualified person interested in providing health and wellness services to the congregation. Churches reported rarely or not at all including healthy messages in the church's email messages or website (46%), one-on-one or in person counseling (41%), or newsletters (36%). Instead, healthy messages are more frequently included in resource tables (68%), brochures/flyers (61%), bulletins (52%), and sermons (48%) at least three or more times in the past calendar year.

Outcomes for Church Availability and Calendar

Church calendar operation and church availability for health and wellness activities. Ninety-six percent of churches have a church calendar and 55% percent of those churches create their calendars 12 months in advance. The church facilities are most available to offer health and wellness activities after 5pm Monday through Friday. Hosting activities before noon on Wednesday, Thursday, and Saturday as well as between noon and 4pm on Sunday also appear to be times church facilities are most available. With the exception of Sunday, facilities are least available between noon and 4pm.

Outcomes for Church Health and Wellness Activities

Partnerships and identifying and developing health and wellness activities. The majority of the churches have partnered with community organizations (76%) and other church

or faith-based organizations (65%) to implement health and wellness work. Approximately half of the churches have worked with local/state government agencies and the health department, while 80% of participants have not partnered with colleges/universities or local schools. Seventy-six percent of health and wellness activities are: 1) developed by the church using outside sources (i.e. website, brochure, toolkit, etc.); or 2) in collaboration with other organizations/groups. Seventy-two percent of activities are completely developed by individuals, committee, auxiliaries and/or ministry within the church, while only 24% are developed by external organizations or groups.

Health-related activities. In the past 12 months, most churches hosted health and wellness activities such as health education programs (i.e. health fairs, health speakers) (71%); provided personal health and wellness resources (i.e. food, shelter, clothing) to congregants and/or community (60%); and supported groups/activities (i.e. weight management clubs, visiting the sick) (55%). Forty-six percent of churches held health screenings (i.e. blood pressure checks). Youth health programs such as food tasting and cooking classes (14%) and health food programs (26%) were the least frequently offered activities. Blood pressure screenings are the most common health screening activity; visiting the sick is the most common support group activity; food donations are the most common personal health and wellness resource activity; open or organized play time is the most common youth health activity; health speakers are the most common health education program; and food demonstrations are the most common healthy food activity.

Leadership involvement to support health and wellness activities. When health and wellness activities are offered, churches reported that approval is mainly required from the pastor while other leadership positions (i.e. church board, deacons) more so provide support. The

churches reported that leadership from the health ministry and other committees/ministries within the church provide resources (50%) and support (75%). However, larger church associations are less likely to provide resources (73%=no), support (60%=no), or require to approve activities (100%=no).

Existence of health-related policies and availability of healthy options. Approximately 50% of the churches do not have guidelines/policies to promote physical activity and 68% do not have guidelines to provide healthy food and beverage options for adults and children at church events and/or activities. “No smoking policy” was most common as well as most enforced. Fifty-two percent of the churches serve healthy beverage choices all or most of the time at church events, but less than 40% provide fruits, vegetables, low fat, low sodium, and/or sugar free options all or most of the time. Fourteen percent of churches reported providing healthy options via community outreach functions all or most of the times.

Outcomes for Congregation Health

Fifty-two percent of congregations have fewer than 100 members and 48% have 100 or more members. Adults made up more than half of the congregation according to 83% of the churches, while 91% reported that youth make up less than half of the congregation. Seventy-four percent have not assessed the health of their congregants in the past year. Overall, churches described the health of the adults and seniors as fair and the youth as good. Seventy percent of churches reported that less than half of the youth in the congregation are obese or overweight, but collectively 40% reported “about half and “less than half “ of youth eat fruits and vegetables. Fifty-five percent of congregations did not know this information. Additional knowledge regarding congregant’s (adult, senior, youth) health appeared to be the most challenging

questions for participants to answer. Particularly regarding mental health, learning difficulties, lifestyle related chronic diseases, and physical, speech, or visual ability challenges, at least 50% or more of congregations didn't know.

Exploring the relationship between churches and organizational capacity and readiness factors

Church size and health ministry. There were statistically significant associations between: 1) larger church size and existence of a health ministry (Fisher's=11.697, p=.004); and 2) health professionals in the congregation and existence of a health ministry (p=.007). Thirteen churches reported having a health ministry. Ten of those thirteen churches were congregations with at least 100 or more members. All of the congregations that have 200 or more members (n=8), also reported having a health ministry (8=yes, 0=no). Ninety percent of the churches (9 out of 10) that reported not having a health ministry were churches with less than 100 members. Of the 13 churches that reported having a health ministry, 100% of those churches also reported having health professionals in their congregation. Only 28% (n=5) of the 18 churches that have health professionals in the congregation do not have a health ministry. Churches that reported not having health professionals in their congregation also do not have a health ministry, and additional analysis showed a significant association between these two factors (Fisher's p=.007).

Health and wellness mission statement, policies, and activities. Of the six health and wellness guidelines and policies that churches could select, on average churches only had one of these policies that were enforced and/or had one of these policies but they were not enforced. A "no smoking policy" was more common to have (50%) and be "enforced" (31%) in comparison to other policies/guidelines. Although these policies were reflective of health and wellness

activities reported by the churches, more of the churches reported not having any of these policies (mode=no). Even if churches reported having a health ministry and health professionals in their congregation (n=13), 54% of these had zero guidelines/policies from the list that were enforced. Having a health and wellness mission statement was associated with having policy/guideline. Seven of twelve churches (60%) that reported having a health and wellness mission statement, goals, and objective also had at least one policy/guideline from the list that is enforced. In comparison, only three of ten churches that did not have health and wellness mission statement, goals, and objective had at least one had at least one policy/guideline from the list that is enforced.

Discussion

Understanding and improving FBO organizational capacity and readiness is a promising strategy to expand FBO involvement in research and public health efforts beyond the site to recruit, host, and test health programs. FBO consist of and assist the most vulnerable and marginalized communities that disproportionately carry the health disparity burden. As previously mentioned, active involvement of FBO to more effectively address these issues via collaborative partnerships has become a public health practice and research priority. Without addressing this gap in the research, FBO are minimally positioned to address their community's most pressing health issues. In part, due to limited knowledge about the factors that influences their organizational capacity and readiness to actively lead and/or partner in faith-based health programs.

Results from this study suggest that CRCHA can be a useful self-assessment tool for individual churches and a more sophisticated tool for organizations interested in capturing this

information across multiple churches. Individual churches do not need sophisticated analysis software or data analysis skills to review and understand their results. Little, if any, assistance was requested from participants to complete the questionnaire. Additionally, the CRCHA can be completed successfully by one person, but is not solely dependent on the knowledge or availability of just one role in the church. Churches that do not have a health ministry and/or lead but have knowledgeable individuals in roles that are considered a common (i.e. pastor, church clerk) part of operations can still complete the CRCHA and use results to improve capacity and readiness for health programming.

Results of this study may not be generalizable to all churches due to the small response rate and participation limited to churches in one statewide association of African American churches. Recruitment strategies revealed challenges when attempting to recruit a random sample of churches including incomplete or erroneous contact information or out of date membership rosters. Ensuring more complete roster information prior to sampling may lead to higher response rate. Additionally, the small sample size limited statistical power, but descriptive analysis and non-parametric tests showed that the CRCHA was able to successfully and consistently collect information in a way that reported frequencies and variations in responses to identify patterns and form hypotheses regarding most influential capacity and readiness factors. Larger and more complex FBO, such as state-wide health ministries, interested in using this tool to gain more information about multiple churches may find it challenging to analyze data without statistical analysis software and/or skills in data analysis. However, this may encourage such FBO to seek partnerships with other organizations such as the health department, universities, and community organizations to leverage resources and knowledge to do so. Further, this may also increase awareness and motivation for partnering organizations to assess FBO

organizational capacity and readiness as a formative or preliminary part of efforts to improve program and partnership planning and outcomes.

The CRCHA demonstrated potential to assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs. This information can be used in research settings and by individual churches for self-assessment to strengthen capacity for health programming. Use of the CRCHA in similar but larger populations is important for understanding its generalizability within this population. Additionally, the ability of the CRCHA to be customized and successfully used in other denominations is an important implication for future research. Varying FBO and partners alike can use this information to better identify and prioritize: 1) health and wellness issues to address; 3) factors needing improvement to address the issue; and 4) a strategy to address the fore mentioned based on what is most feasible for the church.

References

1. Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health Social Behavior*, Spec No, 80-94.
2. Stokols D. (1996). Translating Social Ecological Theory into Guidelines for Community Health Promotion. *American Journal of Health Promotion,* 10(4). 282-298.
3. United States Department of Health and Human Services. (2010a). Healthy People 2010: Understanding and Improving Health Washington, DC: United States Government Printing Office. Retrieved from http:// www.healthypeople.gov /Document /pdf/uih /2010uih.pdf.
4. Center for Disease Control (CDC). (2011). Behavioral risk factor surveillance system: Prevalence and trends data. Retrieved from http://www.cdc.gov/brfss/.
5. Center for Disease Control (CDC). (2009). Leading causes of death. Retrieved from http://www.cdc.gov/nchs/fastats/lcod.htm.
6. Center for Disease Control (CDC). (2012). Chronic disease: The power to prevent, the call to control: At a glance 2009.Retrieved from http://www.cdc gov /chronicdisease/ resources /publications/aag/chronic.htm.
7. United States Department of Health and Human Services. The Office of Minority Health. (2011). HHS action plan to reduce racial and ethnic health disparities. Retrieved from http://minorityhealth.hhs.gov/npa/files/Plans/HHS/HHS_Plan_complete.pdf
8. Center for Disease Control (CDC). (2012). Prevalence and trend data 2010. Retrieved from http://apps.nccd.cdc.gov/brfss.
9. United States Department of Health and Human Services. Agency for Healthcare Research and Quality. (2009). Demographic and clinical variations in health status. Retrieved from http://meps.ahrq.gov/data_files/publications/mr15/mr15.pdf.
10. Center for Disease Control (CDC). (2012). America's heart disease burden. Retrieved from http://www.cdc.gov/heartdisease/facts.htm.
11. Mosca, L., Mochari-Greenberger, H., Dolor, R. J., Newby, L. K., & Robb, K. J. (2010). Twelve-year follow-up of American women’s awareness of cardiovascular disease risk and barriers to heart health. Circulation: *Cardiovascular Qualities and Outcomes*, 3(2), 120-7.
12. Center for Disease Control (CDC). (2014). Diabetes 2014 report card. Retrieved from http://www.cdc.gov/diabetes/pdfs/library/diabetesreportcard2014.pdf.
13. Cancer and Prevention Control (CDC). (2012). Cancer rates by race and ethnicity. Retrieved from http://www.cdc.gov/cancer/dcpc/data/race.htm.
14. American Cancer Society. (2012). Cancer facts and figures 2012. Retrieved from http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-031941.pdf.
15. Center for Disease Control (CDC). (2012). Racial ethnic approaches to community health (REACH). Retrieved from http://www.cdc.gov/reach/about.htm.

16. Chatters, L. M., Levin, J. S., & Ellison, C. G. (1998). Public health and health education in faith communities. *Health Education & Behavior,* 25(6), 689-699.
17. Miller, W. R., & Thoresen, C. E. (2003). Spirituality, religion, and health: An emerging research field. *American Psychologist*, 58(1), 24.
18. Gallup, G. Jr., & Lindsay, D. M. (1999). Surveying the religious landscape: Trends in U.S. beliefs. Harrisburg, PA: Morehouse.
19. Kosmin, B. A., & Keysar, A. (2009).American religious identification survey summary report. Retrieved from http://commons.trincoll.edu/aris/files /2011/08 /ARIS_Report_2008.pdf.
20. Levin, J. S. (1994). Religion and health: Is there an association, is it valid, and is it causal? *Social Science & Medicine*, 38(11), 1475-1482.
21. Williams, D. R., & Sternthal, M. J. (2007). Spirituality, religion and health: Evidence and research directions. *Medical journal of Australia*, 186(10), 47.
22. DeHaven, M. J., Hunter, I. B., Wilder, L., Walton, J. W., & Berry, J. (2004). Health programs in faith-based organizations: Are they effective? *American Journal of Public Health*, 94(6), 1030.
23. Lasater, T. M., Becker, D. M., Hill, M. N., & Gans, K. M. (1997). Synthesis of findings and issues from religious-based cardiovascular disease prevention trials. *Annals of Epidemiology*, 7(7), S46-S53.
24. Campbell, M. K., Hudson, M. A., Resnicow, K., Blakeney, N., Paxton, A., & Baskin, M. (2007). Church-based health promotion interventions: Evidence and lessons learned. Annual. *Review of Public Health*, 28, 213-234.
25. Sallis, F. J., Owen, N., & Fisher, B.E. (2008). Ecological models of health behavior. In K. Glanz, K. B. Rimer, & K. Viswanath (Eds.), Health behavior and health education: Theory, research, and practice (pp 465-485). San Francisco, CA: Jossey-Bass.
26. Baruth, M., Wilcox, S., & Condrasky, M. D. (2011). Perceived environmental church support is associated with dietary practices among African-American adults. *Journal of the American Dietetic Association*, 111(6), 889-893.
27. Peterson, J., Atwood, J. R., & Yates, B. (2002). Key elements for church-based health promotion programs: Outcome-based literature review. *Public Health Nursing*, 19(6), 401-411.
28. Carter-Edwards, L., Jallah, Y. B., Goldmon, M. V., Roberson Jr, J. T., & Hoyo, C. (2006). Key attributes of health ministries in African American churches: an exploratory survey. *North Carolina Medical Journal*, 67(5), 345-50.
29. Chatters, L. M., Levin, J. S., & Ellison, C. G. (1998). Public health and health education in faith communities. *Health Education & Behavior*, 25(6), 689-699.
30. Carter-Edwards, L., Hooten, E. G., Bruce, M. A., Toms, F., Lloyd, C. L., & Ellison, C. (2012). Pilgrimage to wellness: An exploratory report of rural African American clergy perceptions of church health promotion capacity. *Journal of Prevention & Intervention in the Community*, 40(3), 194-207.

31. Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building collaborative capacity in community coalitions: A review and integrative framework. *American Journal of Community Psychology*, 29(2), 241-261.
32. Goodman, R. M., Speers, M. A., McLeroy, K., Fawcett, S., Kegler, M., Parker, E., & Wallerstein, N. (1998). Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Education & Behavior*, 25(3), 258-278.
33. Lempa, M., Goodman, R. M., Rice, J., & Becker, A. B. (2008). Development of scales measuring the capacity of community-based initiatives. *Health Education & Behavior,* 35(3), 298-315.
34. Zakocs, R. C., & Edwards, E. M. (2006). What explains community coalition effectiveness: A review of the literature. *American Journal of Preventive Medicine*, 30(4), 351.
35. Gibbon, M., Labonte, R., & Laverack, G. (2002). Evaluating community capacity. *Health & Social Care in the Community,* 10(6), 485-491.
36. Motley, M., Holmes, A., Hill, J., Plumb, K., & Zoellner, J. (2013). Evaluating community capacity to address obesity in the Dan River Region: A case study. *American Journal of Health Behavior*, 37(2), 208-217.
37. Sowa, J. E., Selden, S. C., & Sandfort, J. R. (2004). No longer unmeasurable? A multidimensional integrated model of nonprofit organizational effectiveness. *Nonprofit and Voluntary Sector Quarterly*, 33(4), 711-728.
38. Herman, R. D., & Renz, D. O. (2003). Nonprofit organizational effectiveness: Contrasts between especially effective and less effective organizations. *Nonprofit Management and Leadership*, 9(1), 23-38.
39. Andrews, J. O., Cox, M. J., Newman, S. D., & Meadows, O. (2011). Development and evaluation of a toolkit to assess partnership readiness for community-based participatory research. *Progress in Community Health Partnerships*, 5(2), 183.
40. United States Department of Health and Human Services. (2012). Checklists for assessing readiness to undertake community collaboration. Retrieved from http://captus.samhsa.gov/access-resources/resource-types/ta-tools?tid=All&tid_1=All&term_node_tid_depth=All&term_node_tid_depth_1= All&title =readiness.
41. Andrews, J. O., Newman, S. D., Cox, M. J., & Meadows, O. (2010). Are we ready: Partnership readiness for community-based participatory research (CBPR) toolkit. Retrieved from https://sctr.musc.edu/images/stories/2012_Toolkit_Final_10.18.12.pdf.
42. Hull, P. C., Canedo, J., Aquilera, J., Garcia, E., Lira, I., & Reyes, F. (2008). Assessing community readiness for change in the Nashville Hispanic community through participatory research. Progress in Community Health Partnerships, 2(3), 185-194.
43. Edwards, R. W., Jumper-Thurman, P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of Community Psychology*, 28(3), 291-307.
44. Oetting, E. R., Jumper-Thurman, P., Plested, B., & Edwards, R. W. (2001). Community readiness and health services. *Substance Use & Misuse*, 36(6-7), 825-843.

45. Dodani, S., & Fields, J. Z. (2010). Implementation of the fit body and soul, a church- based life style program for diabetes prevention in high-risk African Americans. A feasibility study. *The Diabetes Educator*, 36(3), 465-472.
46. Virginia Department of Health. (2009). Congregational health assessments. Retrieved from http://www.vdh.state.va.us/healthpolicy/primarycare/ruralhealth/health-assessment.htm.
47. Michigan Healthy Communities Collaborative. (2012) Walk by faith: Promoting healthy congregations assessment. Retrieved from http://mihealthtools.org/faith/default.asp?tab=about#3

Chapter 6

Summary

Lifestyle-related chronic disease is the leading cause of mortality and morbidity in the United States, accounting for more than 63% of deaths. [1] Minority communities experience a disproportionate burden of adverse health outcomes related to these diseases. [2] Collaborative partnerships with faith-based organizations (FBO) present a unique platform to effectively implement lifestyle-related health programs, especially in minority communities. [3] Faith-based health programs have been shown to produce effective and positive health effects. [4] Studies have also synthesized key characteristics that yield desired partnership, program, and/or health outcomes. [5, 6] However, even with this information, few studies have 1) explored and contextualized capacity and readiness factors in the context of FBO and health and wellness efforts; and 2) assessed FBO capacity and readiness as an evaluative component of faith-based health program and partnership efforts. Consequently, FBO continue to lack the capacity and readiness to effectively address social and health needs faced by their community- especially within the context of a collaborative or research-based process. [7, 8] This is further evidence by a majority of studies that utilize FBO mainly as a recruitment and host site, although studies that more actively involve FBO throughout the research process also produce statistically significant results. [4, 7, 9]

As a result, studies have consistently recognized a growing need to improve FBO capacity and readiness to design, deliver, and sustain programs more effectively. [4, 7, 9]This has established a greater need to identify and explore FBO capacity and readiness as well as develop comprehensive assessment tools and measures that can do so in the context of health promotion efforts. [4, 7, 9] Such information would help to further identify capacity and readiness factors to

facilitate active FBO participation in the development and implementation of effective lifestyle-related health and wellness programs. Thus, FBO would be better positioned to actively lead and/or partner in faith-based health programs that address their community's most pressing health issues. Therefore, the overarching aim of this three phase research study was to identify and explore FBO capacity and readiness to develop, implement, and sustain lifestyle-related health and wellness programs, especially in collaboration with academic, health, and community organizations.

The objective of the first study was to: 1) gain the perspectives of FBO, community, and research partners actively involved in a collaborative faith-based health program; and 2) further explore capacity and readiness factors influence on partners experience implementing such a program. Faith, health, community, and research partners of a collaborative faith-based lifestyle- related program called *Balanced Living with Diabetes (BLD).* BLD advisory committee recognized varying readiness and capacity among churches and faith-based partners to deliver BLD program. Partners that could provide a comprehensive perspective of their experience based on consistent participation in multiple phases of the BLD program were invited to participate. Participants were asked to complete a questionnaire to rate capacity or readiness factors that may have influenced their BLD experience followed by an interview to further discuss factors they rated most important.

Basic descriptive statistical analysis, thematic coding analysis, and qualitative and mixed methods research analysis software was used to synthesize, organize, and interpret data. Eighteen out of 31 capacity and readiness factors presented were collectively rated as '10' (extremely important) to participant's role and partnership experience in the BLD program. Additional data further contextualizes capacity and readiness factors influence on the processes and strategies

that shaped partner recruitment and participation in program design and delivery. At minimum, these 22 factors should be further explored to determine appropriate strategies and areas of improvement to better position FBO to more actively participate and lead such work. Resulting data further affirmed existing observations as well as generated additional hypotheses to expand this research beyond the sample population. Continued exploration can help to identify strategies that will move FBO beyond recruitment and hosting, as well as enhance their capacity and readiness to implement and sustain work beyond the research agenda.

The objective of the second study was to develop, pilot, revise, and improve content, format, and implementation of a mixed methods questionnaire that would identify and assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs, particularly in partnership with community, health, and academic organizations. A church health ministry coordinator with experience in faith-based health programs and congregants from the church with knowledge of the demographics, activities, interest, and resources at their church were invited to participate. Participants completed a questionnaire followed by a focus group discussion to provide suggestions for questionnaire improvement.

A selective transcription method was used to document relevant ideas, feedback, and issues raised by participants. Additional study data was triangulated with participant results to revise the questionnaire. Participants completed the revised questionnaire along with a follow-up questionnaire to verify accuracy and appropriateness of revisions. Resulting data yielded valuable feedback and suggestions that improved the content, format, and implementation of the CRCHA. The revised CRCHA was formatted into four major sections and thirteen subsections that gather information about factors, characteristics, and attributes deemed relevant to FBO

organizational capacity and readiness to actively lead and/or partner in lifestyle-related faith-based health programs.

The CRCHA demonstrated potential to assess FBO attributes that influence organizational capacity and readiness in the context of health and wellness programs. CRCHA should be implemented in a diverse sample of churches to better understand its generalizability and ability to successfully assess organizational capacity and readiness to implement lifestyle-related health programs.

The objective of the last study was to pilot the Capacity and Readiness Church Health Assessment (CRCHA) to assess FBO organizational capacity and readiness to implement lifestyle related health programs, particularly in partnership with community, health and academic organizations. Overall recruitment efforts were geared towards a network of churches within a state-wide association of churches called the Baptist General Convention of Virginia (BGCVA) (n=1,000). Simple random sampling was used to identify churches to participate within the BGCVA network (n=300). Participants were provided an electronic (via email) and hard copy (via mail) of the CRCHA and were given a minimum of two weeks to complete and submit the questionnaire via email or pre-postmarked envelope.

The CRCHA was formatted into four major sections (i.e. church health and wellness resources, availability/church calendar, church health and wellness activities, and congregation health) and 13 subsections that gather information about factors, characteristics, and attributes theorized to be most relevant to FBO organizational capacity and readiness to actively lead and/or partner in lifestyle-related faith-based health programs. Twenty-three churches completed the CRCHA. The Pastor, health ministry lead or member, and church clerk were the most

common roles of the individuals that completed or helped complete the questionnaire. Slightly more than half of the questionnaires were completed by one person. The CRCHA successfully collected information that reported frequencies and variation in responses to identify patterns and form hypotheses regarding most influential capacity and readiness factors. The CRCHA has potential to assess FBO attributes that influence organizational capacity and readiness to implement lifestyle-related health and wellness programs. This information can be used in research settings and by individual churches for self-assessment to strengthen capacity for health programming. Continued use of the CRCHA in similar but larger populations is important for understanding its generalizability within this population.

References

1. Center for Disease Control (CDC). (2011). Behavioral risk factor surveillance system: Prevalence and trends data. Retrieved from http://www.cdc.gov/brfss/.
2. United States Department of Health and Human Services. The Office of Minority Health. (2011). HHS action plan to reduce racial and ethnic health disparities. Retrieved from http://minorityhealth.hhs.gov/npa/files/Plans/HHS/HHS_Plan_complete.p df.
3. Chatters, L. M., Levin, J. S., & Ellison, C. G. (1998). Public health and health education in faith communities. *Health Education & Behavior,* 25(6), 689-699.
4. DeHaven, M. J., Hunter, I. B., Wilder, L., Walton, J. W., & Berry, J. (2004). Health programs in faith-based organizations: Are they effective? *American Journal of Public Health*, 94(6), 1030.
5. Peterson, J., Atwood, J. R., & Yates, B. (2002). Key elements for church-based health promotion programs: Outcome-based literature review. *Public Health Nursing*, 19(6), 401-411.
6. Carter-Edwards, L., Jallah, Y. B., Goldmon, M. V., Roberson Jr, J. T., & Hoyo, C. (2006). Key attributes of health ministries in African American churches: an exploratory survey. *North Carolina Medical Journal*, 67(5), 345-50.
7. Campbell, M. K., Hudson, M. A., Resnicow, K., Blakeney, N., Paxton, A., & Baskin, M. (2007). Church-based health promotion interventions: Evidence and lessons learned. *Annual Review of Public Health*, 28, 213-234.
8. Carter-Edwards, L., Hooten, E. G., Bruce, M. A., Toms, F., Lloyd, C. L., & Ellison, C. (2012). Pilgrimage to wellness: An exploratory report of rural African American clergy perceptions of church health promotion capacity. *Journal of Prevention & Intervention in the Community,* 40(3), 194-207.
9. Lasater, T. M., Becker, D. M., Hill, M. N., & Gans, K. M. (1997). Synthesis of findings and issues from religious-based cardiovascular disease prevention trials. *Annals of Epidemiology*, 7(7), S46-S53.

Chapter 7

Conclusion and Implications

Minority communities' disproportionality carry the disease burden and adverse health outcomes associated with lifestyle-related chronic diseases. Partnerships with community-focused organizations such as FBO present a unique and promising opportunity to enhance relevancy, appropriateness, and effectiveness of solutions being tested by research institutions to address this issue. It also better ensures that these solutions are disseminated into the communities that most need them and are practical for FBO to implement them. Therefore, the number of faith-based health studies that have focused on the efficacy and effectiveness of these proposed solutions matches the pressing need to find solutions now. Consequently, such prioritization has enabled researchers to ignore another critical piece of this work. What good are effective and efficacy proven solutions that are not translatable to the communities and community organizations they aim to help? Further, how promising are the solutions being tested if the organizations that can lend valuable information that enhances the program's relevancy and appropriatness, are unable to contribute their expertise at the highest level due to capacity and readiness challenges?

The limited amount of studies that have actively included FBO beyond recruitment and hosting further evidence a greater need to address and assess FBO capacity and readiness as a prioritized part of partnership and program development. The purpose and results from each phase of this study independently and collective addressed paucities within the field regarding a need to: 1) identify and explore capacity and readiness within the context of FBO implementing lifestyle-related health and wellness programs, particularly in partnership with research, health, and community organizations; and 2) develop comprehensive self-assessment and research focused tools that can assess multiple levels of capacity and readiness. Continued

implementation and testing of tools in larger populations are needed to draw additional conclusions and expand this area of research in the field.

The amount of rich information yielded from this research made it challenging to analyze and report all data. Therefore, continued analysis and interpretation of information is important. This provides the opportunity to develop hypothesis that dig deeper and think more critically about the topic at hand. For example, do collaborative partnerships enable the need to enhance FBO capacity and readiness? Why aren't participatory approaches such as community-based participatory research used to guide faith-based health studies? Why aren't health professionals within the FBO being recruited to help lead and develop various phases of the research agenda?

In closing this exploratory research has contributed to the field by starting the process of conceptualizing capacity and readiness of FBO. Results from each phase as well as across all phases yielded information that: 1) helped identify and prioritize factors that may facilitate active participation and leadership of FBO in interventions; and 2) generated hypotheses that warrant further investigation and/or helps contextualize capacity and readiness factors regarding FBO in faith-based health interventions. Resulting information can lend to future work such as the development of strategies to improve FBO capacity and readiness. Resulting information can also help the field think more critically

Appendix A: Chapter 3 IRB Approval Letter

Office of Research Compliance
Institutional Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website http://www.irb.vt.edu

MEMORANDUM

DATE: May 7, 2015

TO: Dr. Kathryn Hosig, Monica Motley, Tyler Litsch, Ann Forburger

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: Lessons Learned from a Collaborative Evidence-Based Diabetes Education Program

IRB NUMBER: 13-239

Effective May 7, 2015, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Continuing Review request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As:	**Expedited, under 45 CFR 46.110 category(ies) 6,7**
Protocol Approval Date:	**May 23, 2015**
Protocol Expiration Date:	**May 22, 2016**
Continuing Review Due Date*:	**May 8, 2016**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

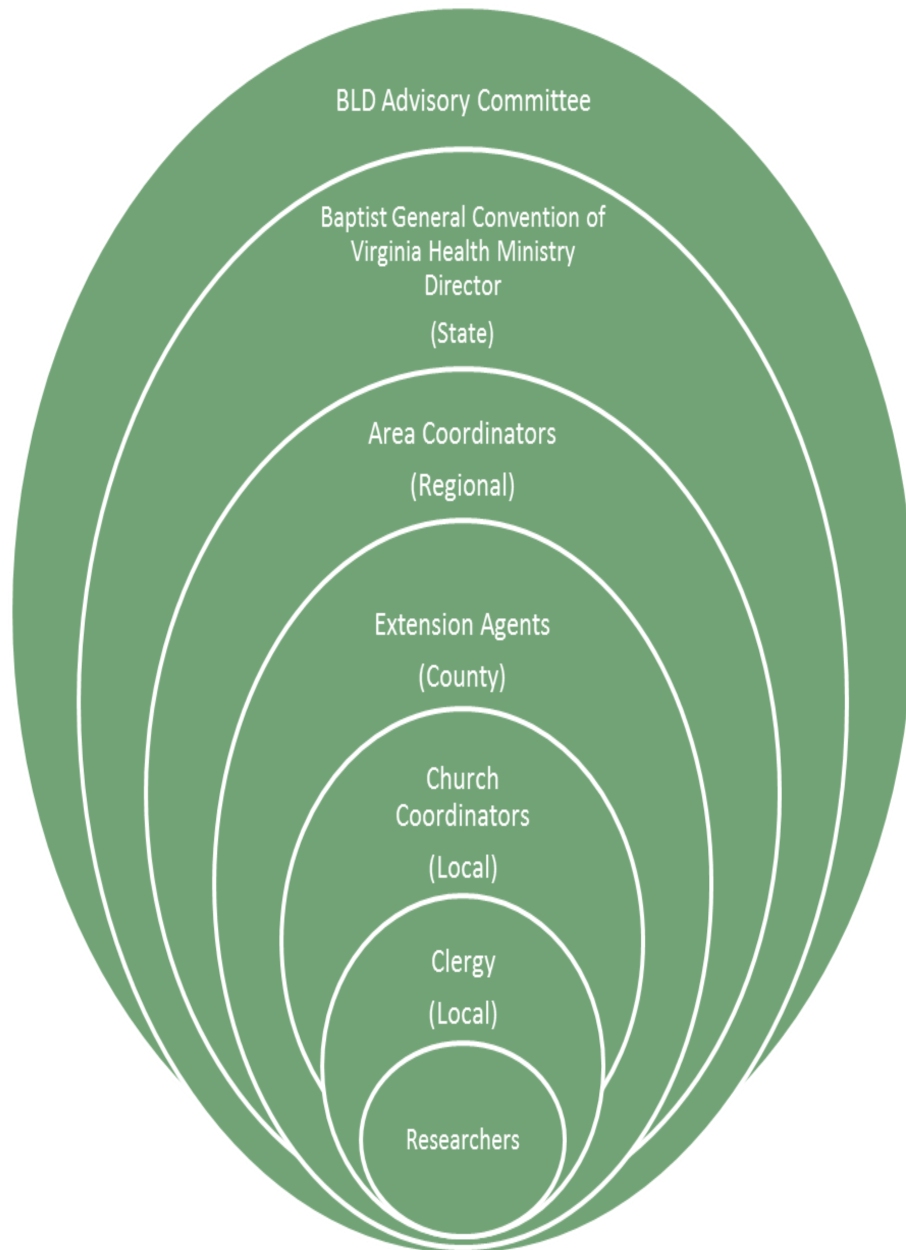
Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

Appendix B: Visual Chart of Balanced Living w Diabetes Partners



<u>Appendix C: Participant Eligibility Criteria</u>

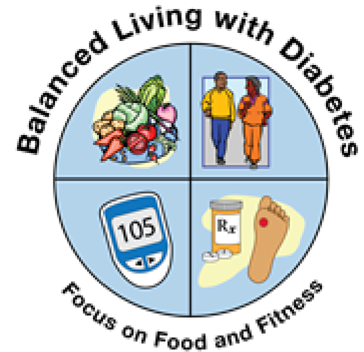
N=27

- State (n=1)
    - Administrative lead for BLD program within Baptist General Convention of Virginia
    - Actively participated in the development, organization and implementation of BLD on state, regional, local, clergy, extension, and research levels
- Regional (n=4)
    - Actively participated in the organization and implementation of BLD program in region
    - Two interventions sites within the region have completed the 4wk BLD program and completed at least 6 month follow-ups)
    - Attended at least 1 community advisory board meetings and/or BLD research program planning meeting
- Local (n=11)
    - Identified at the regional level
    - Actively participated in the organization and implementation of BLD program in their church
    - Church has completed the 4wk BLD program and completed at least completed 3 month follow-ups
- Clergy (n=3)
    - Actively participated in the decision making and implementation process to participate in the BLD program
    - Assisted the local level to recruit participants and/or promote BLD program in the church and/or community
- Extension Agent (n=4)
    - Attendance at 1 of 3 training workshops: BLD training workshop (2011), Extension agent BLD implementation training workshop (2010), and extension agent BLD dissemination training workshop (2012)
    - Actively lead and coordinated food preparation and nutrition education component of BLD program for designated county location
- Research Team (n=4)
    - Involved in identification, recruitment, and implementation of BLD program in at least half of the location sites

Appendix D: Participant Recruitment Letter

Balanced Living with Diabetes

[Insert date]



[Sender Name]
[Street Address]
[City, ST ZIP Code]

[Participant Name]
[Organization/Church Name]
[Street Address]
[City, ST ZIP Code]

Greetings **[insert Mr. / Ms. / Rev/ Dr.] [insert name]**!

My name is [insert name] and I am a recent Masters of Public Health Graduate from Virginia Tech. I am also working as a research assistant with Dr. Kathy Hosig, Ann Forburger, and Monica Motley on this particular project to learn more about the BLD efforts. **[Protocol: When recruiting researchers also involved in research team efforts provide the lead investigator's name (MM) and whoever else's name the letter is not intended for]**

My name is **[insert name]** and I am a graduate student at Virginia Tech as well as a research assistant for the BLD project. I usually assist with the assessment dates recording people's height and weight. I am also working as a research assistant with Dr. Kathy Hosig and Ann Forburger on this particular project to learn more about the BLD efforts.

We are very excited to have you as a **[insert role]** on the Balanced Living with Diabetes (BLD) team! As you may already know Balanced Living with Diabetes is a diabetes education research program aimed to improve A1C levels, diabetes self-care, nutrition behavior, and knowledge about diabetes and related chronic disease and risk factors for Type 2 diabetics.

In order to successfully plan, organize, and implement the BLD program, our efforts rely on the collective contribution and participation of our partners. Therefore, learning more about your personal experiences over the course of the BLD program will allow us to gain a better understanding of the processes and factors that have influenced partnership and program goals and objectives. Ultimately, this information will be used to identify ways to: 1) improve active participation by all partners in various phases of the program; and 2) enhance the individual, organizational, and collaborative capacity and readiness of partners to develop, deliver, and evaluate the BLD program more effectively.

If you are interested, please contact me, **[insert name]**, at **bldlessonslearned@gmail.com** or **[insert telephone]**. I will also follow-up with you on **[insert date]** or **[insert date]** via telephone to tell you more about the study!

For additional information about this project you can also contact Kathy Hosig at khosig@vt.edu or 540-392-6097

I look forward to hearing from you soon!

[Insert name]
[Insert affiliation]
[Insert signature font of name]

Appendix E: Implied Consent Form

Information and Implied Consent Form for Participants in Research Projects Involving Human Subjects

Study Title: Lessons Learned from a Collaborative Evidence-Based Diabetes Education Program

Primary Investigator: Kathy Hosig, Associate Professor, Director, Center for Public Health Practice and Research, Department of Population Health Science

Email: motleym@vt.edu

Co-Investigators: Monica Motley, Biomedical and Veterinary Science/Population Health Science (BMVS/PHS), Tyler Litsch (BMVS/PHS), Ann Forburger, (PHS)

I. Purpose of this Project
The purpose of this study is to evaluate the processes and factors that have influenced partnership and program goals and objectives within a community diabetes education (Balanced Living with Diabetes) program that uses collaborative partnerships to implement and evaluate the program. Gaining in-depth perspectives about the partner's personal experiences over the course of the Balanced Living with Diabetes (BLD) program will be used to explore strategies to enhance the individual, organizational, and collaborative capacity and readiness of partners to develop, deliver, and evaluate the BLD program more effectively.

II. Procedures
Your commitment to this research should not involve more than one (1) hour total to complete the survey and (1) hour total to complete the interview. Both the survey and the interview are intended to ask you questions about your experiences implementing the BLD program. The survey will be provided to you via email or mail to complete at least one week prior to your interview. Assistance is available to orally administer the survey if it better accommodates your needs. The interview will be audio recorded on a digital audio recorder. We may also contact you several weeks after you've completed both the survey and interview to provide you a final report to ensure data analysis accurately represents your perspective. Additional information will not be collected at this time; however, we may ask you to clarify certain responses for accuracy.

III. Risks
There are no more than minimal risks implied by this research. The survey and interview results will be confidential and not connected to program outcomes. At the completion of the research, the survey and interview data will be deleted from the researcher's computer and hard copy surveys shredded and discarded.

IV. Benefits
Each BLD partner can benefit from participating in this interview by contributing valuable information that will reveal the factors, characteristics, and/or elements necessary to plan,implement, evaluate, and disseminate an effective chronic disease health program. Further, this information may also reveal possible approaches to improve partner capacity and readiness,

which can ultimately be applied to achieve individual partner, partnership, and program outcomes.

V. Extent of Confidentiality
We will assign a participant number to you, which will take the place of your name on the interview transcripts and for all analyses and reports. These responses will be kept in a secure location to ensure confidentiality. The interview will be audio recorded using a digital audio recording device. The audio files generated from these recordings will be uploaded on a password secured computer to ensure confidentiality. All identifiable information about you will be destroyed at the earliest opportunity following the completion of the study. It is possible that the Virginia Tech Institutional Review Board (IRB) may view this study's data for auditing purposes. The IRB is responsible for oversight of the protection of human subjects involved in research.

VI. Compensation
You will receive a $15 check for your participation in the study. The check will be provided to you after the completion of the interview by the Virginia Tech controller's office.

VII. Freedom to Withdraw
You have the freedom to withdraw from this study at any point without consequence

VIII. Approval of Research
As required, this research project has been approved by the Baptist General Convention and the Institutional Review Board for Research Involving Human Subjects at Virginia Tech

IX. Participants' Responsibilities

Your participation in this study is voluntary. By reading this document and providing verbal consent to participate in the study, you agree to: a) participate in an approximately one hour interview, that is audio recorded, regarding your experiences and insights developing and implementing the BLD program; b) complete the survey; and c) participate in follow-up communication to ensure your perspective is accurately represented in the final report.

X. Permission

I have read and understand the Implied Consent Form and conditions of this project. I have had all my questions answered by one of the investigators listed below. I hereby acknowledge the above and wish to participate in the interview and survey. I understand that agreement and participation in the survey and interviews acts as voluntary consent.

Should you have any questions about this research or conduct of the research, you can contact:

Monica Motley 540-231-6637 motleym@vt.edu
Investigator(s) Telephone e-mail

Kathy Hosig 540-231-6637 khosig@vt.edu

Investigator(s) Telephone e-mail

Should you have any questions about the participants' human rights, or in the event of a research-related injury to the participant, I may contact:

David M. Moore
Chair, Virginia Tech Institutional Review
Board for the Protection of Human Subjects
Office of Research Compliance
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, VA 24060

540-231-4991/moored@vt.edu
Telephone/e-mail

Appendix F: Community Advisory Board Recruitment Letter

Greetings **[insert name]**!

We are very excited to have you as a **[insert role]** on the Balanced Living with Diabetes (BLD) team! As you may already know Balanced Living with Diabetes is a diabetes education research program aimed to improve A1C levels, diabetes self-care, nutrition behavior, and knowledge about diabetes and related chronic disease and risk factors for Type 2 diabetics.

In order to successfully plan, organize, and implement the BLD program, our efforts rely on the collective contribution and participation of our partners. Therefore, learning more about our partner's personal experiences over the course of the BLD program will allow us to gain a better understanding of the processes and factors that have influenced partnership and program goals and objectives. Ultimately, this information will be used to identify ways to: a) improve active participation by all partners in various phases of the program; and b) enhance the individual, organizational, and collaborative capacity and readiness of partners to develop, deliver, and evaluate the BLD program more effectively.

In order to collect this information, we would like to develop and implement a process evaluation that consist of an 1 hour one-on-one in person interview to ask various partners questions about their experiences implementing the BLD program. We want to ensure potential participants: a) represent each partner level (BGCVA, area coordinator, church coordinator, church clergy, and extension agent); as well as b) has the ability to provide a comprehensive perspective of their experience based on consistent participation in multiple phases of the BLD program.

We would also like to recruit additional partners to help guide the development and implementation of the evaluation on an advisory committee that is also representative of the partnership to better ensure relevancy and appropriateness of evaluation design and methods. The major task of the committee will be to:

- Further approve and finalize the proposed questions for the interview
- Further approve and finalize the proposed strategy for implementing the evaluation
- Review and ask questions about the study to ensure the resulting information resonates with others who are not participants or part of the research team

If you are interested, please contact me, **[insert name]**, at **[insert email]** or **[insert telephone]**. I will also follow-up with you on **[insert date]** or **[insert date]** via telephone to tell you more about the evaluation!

I look forward to hearing from you soon!

[insert name]

Appendix G: Capacity and Readiness Questionnaire

Purpose: To gain a better understanding of the Balanced Living with Diabetes (BLD) program through your personal experience and interpretation as an active partner to develop and/or implement the program, we will focus on five specific parts of your experience 1) your personal and organizational experience with the BLD program; 2) your BLD program experience; 3) your experience implementing BLD as a partner; 4) your experience implementing BLD in partnership with BGCVA, academic, and community organizations; and 5) changes in your experience with health/wellness planning and partnership over time

Instructions: Below is a list and description of some factors that may influence each of the 5 aspects of your experience listed above. Based on the description and your perspective, rate the factors you think have been most important within that experience. 1 signifies "least importance" and 10 signifies "greatest importance." You can put the same number more than once (if necessary); however, we will only talk more about the factors you rate highest in the interview.

1. Personal and Organizational Experience

An individual's personal knowledge, skills, and attitudes can shape personal experiences as well as organizational experiences. Which factors have been most important to your experience as a church coordinator with the BLD program?

Please rate on a scale from 1 to 10 least important=1……………………..…somewhat important=5…..………………………..…10=extremely important

1 2 3 4 5 6 7 8 9 10

Example: Self-determination, competence, and confidence have been the most important factors in my experience as a church coordinator with the BLD program

Personal Experience	
10	**Self-determination: ability to make conscious and confident decisions to accomplish personal goals**
9	**Competence: personal belief in one's ability to perform a task well**
2	**Participation: an individual's opportunity to actively engage in change**
7	**Agency: ability to use motivation and decision making skills to define and act on tasks**
	Confidence: perceived ability to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges

Example

10	
1	**Mastery: increased level of skill to make decisions that minimize negative outcomes and increase positive outcomes**
5	**Information: the availability to accessible and easy to understand information that inform opportunities**
4	**Impact: a sense of contribution to individual and organizational objectives**

1. Personal and Organizational Experience

A. An individual's personal knowledge, skills, and attitudes can shape personal experiences as well as organizational experiences. Which factors have been most important to your experience as a church coordinator with the BLD program

Please rate on a scale from 1 to 10 least important=1…………………..…somewhat important=5….……………………..…10=extremely important
1 2 3 4 5 6 7 8 9 10

Personal Experience	
	Self-determination: ability to make conscious and confident decisions to accomplish personal goals
	Competence: personal belief in one's ability to perform a task well
	Participation: an individual's opportunity to actively engage in social change
	Agency: ability to use motivation and decision making skills to define and act on tasks
	Confidence: perceived ability to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges
	Mastery: increased level of skill to make decisions that minimize negative outcomes and increase positive outcome
	Information: the availability to accessible and easy to understand information that inform opportunities
	Impact: a sense of contribution

B. An organization's structure, operations, and objectives can be used to achieve organizational, individual, and program goals. Which factors have been most important to your church's involvement with the BLD program?

Please rate on a scale from 1 to 10 least important=1……………………..…somewhat important=5….……………………..…10=extremely important
1 2 3 4 5 6 7 8 9 10

Organizational Experience	
	Aspirations: the church's "vision, mission, and goal" to accomplish major objectives
	Strategy: the church's methods and means needed to achieve aspirations
	Organizational skills: the church's processes used to develop, implement, and evaluate programs and operations
	Human resources: the church's personnel, volunteers, and partners needed to execute strategies
	Organizational structure: the church's systems, roles, and responsibilities that support effectiveness
	Culture: the church's core values, beliefs, norms, and performance that influence effectiveness

2. Balanced Living with Diabetes Program Experience

Several key characteristics and elements are considered critical in the planning and implementation of faith-placed health programs, such as BLD, to create desirable program and partnership outcomes. Which factors have been most important in the planning and/or implementation of the BLD program?

Please rate on a scale from 1 to 10 least important=1……………………..…somewhat important=5….……………………..…10=extremely important
1 2 3 4 5 6 7 8 9 10

BLD Program Experience	
	Partnership: the relationship between BLD partners, that also actively involves the faith-based partner (i.e. church, Baptist General Convention), to implement various phases of the BLD program
	Involvement: clear commitment and active involvement of church members and leaders to implement the BLD program

	Resources: availability and accessibility of the partner's resources such as kitchen, meeting areas, etc.
	Program Design: utilization of specific strategy and theory, to design, implement, and evaluate the program
	Community Focused: a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target community to tailor the program design to be more effective and relevant
	Social Supportive Networks: Mutual respect, support, and generosity amongst community members, church members, and partners

3. Partnership Synergy

Synergy can be described as working together in partnership to achieve more by combining complementary strengths, perspectives, values, and resources of all the partners in the search for better solutions. Which factors have been important to your experience as a partner implementing the BLD program?

Please rate on a scale from 1 to 10 least important=1…………………..…somewhat important=5….……………………..…10=extremely important
1 2 3 4 5 6 7 8 9 10

Partnership Synergy	
	Energy: energy, buzz, passion, enthusiasm
	Outcomes: achieving goals and making progress
	All benefit: all partners (including the target community)are getting something out of the partnership
	Positive experience: enjoyable and satisfactory efforts or encounters
	Complementary skills: combination of complementary strengths and skills among partners
	Work shared: tasks broken down so that work is shared and everyone contributes
	Problem solving: the way problems are sorted, getting through difficult patches, and handling conflict

4. Collaborative Readiness

A partnership's fit, readiness, capacity, and operations are necessary to plan, implement, evaluate, and disseminate programs. Which factors have been important in the collaborative effort with BGCVA, academic and community organizations to implement the BLD program?

Please rate on a scale from 1 to 10 least important=1…………………..…somewhat important=5…..……………………..…10=extremely important

1 2 3 4 5 6 7 8 9 10

Collaborative Readiness	
	Goodness of fit: the compatibility of the partners to conduct the proposed project together
	Capacity: capability of the partners to conduct programs and sustain change
	Operations: roles, responsibilities, structure, and processes the BLD partnership uses to operate
	Readiness: the extent to which an individual, group, and community is appropriately prepared to take action and address an issue effectively

5. Interpretation of Experience

A. Your experience with health /wellness program planning and partnership may have changed over the course of time.

Please, only select one answer that is most applicable to the question:

Prior to implementing the BLD program there was…about diabetes and healthy habits for the people the BLD program was planning to serve in my church

Interpretation of Experience	
	No awareness: did not recognize diabetes was an issue and viewed problem health behavior(s) as a norm
	Denial: diabetes and healthy lifestyles were not identified as a community problem
	Little awareness: acknowledgement of the problem but there is no motivation to address it
	Awareness: leaders and organizations recognize and agree to act on the problem

	Planning: a strategic plan is put into place
	Action: action has begun
	Program Implementation: programs have been launched and are supported by personnel, staff, or volunteers
	Sustained Efforts: efforts have been consistent, evaluated, and improved
	Expanded Efforts: efforts have evolved and are inclusive of the community, partners, etc.

Once involved in the BLD program there was… about diabetes and healthy habits for the people the BLD program was serving in my church

Interpretation of Experience	
	No awareness: did not recognize diabetes was an issue and viewed problem health behavior(s) as a norm
	Denial: diabetes and healthy lifestyles were not identified as a community problem
	Little awareness: acknowledgement of the problem but there is no motivation to address it
	Awareness: leaders and organizations recognize and agree to act on the problem
	Planning: a strategic plan is put into place
	Action: action has begun
	Program Implementation: programs have been launched and are supported by personnel, staff, or volunteers
	Sustained Efforts: efforts have been consistent, evaluated, and improved
	Expanded Efforts: efforts have evolved and are inclusive of the community, partners, etc.

Over the next year, if I were to continue involvement in the BLD program or launch another diabetes- related program in my church, there would be… about diabetes and healthy habits for the people the BLD program served in my church

Interpretation of Experience	
	No awareness: did not recognize diabetes was an issue and viewed problem health behavior(s) as a norm
	Denial: diabetes and healthy lifestyles were not identified as a community problem
	Little awareness: acknowledgement of the problem but there is no motivation to address it
	Awareness: leaders and organizations recognize and agree to act on the problem
	Planning: a strategic plan is put into place
	Action: action has begun
	Program Implementation: programs have been launched and are supported by personnel, staff, or volunteers
	Sustained Efforts: efforts have been consistent, evaluated, and improved
	Expanded Efforts: efforts have evolved and are inclusive of the community, partners, etc.

Thank you!

Appendix H: Capacity and Readiness Interview Script

The purpose of this interview is to gain a better understanding of the Balanced Living with Diabetes (BLD) program through your personal experience and interpretation as an active partner to develop and/or implement the program. More specifically, I want to capture your perspective, as a **[insert role (faith-based, research, community)]** partner, implementing BLD in partnership with [insert organizations] organizations.

To do this, I will ask you questions that will explore perceived challenges and opportunities experienced implementing BLD on a personal, partner, and collaborator level. To do this we will focus on five specific parts of your experience 1) your personal and organizational experience with the BLD program; 2) your BLD program experience; 3) your experience implementing BLD as a partner; 4) your experience implementing BLD in partnership with [insert organizations]; and 5) changes in your experience with health/wellness planning and partnership over time.

You've already identified which factors you think have been important within each experience. These are the factors we will talk more about in the interview. You will also have an opportunity to include anything else you think is important to share. Throughout the interview, I may briefly recap what you have said before moving on to the next questions. Also, because some of the factors may seem similar, it may feel like you're answering questions or repeating responses you already shared. Although it will seem repetitive, this will help ensure that I understand your response correctly. Therefore your patience is greatly appreciated while doing this. Although it will seem repetitive, this will help ensure that I understand your response correctly, therefore your patience is greatly appreciated while doing this.

As a reminder, any information shared today will remain confidential. Do you have any questions about what I've shared with you?

Before we begin, may I ask, what is your current role in the BLD program?

How did you become involved with the BLD program?

Personal Experience

Next, I would like to ask you some questions about your personal and organizational experience with the BLD program. I will discuss each factor you selected and then ask you some questions about them.

An individual's personal knowledge, skills, and attitudes can shape personal experiences as well as collective experiences.

[List identified factors] have been most important to your experience as a [insert role] with the BLD program

☐Self-determination
☐Competence
☐Participation
☐Agency
☐Confidence
☐Mastery
☐Information
☐Impact

1. ☐ *Self-determination* can be described as the ability to make conscious and confident decisions to accomplish personal goals
    - How has your "ability to make conscious and confident decisions to accomplish personal goals" been important to your experience as a [insert role] with the BLD program?
        a. *Probe if needed: As a [insert role] how has your "ability to make conscious and confident decisions to accomplish personal goals" been beneficial or presented opportunities during your involvement in the BLD program?*
        b. *Probe if needed: As a [insert role] how has your "ability to make conscious and confident decisions to accomplish personal goals" been challenging or created barriers during your involvement in the BLD program?*

    - If at all, how has your "ability to make conscious and confident decisions to accomplish personal goals" been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?

2. ☐*Competence* can be described as the personal belief in one's ability to perform a task well
    - How has your "belief in your ability to perform a task well" been important to your experience as a [insert role] with the BLD program?
        a. *Probe if needed: As a [insert role] how has your "belief in your ability to perform a task" been beneficial or presented opportunities during your involvement in the BLD program?*
        b. *Probe if needed: As a as a [insert role] how has your "belief in your ability to perform a task" been challenging or created barriers during your involvement in the BLD program?*

- If at all, how has your “belief in your ability to perform a task well” been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?

3. ☐*Participation* can be described as an individual’s opportunity to actively engage in change
   - How has your “opportunity to actively engage in change” been important to your experience as a [insert role] with the BLD program?
     a. *Probe if needed: As a [insert role] how has your “opportunity to actively engage in change” been beneficial or presented opportunities during your involvement in the BLD program?*
     b. *Probe if needed: As a [insert role] how has “opportunity to actively engage in change” been challenging or created barriers during your involvement in the BLD program?*
   - If at all, how has your “opportunity to actively engage in change” been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?
4. ☐*Agency* can be described as the ability to use motivation and decision making skills to define and act on tasks
   - How has your “ability to use personal motivation and decision making skills to define and act on tasks” been important to your experience as a [insert role] with the BLD program?
     a. *Probe if needed: As a [insert role] how has your “ability to use personal motivation and decision making skills to define and act on tasks” been beneficial or presented opportunities during your involvement in the BLD program?*
     b. *Probe if needed: As a [insert role] how has “ability to use motivation and decision making skills to define and act on tasks” been challenging or created barriers during your involvement in the BLD program?*
   - If at all, how has your “ability to use personal motivation and decision making skills to define and act on tasks” been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?
5. ☐***Confidence*** can be described as perceived ability to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges
   - How has your “confidence” been important to your experience as a [insert role] with the BLD program?
     a. *Probe if needed: As a [insert role] how has “confidence” been beneficial or presented opportunities during your involvement in the BLD program?*

    b. *Probe if needed: As a [insert role] how has "confidence" been challenging or created barriers during your involvement in the BLD program?*
- If at all how has your "confidence" been important to your experience with health/wellness program planning and partnership before your current involvement with the BLD program?

6. ☐***Mastery*** can be described as increased level of skill to make decisions that minimize negative outcomes and increase positive outcomes
    - How has your "skill to make decisions that minimize negative outcomes and increase positive outcomes" been important to your experience as a [insert role] with the BLD program?
        a. *Probe if needed: As a [insert role] how has your "skill to make decisions that minimize negative outcomes and increase positive outcomes" been beneficial or presented opportunities in BLD?*
        b. *Probe if needed: As a [insert role] how has your "skill to make decisions that minimize negative outcomes and increase positive outcomes" been challenging or created barriers in BLD?*
    - If at all, how has your "skill to make decisions that minimize negative outcomes and increase positive outcomes" been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?
7. ☐***Information*** can be described as the availability to accessible and easy to understand information that inform opportunities
    - How has "availability to accessible and easy to understand information" been important to your experience as a [insert role] with the BLD program?
        a. *Probe if needed: As a [insert role] how has "availability to accessible and easy to understand information" been beneficial or presented opportunities in BLD?*
        b. *Probe if needed: As a [insert role] how has "availability to accessible and easy to understand information" been challenging or created barriers in BLD?*
    - If at all, how has your "availability to accessible and easy to understand information" been important to your experience with health/wellness program planning and partnership before your current involvement with BLD?
8. ☐***Impact*** can be described as a sense of contribution
    - How has your "sense of contribution" been important to your experience as a [insert role] with the BLD program?
        a. *Probe if needed: If at all, how has your "sense of contribution" been beneficial or presented opportunities in BLD?*
        b. *Probe if needed: If at all, how has "sense of contribution" been challenging or created barriers in BLD?*

- If at all, how has your "sense of contribution" been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?

- Are there any other factors that have been important to your experience as a [insert role] with the BLD program?
- Are there any other factors that you feel have been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?

Is it ok to move onto the next set of questions?

Organizational Experience

An organization's structure, operations, and objectives can be used to achieve organizational and community goals.
[List identified factors] have been important to your/the [insert organization]'s involvement with the BLD program?

☐Aspirations
☐Strategy
☐Organizational skills
☐Human resources
☐Infrastructure
☐Organizational structure
☐Culture

9. ☐***Aspirations*** can be described as the "vision, mission, and goal" to accomplish major [insert organization] objectives
   - How has your/the [insert organization]'s "vision, mission, and goal(s)" been important to involvement with the BLD program??
     a. *Probe if needed: If at all, how has your/the [insert organization]'s "vision, mission, and goal(s) been beneficial or presented opportunities during involvement in the BLD program?*
     b. *Probe if needed: If at all, how has your/the [insert organization] "*vision, mission, and goal(s)" *been challenging or created barriers during involvement in the BLD program?*
   - If at all, how has your/ the [insert organization (not applicable to researchers)]'s "vision, mission, and goal(s)" been important to involvement with health/wellness program planning and partnership before current involvement with BLD?

10. ☐*Strategy** can be described as the methods and means needed to achieve [insert organization] aspirations
    - How has your/the [insert organizations]'s "strategy been important to involvement with the BLD program?
        a. *Probe if needed: If it all, how has your/the* [insert organization]'s *" strategy" been beneficial or presented opportunities during involvement in the BLD program?*
        b. *Probe if needed: If it all, how has your/the* [insert organization]'s *"strategy" been challenging or created barriers during involvement in the BLD program?*
    - If at all, how has your/ the [insert organization (not applicable to researchers)]'s "strategy" been important to involvement with health/wellness program planning and partnership before your current involvement with BLD?
11. ☐***Organizational Skills*** can be described as the processes used to develop, implement, and evaluate programs and operations
    - How has your/the [insert organization]'s "processes to develop, implement, and evaluate programs and operations" been important to involvement with the BLD program?
        a. *Probe if needed: If at all, how has your/the* [insert organization]'*processes to develop, implement, and evaluate programs and operations" been beneficial or presented opportunities during involvement in the BLD program?*
        b. *Probe if needed: If at all, how has your/the [insert organization]'processes to develop, implement, and evaluate programs and operations" been challenging or created barriers during involvement in the BLD program?*
    - If at all, how has your/ the [insert organization (if applicable)]'s "processes to develop, implement, and evaluate programs and operations" been important to involvement with health/wellness program planning and partnership before your current involvement with BLD?
12. ☐***Human Resources*** can be described as personnel, volunteers, and partners needed to execute strategies
    - How has your/the [insert organization]'s "personnel, volunteers, and partners needed to execute strategies" been important to involvement with the BLD program?
        a. *Probe if needed: If at all, how has your/the [insert organization]'s"personnel, volunteers, and partners needed to execute strategies" been beneficial or presented opportunities during involvement in the BLD program?*
        b. *Probe if needed: If at all, how has your* [insert *organization]'s "personnel, volunteers, and partners needed to execute strategies" been challenging or created barriers during involvement in the BLD program?*

- If at all, how has your/the [insert organization]'s "personnel, volunteers, and partners needed to execute strategies" been important to involvement with health/wellness program planning and partnership before your current involvement with BLD?

13. ☐*Organizational structure* can be described as the systems, roles, and responsibilities that support [insert organization] effectiveness
    - How has your/the [insert organization]'s "system's, roles, and responsibilities" been important to involvement with the BLD program?
        a. *Probe if needed: If at all, how has your/the [insert organization] "system's, roles, and responsibilities" been beneficial or presented opportunities during involvement in the BLD program?*
        b. *Probe if needed: If at all, how has your/the [insert organization]'s "system's, roles, and responsibilities" been challenging or created barriers during involvement in the BLD program?*
    - If at all, how has your/the [insert organization]'s "system's, roles, and responsibilities" been important to involvement with health/wellness program planning and partnership before your current involvement with BLD?
14. ☐*Culture* can be described as the core values, beliefs, norms, and performance that influence [insert organization] effectiveness
    - How has your/the [insert organization]'s "core values, beliefs, norms, and performance" been important to involvement with the BLD program?
        a. *Probe if needed: If at all, how has your /the [insert organization]'s "core values, beliefs, norms, and performance" been beneficial or presented opportunities during involvement in the BLD program?*
        b. *Probe if needed: How has your/the [insert organization]'s "core values, beliefs, norms, and performance" been challenging or created barriers during involvement in the BLD program*
    - If at all, how has your/the [insert organization]'s "core values, beliefs, norms, and performance" been important to involvement with health/wellness program planning and partnership before your current involvement with BLD?

    - Are there any other factors that have been important in your/the [insert organization]'s involvement with the BLD program?
    - Are there any other factors that have been important to involvement with health/wellness program planning and partnership before your current involvement with BLD?

Is it ok to move onto the next set of questions?

Balanced Living with Diabetes Program Experience

Next I would like to ask you some questions about in the BLD program. These questions will be about: a) your experience implementing the BLD program, b) partnership synergy, and c) collaborative readiness. Let's begin with your program experience.

Several key characteristics and elements are considered critical in the planning and implementation of faith-placed health programs, such as BLD, to create desirable program and partnership outcomes.

[List identified factors] have been important to your program experience with BLD

☐Partnership
☐Involvement
☐Resources
☐Program design
☐Community focused
☐Social support networks

15. ☐***Partnership*** can be described as the relationship between BLD partners, that also actively involves the faith-based partner (i.e. church, Baptist General Convention), to implement various phases of the BLD program
    - How has the "relationship between partners" been important to your experience implementing the BLD program?
        a. *Probe if needed: If at all, how has "the relationship between partners" been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all, how has the "relationship between partners" been challenging or created barriers implementing the BLD program?*
16. ☐***Involvement*** can be described as the clear commitment and active involvement of church members and leaders to implement the BLD program
    - How has "clear commitment and active involvement of church members and leaders to implement the BLD program" been important to your experience implementing the program?
        a. *Probe if needed: If at all how has "clear commitment and active involvement of church members and leaders to implement the BLD program" been beneficial or presented opportunities implementing the program?*
        b. *Probe if needed: If at all, how has "clear commitment and active involvement of church members and leaders to implement the BLD program" been challenging or created barriers implementing the program?*
17. ☐***Resources*** can be described as the availability and accessibility of the partner's resources such as kitchen, meeting areas, etc.

- How has the “availability and accessibility of the faith based organization’s resources such as kitchen, meeting areas, etc.” been important to your experience implementing the BLD program?
    a. *Probe if needed: If at all, how has “availability and accessibility of the faith based organization’s resources such as kitchen, meeting areas, etc.” been beneficial or presented opportunities implementing the BLD program?*
    b. *Probe if needed: If at all, how has “availability and accessibility of the faith based organization’s resources such as kitchen, meeting areas, etc.” been challenging or created barriers implementing the BLD program?*

18. ☐***Program Design*** can be described as the utilization of specific strategy and theory, to design, implement, and evaluate the program
    - How has the BLD “program design” been important to your experience implementing the BLD program?
        a. *Probe if needed: If at all, how has the BLD“ program design” been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all, how has the BLD “program design ” been challenging or created barriers implementing the BLD program?*
19. ☐***Community Focused*** can be described as a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target community to tailor the program design to be more effective and relevant
    - How has “an understanding of the target community’s beliefs, traditions, concerns, and behavior” been important to your experience implementing the BLD program?
        a. *Probe if needed: If at all, how has “an understanding of the target community’s beliefs, traditions, concerns, and behavior” been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all, how has “an understanding of the target community’s beliefs, traditions, concerns, and behavior” been challenging or created barriers implementing the BLD program?*
20. ☐***Social support networks*** can be described as mutual respect, support, and generosity amongst community members, church members, and partners
    - How has “mutual respect, support, and generosity amongst community members, church members, and partners” been important to your experience implementing the BLD program?
        a. *Probe if needed: If at all, how has “mutual respect, support, and generosity amongst community members, church members, and* partners*” been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all, how has “mutual respect, support, and generosity amongst community members, church members, and partners” been challenging or created barriers implementing the BLD program?*

- Are there any other factors that you feel have been important to your experience implementing the BLD program?

Is it okay to move to the next set of questions?

Partnership Synergy

Next I would like to ask you some questions about partnership synergy.

Synergy can be described as working together in partnership to achieve more by combining complementary strengths, perspectives, values, and resources of all the partners in the search for better solutions. Based on your experience [list identified factors] have been important to your partnership experience with BLD

☐Energy
☐Outcomes
☐All benefit
☐Positive experience
☐Complementary skills
☐Work shared
☐Problem solving

21. ☐***Energy*** can be described as buzz, passion, enthusiasm
    - How has "buzz, passion, and enthusiasm been important to your experience as a partner implementing the BLD program?
        a. *Probe if needed: If at all, how has partnership "buzz, passion, and enthusiasm" been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all, how has partnership "buzz, passion, and enthusiasm" been challenging or created barriers implementing the BLD program?*
22. ☐***Outcomes*** can be described as achieving goals and making progress
    - How has "achieving goals and making progress" been important to your experience as a partner implementing the BLD program?
        a. *Probe if needed: If at all how has achieving partnership "goals and making progress" been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all how has achieving partnership "goals and making progress" been challenging or created barriers implementing the BLD program?*

23. ☐*All Benefit* can be described as all partners(including the target community) are getting something positive out of the partnership
    - How has "getting something positive out of the partnership" been important to your experience as a partner implementing the BLD program?
        a. *Probe if needed: If at all how has "getting something positive out of the partnership" been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all how has "getting something positive out of the partnership" been challenging or created barriers implementing the BLD program*
24. ☐*Positive Experience* can be described as enjoyable and satisfactory efforts or encounters
    - How has "enjoyable and satisfactory efforts or encounters" been important to your experience as a partner implementing the BLD program?
        a. *Probe if needed: If at all how have "enjoyable and satisfactory efforts or encounters" been beneficial or presented opportunities as a partner implementing the BLD program?*
        b. *Probe if needed: If at all how have "enjoyable and satisfactory efforts or encounters" been challenging or created barriers as a partner implementing the BLD program?*
25. ☐*Complimentary Skills* can be described as combination of complementary strengths and skills among partners
    - How has a "combination of complementary strengths and skills among partners" been important to your experience as a partner implementing the BLD program?
        a. *Probe if needed: If at all how has a "combination of complementary strengths and skills among partners" been beneficial or presented opportunities implementing the BLD program?*
        b. *Probe if needed: If at all how has a "combination of complementary strengths and skills among partners," been challenging or created barriers implementing the BLD program?*
26. ☐*Work Shared* can be described as tasks broken down so that work is shared and everyone contributes
    - How has "sharing the work" been important to your experience as a partner implementing the BLD program?
        a. *Probe if needed: If at all how has "sharing the work" been beneficial or presented opportunities as a partner implementing the BLD program?*
        b. *Probe if needed: If at all how has "sharing the work" been challenging or created barriers as a partner implementing the BLD program?*
27. ☐*Problem Solving* can be described as the way problems are sorted, getting through difficult patches, and handling conflict

- How has “problem solving” been important to your experience as a partner implementing the BLD program?
    a. *Probe if needed: If at all how has “*problem solving*” been beneficial or presented opportunities implementing the BLD program?*
    b. *Probe if needed: If at all how has “*problem solving*” been challenging or created barriers implementing the BLD program through a collaborative partnership?*

- Are there any other factors that you feel have been important to been important to your experience as a partner implementing the BLD program?

Is it okay to move to the next set of questions? This information is really going to help and we are almost done with this section.

Collaborative Readiness

In the last part of this section I would like to ask you some questions about collaborative readiness. I will ask you about all 4 factors but will only get more in-depth information about the factor(s) you selected as most important.

A partnership’s fit, readiness, capacity, and operations are necessary to plan, implement, evaluate, and disseminate programs

[List identified factors] have been important in the collaborative effort with [insert organizations] to implement the BLD program

☐Goodness of fit
☐Capacity
☐Operations
☐Readiness

28. ☐***Goodness of Fit*** can be described as the compatibility of the partners to conduct the proposed project together
    - How has “goodness of fit” been important in the collaborative effort with [insert organizations] to implement the BLD program?
        a. *Probe if needed: If at all how has “the compatibility of the partners to conduct the proposed project together” been beneficial or presented opportunities implementing the BLD program with [insert organizations]?*
        b. *Probe if needed: If at all how has “the compatibility of the partners to conduct the proposed project together” been challenging or created barriers implementing the BLD program with [insert organizations]?*

29. ☐***Capacity*** can be described as the capability of the partners to conduct programs and sustain change
   - How has “the capability of the partners to conduct programs and sustain change” been important in the collaborative effort with [insert organizations] to implement the BLD program?
      a. *Probe if needed: If at all how has “the capability of the partners to conduct programs and sustain change” been beneficial or presented opportunities implementing the BLD program with [insert organizations]?*
      b. *Probe if needed: If at all how has “the capability of the partners to conduct programs and sustain change” been challenging or created barriers implementing the BLD program with [insert organizations]?*
30. ☐***Operations*** can be described as the roles, responsibilities, structure, and processes the BLD partnership uses to operate
   - How has the BLD partnerships “operations” been important in the collaborative effort with [insert organizations] to implement the BLD program?
      a. *Probe if needed: If at all how has the BLD partnership “operations” been beneficial or presented opportunities implementing the BLD program with [insert organizations]?*
      b. *Probe if needed: If at all how has the BLD partnership “operations” been challenging or created barriers implementing the BLD program with [insert organizations]?*
31. ☐***Readiness*** can be described as the extent to which an individual, group, and community is appropriately prepared to take action and address an issue effectively
   - How has “being prepared to take action” been important in the collaborative effort with [insert organizations] to implement the BLD program?
      a. *Probe if needed: If at all how has “being prepared to take action” been beneficial or presented opportunities implementing the BLD program with [insert organizations]?*
      b. *Probe if needed: If at all how has “being prepared to take action” been challenging or created barriers implementing the BLD program with [insert organizations]?*
   - Are there any other factors that have been important in the collaborative effort with [insert organizations] to implement the BLD program?

32. Based on your experience, why do you consider [list identified factor] to be most important in the collaborative effort with [insert organizations] to implement the BLD program?

Thank you for this information! This is very helpful. May we continue with the last set of questions?

Interpretation of Experience

Finally, I would like to ask you about your experience with health/wellness program planning and partnership over time.

Prior to implementing the BLD program there was [insert identified factor] about diabetes and healthy habits for the [people or most of the churches] the BLD program was planning to serve [in your church (if applicable)]

☐No awareness: did not recognize diabetes was an issue and viewed problem health behavior(s) as a norm
☐Denial: diabetes and healthy lifestyles were not identified as a community problem
☐Little awareness: acknowledgement of the problem but there is no motivation to address it
☐Awareness: leaders and organizations recognize and agree to act on the problem
☐Planning: a strategic plan is put into place
☐Action: action has begun
☐Program implementation: programs have been launched and are supported by personnel, staff, or volunteers
☐Sustained efforts: efforts have been consistent, evaluated, and improved
☐Expanded efforts: efforts have evolved and are inclusive of the community, partners, etc.

Can you tell me more about this?

a. *Probe if needed:* What were some of the challenges experienced during this time?
b. *Probe if needed:* What were some of the opportunities experienced during this time?

Is it okay to move on to the next question?

Once involved in the BLD program there was… about diabetes and healthy habits for the [people or most of the churches] the BLD program was serving [in my church (if applicable)]

☐No awareness: did not recognize diabetes was an issue and viewed problem health behavior(s) as a norm
☐Denial: diabetes and healthy lifestyles were not identified as a community problem
☐Little awareness: acknowledgement of the problem but there is no motivation to address it
☐Awareness: leaders and organizations recognize and agree to act on the problem
☐Planning: a strategic plan is put into place
☐Action: action has begun
☐Program implementation: programs have been launched and are supported by personnel, staff, or volunteers
☐Sustained efforts: efforts have been consistent, evaluated, and improved
☐Expanded efforts: efforts have evolved and are inclusive of the community, partners, etc.

Can you tell me more about this?

a. *Probe if needed:* What were some of the challenges experienced during this time?
b. *Probe if needed:* What were some of the opportunities experienced during this time?

Is it okay to move on to the next question?

Over the next year, if you were to continue involvement in the BLD program or launch another diabetes- related program [in your church or with the same churches], there would be [list identified factor] about diabetes and healthy habits for the [people or most of the churches] the BLD program served [in my church (if applicable)]

☐No awareness: did not recognize diabetes was an issue and viewed problem health behavior(s) as a norm
☐Denial: diabetes and healthy lifestyles were not identified as a community problem
☐Little awareness: acknowledgement of the problem but there is no motivation to address it
☐Awareness: leaders and organizations recognize and agree to act on the problem
☐Planning: a strategic plan is put into place
☐Action: action has begun
☐Program implementation: programs have been launched and are supported by personnel, staff, or volunteers
☐Sustained efforts: efforts have been consistent, evaluated, and improved
☐Expanded efforts: efforts have evolved and are inclusive of the community, partners, etc.
Can you tell me more about this?

a. *Probe if needed:* What were some of the challenges experienced during this time?
b. *Probe if needed:* What were some of the opportunities experienced during this time?

Overall, as a [insert role] what are some of the important lessons you've learned implementing the BLD program?

Overall, as a [insert role] what are some of the important lessons you've learned implementing the BLD program in collaboration with [insert organizations]?

Thank you so much for this information!

Do you have questions about anything I have asked you today?

Is there anything that was left out that you think I should have asked?

Thank you for your time!

Appendix I: Simplified Capacity and Readiness Script

The purpose of this interview is to gain a better understanding of the Balanced Living with Diabetes program (BLD) through your personal experience and interpretation as an active partner to develop and/or implement the program. We will focus on five specific parts of your experience 1) your personal and organizational experience with the BLD program; 2) your BLD program experience; 3) your experience implementing BLD as a partner; 4) your experience implementing BLD in partnership with BGCVA, academic, and community organizations; and 5) changes in your experience with health/wellness planning and partnership over time.

We will talk more about the factors you think have been important within each experience.

What is your current role in the BLD program?

How did you become involved with the BLD program?

Personal Experience

I would like to begin by asking you some questions about your personal and organizational experience with the BLD program. I will discuss each factor you selected and then ask you some questions about them.

[Check factors participant selected] have been most important to your experience as a church coordinator with the BLD program

☐Self-determination
☐Competence
☐Participation
☐Agency
☐Confidence
☐Mastery
☐Information
☐Impact

An individual's personal knowledge, skills, and attitudes can shape personal experiences as well as collective experiences.

- How has your [insert factor] been important to your experience as a church coordinator with the BLD program?
- If at all, how has **[insert factor]** been important to your personal experience with health/wellness program planning and partnership before your current involvement with BLD?

Organizational Experience

[Check factors participant selected] have been important to your church's involvement with the BLD program?

☐Aspirations
☐Strategy
☐Organizational skills
☐Human resources
☐Organizational structure
☐Culture

An organization's structure, operations, and objectives can be used to achieve organizational and community goals.

- How has **[insert factor]** been important to your church's involvement with the BLD program?
- If at all, how has **[insert factor]** been important to your church's involvement with health/wellness program planning and partnership before your current involvement with BLD?

Balanced Living with Diabetes Program Experience

Next I would like to ask you some questions about the BLD program. There questions will be about: a) your experience implementing the BLD program, b) partnership synergy, and c) collaborative readiness. Let's begin with your program experience.

[Check factors participant selected] have been important to your program experience with BLD

☐Partnership
☐Involvement
☐Resources
☐Program design
☐Community focused
☐Social support networks

Several key characteristics and elements are considered critical in the planning and development of faith-placed health programs, such as BLD, to create desirable program and partnership outcomes.

- How has **[insert factor]** been important to your experience implementing the BLD program?
- Are there any other factors that you feel have been important to your experience implementing the BLD program?

Partnership Synergy

Next I would like to ask you some questions about partnership synergy.

[Check factors participant selected] have been important to your partnership experience with BLD

☐Energy
☐Outcomes
☐All benefit
☐Positive experience
☐Complementary skills
☐Work shared
☐Problem solving

Synergy can be described as working together in partnership to achieve more by combining complementary strengths, perspectives, values, and resources of all the partners in the search for better solutions.

- How has **[insert factor]** been important to your experience as a partner implementing the BLD program?
- Are there any other factors that you feel have been important to your experience as a partner implementing the BLD program?

Collaborative Readiness

In the last part of this section I would like to ask you some questions about collaborative readiness. I will ask you about all 4 factors but will only get more in-depth information about the factor(s) you selected as most important.

[Check factors participant selected] have been important in the collaborative effort with BGCVA, academic, and community organizations to implement the BLD program

☐Goodness of fit
☐Capacity
☐Operations
☐Readiness

An academic-community partnership's fit, readiness, capacity, and operations are necessary to plan, implement, evaluate, and disseminate programs

- How has **[insert factor]** been important in the collaborative effort with BGCVA, academic, and community organizations to implement the BLD program?

- Are there any other factors that you feel have been important in the collaborative effort with BGCVA, academic, and community organizations to implement the BLD program?

Interpretation of Experience

Finally, I would like to ask you about your experience with health/wellness program planning and partnership over time.

Prior to implementing the BLD program there was **[check factor participant selected]** about diabetes and healthy habits for the people the BLD program was planning to serve in your church

☐No awareness
☐Denial
☐Little awareness:
☐Awareness
☐Planning
☐Action
☐Program implementation
☐Sustained efforts
☐Expanded efforts

Can you tell me more about this?

Once involved in BLD, there was **[check factor participant selected]** about diabetes and healthy habits for the people the BLD program was serving in your church

☐No awareness
☐Denial
☐Little awareness:
☐Awareness
☐Planning
☐Action
☐Program implementation
☐Sustained efforts
☐Expanded efforts
Can you tell me more about this?

Over the next year, if you were to continue involvement in the BLD program or launch another diabetes- related program in your church, there will be **[check factor participant selected]** about diabetes and healthy habits for the people the BLD program served in your church

☐No awareness

☐Denial
☐Little awareness:
☐Awareness
☐Planning
☐Action
☐Program implementation
☐Sustained efforts
☐Expanded efforts

Can you tell me more about this?

Overall, as a church coordinator what are some of the important lessons you've learned implementing the BLD program?

Overall, as a church coordinator what are some of the important lessons you've learned implementing the BLD program in collaboration with BGCVA, academic, and community organizations?

Thank you so much for this information!

Do you have questions about anything I have asked you today?

Is there anything that was left out that you think I should have asked?

Thank you for your time!

Appendix J: Summary of Capacity and Readiness Factors Rated ‘10’

Personal Experience (Individual Capacity) 4 out of 8	
10	Self-determination: ability to make conscious and confident decisions to accomplish personal goals
10	Confidence: perceived ability to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges
10	Information: the availability to accessible and easy to understand information that inform opportunities
10	Impact: a sense of contribution
	Competence: personal belief in one’s ability to perform a task well
	Participation: an individual’s opportunity to actively engage in social change
	Agency: ability to use motivation and decision making skills to define and act on tasks
	Mastery: increased level of skill to make decisions that minimize negative outcomes and increase positive outcome
Organizational Experience (Organizational Capacity) 3 out of 6	
10	Aspirations: the “vision, mission, and goal” to accomplish major BGCVA health ministry’s objectives
10	Human resources: personnel, volunteers, and partners needed to execute strategies
10	Organizational structure: the systems, roles, and responsibilities that support BGCVA health ministry’s effectiveness
	Culture: core values, beliefs, norms, and performance that influence BGCVA health ministry’s effectiveness
	Strategy: methods and means needed to achieve BGCVA health ministry’s aspirations
	Organizational skills: processes used to develop, implement, and evaluate programs and operations
BLD Program Experience (Key Aspects of Successful Programs) 5 out of 6	
10	Partnership: the relationship between BLD partners, that also actively involves the faith-based partner (i.e. church, Baptist General Convention), to implement various phases of the BLD program
10	Involvement: clear commitment and active involvement of church members and leaders to implement the BLD program
10	Resources: availability and accessibility of the partner’s resources such as kitchen, meeting areas, etc.
10	Community Focused: a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target community to tailor the program design to be more effective and relevant
10	Social Supportive Networks: Mutual respect, support, and generosity amongst community members, church members, and partners
	Program Design: utilization of specific strategy and theory, to design, implement, and evaluate the program
Partnership Synergy 3 out of 7	
10	Energy: energy, buzz, passion, enthusiasm
10	Outcomes: achieving goals and making progress
10	All benefit: all partners (including the target community)are getting something out of the partnership
	Positive experience: enjoyable and satisfactory efforts or encounters

	Complementary skills: combination of complementary strengths and skills among partners
	Work shared: tasks broken down so that work is shared and everyone contributes
	Problem solving: the way problems are sorted, getting through difficult patches, and handling conflict
Collaborative Readiness 3 out of 4	
10	Goodness of fit: the compatibility of the partners to conduct the proposed project together
	Capacity: capability of the partners to conduct programs and sustain change
10	Operations: roles, responsibilities, structure, and processes the BLD partnership uses to operate
10	Readiness: the extent to which an individual, group, and community is appropriately prepared to take action and address an issue effectively
Interpretation of Experience (Community Readiness)	
	No awareness: did not recognize diabetes was an issue and viewed problem health behavior(s) as a norm
	Denial: diabetes and healthy lifestyles were not identified as a community problem
X	Little awareness: acknowledgement of the problem but there is no motivation to address it
	Awareness: leaders and organizations recognize and agree to act on the problem
	Planning: a strategic plan is put into place
X	Action: action has begun
X	Program Implementation: programs have been launched and are supported by personnel, staff, or volunteers
	Sustained Efforts: efforts have been consistent, evaluated, and improved
	Expanded Efforts: efforts have evolved and are inclusive of the community, partners, etc.

Appendix K: Breakdown of Capacity and Readiness Factors Rated '10' by Partner Level

Capacity and Readiness Factors Most Critical to Role and Partnership Experience in the BLD program
(State Health Ministry Administrator=HMA; Area Church Coordinator=ACC; Local Church Coordinator=CC; Clergy=CLR; Extensions=EXT; Researcher=R)

Personal Experience	# of Participants that Rate Factor '10' Extremely Important	Partner Level
Self-determination: ability to make conscious and confident decisions to accomplish personal goals	n=14	HMA=1 ACC=3 CC=6 CLR=2 EXT=1 R=1
Confidence: perceived ability to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges	n=8	HMA=1 ACC=3 CC=1 EXT=1 R=2
Information: the availability to accessible and easy to understand information that inform opportunities	n=8	HMA=1 CC=3 CLR=3 R=1
Impact: a sense of contribution to individual and organizational objectives	n=8	HMA=1 ACC=1 CC=3 CLR=1 R=2
Organizational Experience	**# of Participants that Rate Factor '10' Extremely Important**	**Partner Level**
Aspirations: the "vision, mission, and goal" to accomplish major [INSERT partner's organization]objectives	n=11	HMA=1 ACC=3 CC=4

		CLR=1 EXT=2
Human resources: personnel, volunteers, and partners needed to execute strategies	n=12	ACC=3 CC=5 CLR=1 R=3
Organizational structure: the systems, roles, and responsibilities that support [INSERT partner's organization]'s effectiveness	n=8	HMA=1 ACC=2 CC=3 EXT=2
Balanced Living with Diabetes Program Experience	**# of Participants that Rate Factor '10' Extremely Important**	**Partner Level**
Partnership: the relationship between BLD partners, that also actively involves the faith-based partner (i.e. church, Baptist General Convention), to implement various phases of the BLD program	n=17	HMA=1 ACC=4 CC=6 CLR=1 EXT=2 R=3
Involvement: clear commitment and active involvement of church members and leaders to implement the BLD program	n=15	ACC=3 CC=7 CLR=3 R=2
Resources: availability and accessibility of the partner's resources such as kitchen, meeting areas, etc.	n=9	ACC=1 CC=4 CLR=3 EXT=1
Community Focused: a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target community to tailor the program design to be more effective and relevant	n=9	HMA=1 ACC=2 CC=4 R=1 EXT=1

Social Supportive Networks: Mutual respect, support, and generosity amongst community members, church members, and partners	n=11	HMA=1 ACC=1 CC=5 R=3 EXT=1
Partnership Synergy	# of Participants that Rate Factor '10' Extremely Important	Partner Level
Energy: energy, buzz, passion, enthusiasm	n=11	HMA=1 ACC=2 CC=5 CLR=2 R=1
Outcomes: achieving goals and making progress	n=11	HMA=1 ACC=2 CC=5 CLR=2 R=1
All benefit: all partners (including the target community)are getting something out of the partnership	n=16	HMA=1 ACC=3 CC=7 CLR=1 EXT=2 R=2
Collaborative Readiness	# of Participants that Rate Factor '10' Extremely Important	Partner Level
Goodness of fit: the compatibility of the partners to conduct the proposed project together	n=14	HMA=1 ACC=2 CC=8 CLR=1 R=1 EXT=1
Capacity: capability of the partners to conduct programs and sustain change	n=7	HMA=1 ACC=2

		CC=2 CLR=1 R=1
Operations: roles, responsibilities, structure, and processes the BLD partnership uses to operate	n=11	ACC=3 CC=4 CLR=2 EXT=1 R=1
Readiness: the extent to which an individual, group, and community is appropriately prepared to take action and address an issue effectively	n=10	ACC=2 CC=5 CLR=1 EXT=1 R=1
Interpretation of Experience Prior to implementing the BLD program there was…about diabetes and healthy habits in most of the BGCVA churches the BLD program was planning to serve	# of Participants that Selected This Factor	Partner Level
Little awareness: acknowledgement of the problem but there is no motivation to address it	n=10	HMA=1 ACC=1 CC=4 CLR=2 R=2
Interpretation of Experience Once involved in the BLD program there was… about diabetes and healthy habits in most of the BGCVA churches the BLD program was serving		
Action: action has begun	n=7	CC=2 CLR=1 R=3 EXT=1

Appendix L: Major Themes and Supporting Meaning Units Related to Capacity and Readiness Factors Rated '10'

Major Themes and Supporting Meaning Units Related to Capacity and Readiness Factors Most Critical to Role and Partnership Experience in the BLD program
(State Health Ministry Administrator=HMA; Area Church Coordinator=ACC; Local Church Coordinator=CC; Clergy=CLR; Extensions=EXT; Researcher=R)

Personal Experience	Theme	# of Interviews Expressing Theme	Notable Meaning Unit
Self-determination: ability to make conscious and confident decisions to accomplish personal goals	Goal to improve control and prevent diabetes influence self-determination	n=6	• "…Once I accepted this opportunity to educate people in the community—it was always something that I wanted to do. So I think it fell in to my personal mission to do once I was given a method and a means." • "I knew the urgency of helping the people with diabetes in the educational process so that they could help improve their lives. So I was very determined to do my part to assist Virginia Tech and the community and the Virginia Health Department and give the needed resources to those individuals."
Confidence: perceived ability to take action, put forth the required effort to change behavior and/or circumstances, and persist in action through barriers and challenges	Interest, investment in, and outcomes of program strengthened confidence	n=3	• "I'm saying, "You can do this. You need this." So, you know, we need you in this program. For the area coordinator, I said, "We need you in this program because you have a relationship with your congregation, and you know these people, and they like you, and you have shown that you're a good leader."
Information: the availability to accessible and easy to understand information that inform	Adaption of materials and customization of program important for effectiveness	n=2	• "…our focus groups were very important because one of the things we did in our early meetings was look at the consent

opportunities	and implementation		form and we kept on adapting consent form because we had to make sure people understood it." • "…it made it wonderful for me as an area coordinator, and even better for me as a church coordinator because all I had to do was to assist...I mean, everything was just available. It was right there and I didn't have to do anything, so getting the information out was excellent."
Impact: a sense of contribution to individual and organizational objectives	Helping multiple communities	n=4	• "…part of my interest is in the—the accomplishment that we've made in getting this small group of African-American, under-served, largely fairly elderly adults to see science in a totally different light, that we've approached them about being in a research project."
Organizational Experience	**Theme**	**# of Interviews Expressing Theme**	**Notable Meaning Unit**
Aspirations: the "vision, mission, and goal" to accomplish major objectives	BLD fits the churches, BGCVA and churches health ministry, and individual vision, mission, and goals.	n=7	• "The health of all of its members, the mental, physical, and spiritual health of all of its members is important to the church." • "I would think that many churches would incorporate this program because we do not only care for the spiritual aspects of one's life, but we must encourage the physical as well."
Human resources: personnel, volunteers, and partners needed to execute strategies	FBO volunteers and personnel important to implement the program	n=6	• "Obviously, it varies by church, but they are pivotal…recruitment of participants wouldn't happen…coordination of all logistics…educating church members along the way in terms of this process and how it's going to benefit them wouldn't happen. I mean, it's just—they're vital."

			• "The secretary was very instrumental in the system with notification to the participants,
Organizational structure: the systems, roles, and responsibilities that support effectiveness	Organizational structures in place to support launch and implementation of program	N=6	• "My pastor has been very supportive. I mean, they've let us use the church without any problems and he's been very supportive of the program. He actually, was a participant in the program himself because he's a diabetic. He talks about the program during church…and financially they've been supportive with anything that I needed."
Balanced Living with Diabetes Program Experience	**Theme**	**# of Interviews Expressing Theme**	**Notable Meaning Unit**
Partnership: the relationship between BLD partners, that also actively involves the faith-based partner (i.e. church, Baptist General Convention), to implement various phases of the BLD program	Collaborative effort of partners to implement program	N=9	• "The partnership relationships are key in my view because every partner brings a different perspective to the table" • "The relevance of partnership from the perspective of pulling volunteers together, of knowing who you could go to in order to get participation, was extremely important."
Involvement: clear commitment and active involvement of church members and leaders to implement the BLD program	Involvement and support of church members and leaders very important to program outcomes	N=11	• "I went through them, the leaders, to get their members involved. So being in a partnership with the leaders of the church was very instrumental in them getting their members to cooperate with us." • "It means a great deal when the pastor is supportive of a program and then the members here are very supportive of anything that they feel is good for their community and for their church. that's why it's worked so well"

Resources: availability and accessibility of the partner's resources such as kitchen, meeting areas, etc.	Access to church resources important for program	N=11	• "Every church that I visited has had kitchens available to them. They've had large meeting rooms available to them. Even if there is quiet areas for consultation. So space has been accessible, period." • "We can have the program in the main downstairs hall or in the side room with the kitchen, straight out there. So it was good and laid out and accessible."
Community Focused: a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target community to tailor the program design to be more effective and relevant	Knowing what will work with the community is key to program implementation and program outcomes	N=5	• "So a lot of the community in the area and the adults that we're working with love taste. If it doesn't taste right and…sometime it doesn't look right to them they shy away from it. Their taste buds are the most important thing to them and even surpasses being healthy or not. I want it to taste good."
Social Supportive Networks: Mutual respect, support, and generosity amongst community members, church members, and partners	Social support networks important to program implementation and participant/ partner participation	N=7	• "There were many people that didn't know that someone else had diabetes and so they can help each other and really support each other in the process." • I've seen church coordinators get on the phone and call, they're members of the church too, they will call and say "Where are you? You're not here, why are you not here? "Well I'll come get you." They're not giving them any excuses to not be there that night.

Partnership Synergy	Theme	# of Interviews Expressing Theme	Notable Meaning Unit
Energy: energy, buzz, passion, enthusiasm	Good energy influenced participants excitement about the program and	N=8	• "…even those foods that some would eat or bring up and it was something that we were seeing they should not have, nobody

	having help with diabetes		was jumped on and nobody was scolded "you don't supposed to be eating that." It was brought across in a manner as saying, "Well, what can we do with that to make it better." • "…the coordinator was excited, the coordinator was motivated. So that energy was transferred over to them because of the fact that the coordinator energized and excited about what he or she is doing."
Outcomes: achieving goals and making progress	Tangible results and incremental progress important for the program, partners, and participants	N=8	• "I felt like goals were achieved. From week to week, we're making progress, as evidenced by the participants showing up because I think, at most meetings, the persons were there." • "Looking at the participants and how they were reaching their goals, how their AC1 were dropping, how their sugar was being more controlled, and how excited that they were."
All benefit: all partners (including the target community)are getting something out of the partnership	Getting something positive out of program important to participants and partners	N=12	• "When people can see there are tangible benefits that benefit everyone, I think that that helps the program survive and continue." • "I think we did. I think my church has grown tremendously in the year that the program was there. I feel like that the partners benefited by getting good information and good feedback from the program."
Collaborative Readiness	**Theme**	**# of Interviews Expressing Theme**	**Notable Meaning Unit**
Goodness of fit: the compatibility of the partners to conduct the	Complementary objective, goals, and desired outcomes	N=7	• "Baptist General Convention, with their Spices Health Ministry, is a perfect fit,

proposed project together	important to goodness of fit		because that's what Spices Health Ministry is supposed to do, is maximize health of the, the members of the congregation." • "I think that all had to do with sitting down and looking at, "Here's what we propose to do. How does that fit with what you already have in place or what you can put in place?" I think it worked very well."
Operations: roles, responsibilities, structure, and processes the BLD partnership uses to operate	Clear roles and responsibilities for partners helped with operations	N=5	• "…the roles and responsibilities were all defined out, so really everybody kind of knew their role and knew what their responsibilities were so that the program could run smoothly." • "Everyone knew what their role was, um, their responsibilities in running the program, so, um, I think everything ran smoothly and things worked out. So I don't think there were any problems there.
Readiness: the extent to which an individual, group, and community is appropriately prepared to take action and address an issue effectively	Partners helped prepare other partners for program Readiness of partners influence success of program implementation	N=4 N=4	• "…their openness was probably essential. Their readiness probably not that important. We were happy to work them through it. You know, if they were open to becoming involved in the program, did not really require that much from them. We were pretty much able to put into place or help them put in place anything that we needed to happen." • "We've had sort of a variety at the church level of involvement of the pastor and encouragement of the pastor. Sometimes it's the coordinator going to the pastor saying "You know I want to do this, can we do this?" Other times it's the pastor saying "I pick you and I want you to do

			this.""
Interpretation of Experience	**Theme**	**# of Interviews Expressing Theme**	**Notable Meaning Unit**
Interpretation of Experience Prior to implementing the BLD program there was…about diabetes and healthy habits in most of the BGCVA churches the BLD program was planning to serve			
Little awareness: acknowledgement of the problem but there is no motivation to address it	Awareness of problem but didn't want to talk about it as a church, limited knowledge of how to address diabetes, or accepted health issues/diabetes as inevitable problem	N=9	• "They sort of expect to get certain things because other people in the family did…and many have seen diabetics just watch it progress from one stage to the next, but seen very little of people doing behavior change in order to slow it down, or maybe they even remove themselves from symptoms at some point."
Interpretation of Experience Once involved in the BLD program there was… about diabetes and healthy habits in most of the BGCVA churches the BLD program was serving			
Action: action has begun	Once program began action to address diabetes on individual, community, and church level was initiated	N=3	• "Because they were involved with our research program, they did have a program at their church, which I would consider taking action. They had people in the church involved."
Interpretation of Experience Over the next year, if you were to continue involvement in the BLD			

program or launch another diabetes- related program with the same BGCVA churches, there would be… about diabetes and healthy habits in most of the BGCVA churches the BLD program served			
Program Implementation: programs have been launched and are supported by personnel, staff, or volunteers	Enhanced knowledge, resources, access to volunteers and professionals to launch future programs	N=4	• "It would be an encouragement for all churches to implement such a program. Because we want to live as long as we can, and any help that we can get would be a plus for us. So we do plan to continue the process with better health, better living with diabetes."

Appendix M: Challenges and Benefits Experienced Related to Capacity and Readiness Factors Rated '10'

Notable Challenges and Benefits Related to Capacity and Readiness Factors Most Critical to Role and Partnership Experience in the BLD program

Balanced Living with Diabetes Program Experience	Theme	Notable Meaning Unit
Partnership: the relationship between BLD partners, that also actively involves the faith-based partner (i.e. church, Baptist General Convention), to implement various phases of the BLD program	Challenge: Executing partnership roles and responsibilities via distance was a challenge Benefit: Flexibility and sharing of resources within partnership beneficial to program implementation	• "It's been challenging because we're doing some things over a distance, and sometimes it's difficult when you're on the phone." • "So that relationship, partnership between Virginia Tech and the Baptist General Convention and the Virginia Health Department was very effective in identifying and putting into place those resources that our clients needed in order to live a healthier life."
Involvement: clear commitment and active involvement of church members and leaders to implement the BLD program	Challenge: Getting participants to commit to program and see importance to be involved Benefit: Dedicated and active FBO partners critical to program	• "…sometimes they say, "Oh yeah, my church wants this," and maybe there are not as many people in the church that have been convinced that it's important as it is for them." • "We would never have been able to pull this off, so to speak, if we had not had folks in local churches who volunteered their time. They have, I think, sort of canvassed or round up people. A lot of times you'll notice that a bulletin doesn't get people. You need to kind of run around get them involved. They've really made an effort for that. "
Resources: availability and accessibility of the partner's resources such as kitchen, meeting	Challenge: Varying resources at each church	• "…if you're going to bring the program in, you've got to make sure that they have everything they need for it to be

areas, etc.	Benefit: Kitchen equipment helpful	successful." • "Definitely kitchens are key. Working kitchens with working stoves is key"
Community Focused: a deeper understanding of beliefs, traditions, concerns, and behaviors specific to the target community to tailor the program design to be more effective and relevant	Challenge: Setting the program up to address diversity of participants needs, interests, and willingness Benefit: Word of mouth has impact on participation and outcomes	• "We realized we just can't have the program set up for just one group of people, you do have diversity and different cultures of the way their eating habits are and you have to work with that." • "…if you say that you're doing it and tell it to one person, they remember what you said, so if the conversation comes up with someone else, they're going to share that information. "Well, you know, my husband was in this program." "Well, what kind of program was it?" …So that kind of thing, word of mouth, has a lot of impact on changing the thinking of people. It's within the household and spreads out into the community.
Social Supportive Networks: Mutual respect, support, and generosity amongst community members, church members, and partners	Challenge: Social support and the control Benefit: Church/FBOs major support system/network for African American families and community	• …"but it's just an odd dynamic, where three people who know each other, possibly are each praying that some other church gets in the control condition." • "…the church is and has been for many, many generations, the connector for most African-American families and extended families and neighborhoods…all of that comes to bear when you try to launch an initiative."
Partnership Synergy	**Theme**	**Notable Meaning Unit**
Energy: energy, buzz, passion, enthusiasm	Challenge: Maintaining participant energy throughout certain parts of the program	• "…my church, for instance, we had to wait a year before the program started, so they were getting these contacts, but they had to

	Benefit: Good energy influenced participants excitement about the program and having help with diabetes	wait, and it was like "Well, what are we doing? When are we going to start? Well, you know, what is it about?" But the other two churches had already gotten underway…so excitement was going on for them because they were doing something, but for my people, who were having contact and running into them, it was like "Well, if they're doing it, when are we going to do something?" • "…you talk to them as if you're talking to family, because you're trying to encourage your family to have a better lifestyle or even maintain what lifestyle they have now…the seriousness of it is serious, but the relaxation of learning it needs to be in a relaxing atmosphere, and I think everybody has done a good job doing that, kind of making it fun to learn about."
Outcomes: achieving goals and making progress	Challenge: Will take time to know if program is effective Benefit: Experience with collaborative partnerships encourage health and wellness interest	• "You want to see this happen because you want to know if it really helps people, and you won't know that unless people actually participate in the whole process." • "It's been important because it says that it wasn't a waste of time. I've been able to see the people really apply what they learned. There have been requests from the participants to have something else or to do more"
All benefit: all partners (including the target community)are getting something out of the partnership	Challenge: Trusting the program and partners Benefit: Positive program and partnership experience important for all involved	• "I think their uncertainty about whether everybody is going to benefit, or whether we're just there to get information from them, I think that's a challenge until they see that that's not the case."

		• "I think that people saw the benefits out of it-the leaders and the partners involve were able to see these things
Collaborative Readiness	**Theme**	**Notable Meaning Unit**
Goodness of fit: the compatibility of the partners to conduct the proposed project together	Challenge: Challenging to get partners and participants on board with program Benefit: Partners were compatible	• "Even though collaborative effort was extremely important—because that needed to take place first—after we got into the program, readiness was an issue. Finding individuals who were willing to commit to serve as coordinators was a problem…we didn't have people who were jumping up, saying, "Okay, yeah. Yeah, I'd be glad to do it." That didn't happen, so the readiness issue. We had to kind of put off when we were going to start in certain areas because we didn't have coordinators. I felt that was a bit of a problem, but we did overcome it." • "It's been beneficial any time your partners are compatible, you work well together, and you're working towards a common goal. I think everybody was on the same page which direction we want the program to go and what the benefits we wanted to see happen through the program"
Operations: roles, responsibilities, structure, and processes the BLD partnership uses to operate	Challenge: Operations must be clear and consistent but also flexible Benefit: Leaders throughout partnership helped guide operations	• "I think when it became most important was in those setting where the area coordinators or church coordinators really weren't sure what they were doing and didn't know how to get started. I think then we really had to double our efforts and figure out other ways beyond the ones that we had already tried to try to help them

		reach out to the community and actually get those people." • "I know that there were a time or two that we had problems…and they were able to move to the backup plan or whatever…the way that the entire thing was presented in offering assistance when individual assistance was needed really made the program well worthwhile"
Readiness: the extent to which an individual, group, and community is appropriately prepared to take action and address an issue effectively	Challenge: Varying readiness Benefit: Understanding program design and operations helped improve readiness	• "If you've got somebody who's willing to work with us, then we're happy to work with them, whether or not they've ever done it before or they know what they're doing." • "Knowing the procedures and the responsibilities that were expected of me, made it a lot easier to be ready, to do what was needed to accomplish what the BLD program was trying to accomplish."

Appendix N: Chapter 4 IRB Approval Letter

Office of Research Compliance
Institutional Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website http://www.irb.vt.edu

MEMORANDUM

DATE: February 27, 2015

TO: Dr. Kathryn Hosig, Monica Motley

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: Testing and revising a questionnaire: Evaluating church activities, resources, and infrastructure that influence capacity and readiness to develop to deliver successful health and wellness programs.

IRB NUMBER: **14-190**

Effective February 27, 2015, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Continuing Review request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As:	**Expedited, under 45 CFR 46.110 category(ies) 6,7**
Protocol Approval Date:	**March 14, 2015**
Protocol Expiration Date:	**March 13, 2016**
Continuing Review Due Date*:	**February 28, 2016**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

Appendix O: Recruitment Flyer

Participants Needed
Please Help Us Test a Questionnaire that Evaluates Church Health Programs & Resources

Virginia Tech has partnered with High Street Baptist Church to conduct a short questionnaire and group discussion to learn more about faith-based organizations implementing health and wellness programs. Ultimately, this information will help churches like ours to:

- Better prepare to take action on health issues affecting our congregation and community
- Enhance churches capacity to actively develop and launch health and wellness programs independently or in collaboration with other groups

We are looking for 16-20 participants to help with this project! If you are interested here's what you need to know

What's the purpose of this project again?

- To test a questionnaire that evaluates what activities, infrastructure, and resources influences a church's capacity and readiness to develop to deliver successful health and wellness programs
- Participants will provide feedback about the content/format of the questionnaire, provide suggestions to improve the questionnaire, and give insight about their experience completing the questionnaire

How do I know if I'm eligible to participate?

- Participation is voluntary, all information is confidential, and you must be at least 18 years old, attend High Street Baptist Church, and somewhat knowledgeable about the health and wellness programs and resources at your church

If I'm interested, what do I have to do?

- Participate in (2) two hour sessions
  - Part 1: Complete 1-2 questionnaires that should not take more than 45 minutes total to complete followed by a group discussion that should not take more than 1 hour to complete
  - Part 2: Complete the revised questionnaire that should not take more than 45 minutes total to complete followed by a short in-person follow-up interview to provide any additional feedback on the questionnaire

Will I get compensated for my time?

- Yes, a light meal will be provided at each session and each participant will receive $15 cash after the completion of part 1 and part 2 of the project.

What will the questionnaire ask me about?

- The questionnaire will ask about the health of the church congregation, health and wellness activities hosted by the church, church infrastructure important to health and wellness activities, and church resources to do so

When will the project begin and where will it be held?

- The project will begin towards the end of March and will held at a date, time, and location convenient to the group

If you would like to participate or have further questions please contact Sabrina [insert last name] @ [number/email]

Appendix P: Informed Consent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed Consent for Participants in Research Projects Involving Human Subjects

Title of Project: Testing and revising a questionnaire: Evaluating church activities, resources, and infrastructure that influence capacity and readiness to develop to deliver successful health and wellness programs.

Investigator(s):	Kathy Hosig_______________	khosig@vt.edu/540-231-6637
	Name	E-mail / Phone number
	Monica Motley	motleym@vt.edu/540-231-6637
	Name	E-mail / Phone number

I. Purpose of this Research Project

The purpose of this questionnaire is to test a questionnaire that evaluates what activities, infrastructure, and resources influence a church's capacity and readiness to develop to deliver successful health and wellness programs.

II. Procedures

Participation in this project is completely voluntary. Should you agree to participate, your commitment to this project will involve the completion of two parts:

Part 1: Individually complete 1-2 questionnaires that should not take more than 45 minutes total to complete followed by a group discussion that should not take more than 1 hour to complete. The questionnaire will ask about the health of the church congregation, health and wellness activities hosted by the church, church infrastructure important to health and wellness activities, and church resources to do so. The group discussion will be audio recorded and used to get your feedback about the content/format of the questionnaire, provide suggestions to improve the questionnaire, and give insight about your experience completing the questionnaire.

Feedback will be used to revise and improve the questionnaire

Part 2: Complete the revised questionnaire that should not take more than 45 minutes total to complete followed by a short in-person follow-up interview to provide any additional feedback on the questionnaire.

Completion of both sessions should take approximately two hours and will be conducted at a date, time, and location most convenient to the group.

III. Risks

Participation in this study poses minimal risk. Questions on the questionnaire or asked during the focus group and/or interview are not sensitive in nature and will remain confidential. As an additional measure to further minimize discomfort during the group discussion, participants will establish "communication norms" to help create a more supportive and celebratory experience around sharing.

IV. Benefits

Findings will be used to further develop and finalize a questionnaire that can be used as a valuable tool for churches to better evaluate their capacity and readiness to conduct health and wellness programs based on their activities, resources, and infrastructure. As a result, such information may enhance churches' ability to actively develop and launch health and wellness programs independently or in collaboration with other groups. No promise or guarantee of benefits has been made to encourage you to participate.

V. Extent of Anonymity and Confidentiality
Identifying information (name, address, telephone, etc.) will only appear on the consent form. Identifying information will not be collected on the questionnaires, and a participant ID number will be used in place of your name on all other study materials (i.e. group discussion notes, audio transcripts, etc.). The consent form will not be linked to any of these documents. At no time will the researchers release identifiable information to anyone other than individuals working on the project without your written consent. All information will be stored in a secure location, and will only be accessible by research personnel approved by the Virginia Tech Institutional Review Board. The Virginia Tech (VT) Institutional Review Board (IRB) may view the study's data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research.

VI. Compensation
Should you agree to participate, you will receive $15 cash after the completion of Part 1 and Part 2. Additionally, a light meal and beverage will be provided at each session. If you complete the first session but are unable to attend the second session, you will be partially compensated ($10) for the first session at the completion of the project. A check will be mailed to the address provided on the informed consent form.

VII. Subject's Consent
I have read the Consent Form and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent:

____ Date__________
Subject signature

____
Subject printed name

VIII. Freedom to Withdraw
It is important for you to know that you are free to withdraw from this study at any time without penalty. You are free not to answer any questions that you choose or respond to what is being asked of you without penalty.

Please note that there may be circumstances under which the investigator may determine that a subject should not continue as a subject.

Should you withdraw or otherwise discontinue participation, you will be compensated for the portion of the project completed in accordance with the Compensation section of this document.

IX. Questions or Concerns

Should you have any questions about this study, you may contact one of the research investigators whose contact information is included at the beginning of this document.

Should you have any questions or concerns about the study's conduct or your rights as a research subject, or need to report a research-related injury or event, you may contact the VT IRB Chair, Dr. David M. Moore at moored@vt.edu or (540) 231-4991.

Appendix Q: Focus Group Interview Guide

Focus Group Interview Guide

[Moderator]: I would like to get any feedback you may have about the content/format of the questionnaire, suggestions to improve the questionnaire, and your experience completing the questionnaire. There are no right or wrong answers and any information you provide will be helpful.

Questions 1-4 will be repeated for each section.

1. How can we improve the format of this section of the questionnaire so that it is easier to complete?
2. How can we improve the wording in this section of the questionnaire so that it is easier to understand?
3. What questions should have been asked in this section of the questionnaire but weren't?
4. What are other suggestions you would provide to improve this section of the survey?

Questions for end of the focus group

5. In your opinion, what type of people would be most capable of completing this survey within the church?
    a. [Probe]: Would it be better to complete this questionnaire individually or with a group of people

[Moderator]: Well thank you for taking the time to chat with me today. Do you have any questions? Is there anything else you'd like to add before we finish up? Ok, great!

Individual Follow-up Interview Guide

[Moderator]: I would like to get some final feedback about the questionnaire. There are no right or wrong answers and any information you provide will be helpful.

1. What questions should have been asked in the questionnaire but weren't?
2. If at all, how did the revised format of the questionnaire make it easier to complete?
    a. [Probe]: Could you provide an example

3. If at all, how did the revised format of the questionnaire make it more challenging to complete?
    a. [Probe]: Could you provide an example
4. If at all, did the revised wording of the questionnaire make it easier to understand?
    a. [Probe]: Could you provide an example

5. If at all, did the revised wording of the questionnaire make it more challenging to complete?
    a. [Probe]: Could you provide an example

6. What are other suggestions you would provide to improve the questionnaire?
7. In your opinion, what type of people would be most capable of completing this survey within the church?

[Moderator]: Well thank you for taking the time to chat with me today. Do you have any questions? Is there anything else you'd like to add before we finish up? Ok, great!

Appendix R: Individual Feedback Questionnaire Individual Follow-up Questionnaire

Instructions: We would like to get some final feedback about the questionnaire. There is no right or wrong answer and any information you provide will be helpful.

1. What questions should have been asked in the questionnaire but weren't?

2. If at all, how did the revised format of the questionnaire make it easier to complete?

    a. Could you provide an example

3. If at all, how did the revised format of the questionnaire make it more challenging to complete?

    a. Could you provide an example

4. If at all, did the revised wording of the questionnaire make it easier to understand?

    a. Could you provide an example

5. If at all, did the revised wording of the questionnaire make it more challenging to complete?

    a. Could you provide an example

6. What are other suggestions you would provide to improve the questionnaire?

7. In your opinion, what type of people would be most capable of completing this survey within the church?

Thank you for taking the time to chat with me today. Feel free to provide any additional comments below.

Appendix S: CRCHA Questionnaire

Instructions: This questionnaire may appear to be long, but should take no more than 30-45 minutes to complete. It will ask you a series of questions about your church's: 1) Health & Wellness Resources; 2) Calendar & Availability; 3) Health &Wellness Activities; and 4) Congregational Health. Based on your knowledge of the church, please answer the following questions as best as possible. There may be some questions you do not know the answer to, so feel free to take a guess or estimate. However, we recommend that you use the following options to complete the questionnaire more successfully:

- Complete as much of the questionnaire individually and then seek the help of other knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees as needed (example: Pastor, Church Clerk, Health Ministry Coordinator, Church Nurse, Kitchen Committee Leader, Church Secretary, Youth Minister, etc.)

  OR

- Identify knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees to complete the questionnaire during a group session (example: Pastor, Church Clerk, Health Ministry Coordinator, Church Nurse, Kitchen Committee Leader, Church Secretary, Youth Minister, etc.)

Please answer the following questions once you've completed the questionnaire

How many people helped complete the questionnaire? ___________________________

Within the church, what are the roles of the individuals that helped complete the questionnaire? (i.e. active church member for 5 years, church clerk, kitchen committee chair/leader, etc.)

1. ____

2. ____

3. ____

4. ____

5. ____

Church Health & Wellness Resources

Nutrition & Physical Activity Resources

Please CIRCLE one of the following answers

6. Does your church have snack or soda vending machines on the premises? Yes No

   If yes, what items are sold in the machine(s)? ___________________________________
   (Example: candy, chips, soda, water, crackers, fruit, etc.)

7. Does your church have one or more kitchens that can be used for health and wellness programs?

   Yes No

   If yes, how many? ______________

   If yes, can the kitchen be used to serve individuals or groups external to the church?

   Yes No

   If yes, can the kitchen be used by individuals or groups external to the church?

   Yes No

8. Does your church have one or more dining halls that can be used for health and wellness programs?

   Yes No

   If yes, how many? ____________________________

   If yes, about how many people do they seat? 1.___________ 2.__________ 3. _______

   If yes, can the dining hall be used to serve individuals or groups external to the church?

   Yes No

   If yes, can the dining hall be used by individuals or groups external to the church?

   Yes No

9. Does your church have one or more permanent or portable outdoor shelters for picnics or gatherings that can be used for health and wellness programs? Yes No

If yes, how many? ____________________________

If yes, about how many people do they seat? 1.___________ 2._________ 3. ________

If yes, can the shelter(s) be used to serve individuals or groups external to the church?

Yes No

If yes, can the shelter(s) be used by individuals or groups external to the church?

Yes No

Please place an "x" in the box with the best response

Do you have any the following at the church or on-site?	Yes	No	Don't know or not applicable
A place to exercise such as a large room or auditorium			
Basketball courts, ball fields, skate parts or playgrounds			
Walking path or space (indoor and/or outdoor)			
If no, is there space to add any of these? Please specify:			

Health & Wellness Program Resources

Please place an "x" in the box with the best response

10. What church resources and/or infrastructure are available to support health and wellness activities?

	Yes	No	Don't know or not applicable
Church personnel (i.e. church secretary, church treasurer, maintenance person, etc.)			
Volunteer coordinator/ committee/group			
Volunteer list/database			
Automatic calling system, phone tree, etc.			
Sick/Sick and Shut In/ Prayer list			
Office equipment (i.e. computer, printer, scanner, fax)			
Health and wellness budget			
Resource library, bulletin, table			
Classroom, meeting room, etc.			
Health and wellness mission statement, goals, objectives			
Other (Please describe):			

Please <u>CIRCLE</u> one of the following answers

11. Does your church have one or more large meeting halls that can be used for health and wellness programs?

    Yes No

    If yes, how many? ____________________________

    If yes, about how many people do they seat? 1.___________ 2._________ 3. ________

    If yes, can the meeting hall be used to serve individuals or groups external to the church?

    Yes No

    If yes, can the meeting hall be used by individuals or groups external to the church?

    Yes No

Health Professional Resources

Please <u>CIRCLE</u> one of the following answers

12. Does your church membership include health professionals (i.e. registered nurses, doctors, dietitians, etc.)?

    Yes No

13. Does your church have a health ministry/committee/group? Yes No

14. Is the health ministry/committee/ group lead by a health professional or qualified person that seeks to provide health and wellness services to the congregation?

    Yes No

Church Communication Resources

Please <u>CIRCLE</u> one of the following answers

15. Is there access to the internet at the church? Yes No

16. Does your church have a newsletter? Yes No

    If yes, how often is it distributed? ____

Please <u>place an "x" in the box</u> with the best response

17. In the past 12 months, how many times has your church included messages about being healthy?
Examples of being healthy include:
- Being physically active
- Eating and drinking healthy foods and beverages
- Being at a healthy weight
- Living a tobacco-free lifestyle
- Living a substance-free lifestyle
- Maintaining a positive state of mental health

Included messages about being healthy in…	**How often in the past 12 months?**				
	6 or more times	**3 to 5 times**	**1 or 2 times**	**Rarely or none**	**Don't know or not applicable**
Sermons					
Bulletins					
Newsletters					
Email messages or website postings					
Bulletin boards, posted on walls or other easy ways to see					
Brochures or flyers					
Resource Table					
One-on-one or in person communication or counseling					
Other (Please Describe):					

Availability/ Church Calendar

Please CIRCLE one of the following answers

18. Does your church have a church calendar? Yes No

19. If so, how far in advance is it created? _______________

Please place an "x" in the box with the best response

20. Based on the day, what times are the church facilities available to offer health and wellness activities?

Day	Before noon	Between noon and 4pm	After 5pm
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

Please provide any additional information about church calendar/availability:

____

____

____

____

____

Church Health & Wellness Activities

Please place an "x" in the box with the best response

21. If at all, what organizations has your church partnered with to implement health and wellness activities?

Organization	Yes	No	Don't know or not applicable
Health department			
College/university			
Community group/organization			
Church or faith-based organization			
School/school district			
Local/state government agencies			
Other (please describe):			

Please place an "x" in the box with the best response

22. How are health and wellness activities usually developed and/or identified?

Source	Yes	No	Don't know or not applicable
Completely developed by individuals, committee, auxiliaries and/or ministry within the church			
Developed by an outside organization/group			
Developed by the church using outside sources (i.e. website, brochure, toolkit, etc.)			
In collaboration with other organizations/groups			
Other (please describe):			

Please CIRCLE one of the following answers

23. Has the church held health screenings in the past 12 months? Yes No

24. Has the church held support groups/activities in the past 12 months? Yes No

Please use the blank spaces to list activities. Then place an "x" in the box with the best response under the "How Often" section

25. If yes, in the past 12 months, how often has your church offered the following screenings and/or activities?

	How often in the past 12 months?				
	6 or more times	**3 to 5 times**	**1 or 2 times**	**Rarely or none**	**Don't know or not applicable**
Health screenings (i.e. blood pressure checks, cholesterol checks)					
1.					
2.					
3.					
Support groups or activities (i.e. nutrition counseling, weight management clubs, visiting the sick, tobacco cessation, alcohol/drug addiction)					
1.					
2.					
3.					

Please CIRCLE one of the following answers

26. Has the church provided personal health and wellness resources in the past 12 months?
    Yes No

27. Has the church held youth health programs in the past 12 months? Yes No

Please use the blank spaces to list activities. Then place an "x" in the box with the best response under the "How Often" section

28. If yes, in the past 12 months, how often has your church offered the following resources and/or programs?

	How often in the past 12 months?				
	6 or more times	**3 to 5 times**	**1 or 2 times**	**Rarely or none**	**Don't know or not applicable**
Personal resources (i.e. food, shelter, clothing)					
1.					
2.					
3.					
Youth health programs (i.e. open play time, cooking classes, food tasting)					
1.					
2.					
3.					

Please CIRCLE one of the following answers

29. Has the church provided health education programs in the past 12 months?
Yes No

30. Has the church held healthy food activities in the past 12 months? Yes No

Please use the blank spaces to list activities. Then place an "x" in the box with the best response under the "How Often" section

31. If yes, in the past 12 months, how often has your church offered the following programs and/or activities?

	How often in the past 12 months?				
	6 or more times	**3 to 5 times**	**1 or 2 times**	**Rarely or none**	**Don't know or not applicable**
Health education programs (i.e. health speakers, lectures, workshops or seminars, community health fairs or health conferences)					
1.					
2.					
Healthy food activities (i.e. food demonstrations, tastings, community garden)					
1.					
2.					
3.					
Other (please describe):					

Please <u>place an "x" in the box</u> with the best response

32. In general, who was served by the health and wellness activities offered by the church?

	Congregation	Community	Congregation-focused but open to the community	Community-focused but open to the congregation
Health screenings				
Support groups				
Personal Resources				
Youth health programs				
Health education programs				
Healthy food activities				
Other:				
Other:				

Please place an "x" in the box with the best response

33. When health and wellness activities are offered, how is church leadership involved?

Position	Approval required	Provides support	Provide resources	Don't know or not applicable
Pastor				
First Lady/First Family				
Deacon(s)/Deaconesses				
Church board/ Deacon board				
Health ministry coordinator				
Church committee, auxiliary, or ministry (i.e. kitchen committee, building committee, youth ministry, etc.)				
Church association (i.e. state-wide church association, local church convention, etc.)				
Other (Please Describe):				

Please place an "x" in the box with the best response

34. Does your church have guideline/policies for church events and/or activities to promote health and wellness (i.e. offer healthy food options in Sunday school and at youth events, no smoking policy, etc.)?

	Yes, and they are enforced	Yes, but they are not enforced	No	Don't know
No smoking policy				
Offering healthy food and beverage options at sponsored events that include food				
Offering healthy food and beverage options in Sunday school and at youth events				
Not using food as a reward for children involved in church activities				
Including/encouraging physical activity at events, such as walk or stretch breaks during meetings, services, or organized games at picnics				
Including/encouraging physical activity during Sunday school or at events for children and youth, such as walk or stretch breaks or organized games				
Other (Please describe):				

Physical Activity

Please place an "x" in the box with the best response

35. In the past 12 months, has your church sponsored or offered ways for youth, adults, and/or families to be physically active?

Through…	Youth		Adults		Families (both adults and youth)		
	Yes	No	Yes	No	Yes	No	Don't know or not applicable
Sports leagues							
Exercise classes (i.e. aerobics, yoga, etc.)							
Walking/running clubs							
Walking or running challenges (i.e. 5K walks, marathons, etc.)							
Non-organized activities (i.e. free time/free play, open gym, individual activity/time, etc.)							
Other:							

36. In the past 12 months, have there been any changes related to providing opportunities for physical activity at your church? If so, please describe

____

____

37. In the past 12 months, have there been any challenges related to providing opportunities for physical activity at your church? If so, please describe.

____

____

Healthy Meal & Nutrition Activity

Please CIRCLE one of the following answers

38. Does your church have guidelines or suggestions for healthy foods served at church suppers or other functions? Yes No

Please place an "x" in the box with the best response

39. In the past 12 months, how often have healthy food or drink options been served at church events or meetings?

Types of healthy foods or drinks…	All or most of the time	Sometimes	Rarely or never	Don't know or not applicable
Fruits (i.e. canned in its own juice, fresh, frozen or dried)				
Vegetables (i.e. prepared without added fat, cream sauces, or fried)				
Low-fat entrees (i.e. grilled or baked poultry or fish; sandwiches prepared without cheese or mayonnaise-type dressings)				
Low-sodium foods				
Low-fat dairy products				
Low-fat or sugar free desserts				
Healthy beverage choices (i.e. water, tea without added sugar or sweetener, 100% fruit or vegetable juices)				

Please place an "x" in the box with the best response

40. In general, how often are the food and beverages options healthy?

Types of events…	How often are food and beverage options healthy?			
	All or most of the time	**Sometimes**	**Rarely or never**	**Don't know or not applicable**
After church services				
Potlucks and fundraisers				
Youth events, vacation bible school, Sunday school				
Presentations and lectures				
Feeding ministries (i.e. soup kitchens, food pantries, community kitchens)				
Vending machines				

Please CIRCLE one of the following answers

41. Does your church have a community garden? Yes No

If no, does your church have space for a community garden? Yes No

Congregation Health

Please answer the following questions as best as possible. We understand that these questions may be difficult to answer or you may not know the answer, so feel free to take a guess or estimate.

Please CIRCLE one of the following answers

42. How many people make up your congregation? Be sure to include members and non-members

No documentation of membership 1-50 50-100 100-200 200+

43. Approximately, what percentage of the congregation are youth?

Less than half About half More than half I don't know

44. Approximately, what percentage of the congregation are adults?

Less than half About half More than half I don't know

45. Approximately, what percentage of the congregation are seniors?

Less than half About half More than half I don't know

46. In the past 12 months, has there been an assessment of the congregation's health?

Yes Somewhat No Not Sure

If yes, please use information from the assessment to answer the following questions

If somewhat, no, or not sure, please answer the following questions as best as possible. It is okay if you need to guess, estimate, or do not know

Adult Health

47. Approximately, what percentage of the adults in the congregation participate in regular physical activity?

Less than half About half More than half I don't know

48. Approximately, what percentage of the adults in the congregation eat fruits and vegetables regularly?

Less than half About half More than half I don't know

49. Approximately, what percentage of the adults in the congregation are non-smokers?

Less than half About half More than half I don't know

50. Approximately, what percentage of the adults in the congregation currently have pre-diabetes or have diabetes?

    Less than half About half More than half I don't know

51. Approximately, what percentage of the adults in the congregation currently have or have ever been diagnosed with heart disease or cardiovascular disease?

    Less than half About half More than half I don't know

52. Approximately, what percentage of the adults in the congregation currently have or have ever been diagnosed with cancer?

    Less than half About half More than half I don't know

53. Approximately, what percentage of the adults in the congregation currently have or have ever been diagnosed with respiratory disease (i.e. chronic obstructive pulmonary disease, asthma, etc.)?

    Less than half About half More than half I don't know

54. Approximately, what percentage of the adults in the congregation currently have or have ever been diagnosed with any mental health problems or learning difficulties (i.e. depression, Alzheimer, Dementia, Down Syndrome, etc.)?

    Less than half About half More than half I don't know

55. Approximately, what percentage of the adults in the congregation currently have or have ever been diagnosed with any physical, speech, or visual health problems or difficulties?

    Less than half About half More than half I don't know

56. Approximately, what percentage of the adults in the congregation are overweight or obese?

    Less than half About half More than half I don't know

57. Approximately, what percentage of the adults in the congregation currently have or have ever been diagnosed with high blood pressure and/or high cholesterol?

    Less than half About half More than half I don't know

58. Overall, how would you describe the health of the adults in the congregation?

Excellent Very good Good Fair Poor I don't know

Senior Health

59. Approximately, what percentage of the seniors in the congregation participate in regular physical activity?

    Less than half About half More than half I don't know

60. Approximately, what percentage of the seniors in the congregation eat fruits and vegetables regularly?

    Less than half About half More than half I don't know

61. Approximately, what percentage of the seniors in the congregation are non-smokers

    Less than half About half More than half I don't know

62. Approximately, what percentage of the seniors in the congregation currently have pre-diabetes or have diabetes?

    Less than half About half More than half I don't know

63. Approximately, what percentage of the senior in the congregation currently have or have ever been diagnosed with heart disease or cardiovascular disease?

    Less than half About half More than half I don't know

64. Approximately, what percentage of the seniors in the congregation currently have or have ever been diagnosed with cancer?

    Less than half About half More than half I don't know

65. Approximately, what percentage of the seniors in the congregation currently have or have ever been diagnosed with respiratory disease (i.e. chronic obstructive pulmonary disease, asthma, etc.)?

    Less than half About half More than half I don't know

66. Approximately, what percentage of the seniors in the congregation currently have or have ever been diagnosed with any mental health problems or learning difficulties (i.e. depression, Alzheimer, Dementia, Down Syndrome, etc.)?

    Less than half About half More than half I don't know

67. Approximately, what percentage of the seniors in the congregation currently have or have ever been diagnosed with any physical, speech, or visual health problems or difficulties?

    Less than half About half More than half I don't know

68. Approximately, what percentage of the seniors in the congregation are overweight or obese?

Less than half | About half | More than half | I don't know

69. Approximately, what percentage of the seniors in the congregation have or have ever been diagnosed with high blood pressure and/or high cholesterol?

Less than half | About half | More than half | I don't know

70. Overall, how would you describe the health of the seniors in the congregation?

Excellent | Very good | Good | Fair | Poor | I don't know

Youth Health

71. Approximately, what percentage of the youth in the congregation participate in regular physical activity?

Less than half | About half | More than half | I don't know

72. Approximately, what percentage of the youth in the congregation eat fruits and vegetables regularly?

Less than half | About half | More than half | I don't know

73. Approximately, what percentage of the youth in the congregation have pre-diabetes or have diabetes?

Less than half | About half | More than half | I don't know

74. Approximately, what percentage of the youth in the congregation currently have or have ever been diagnosed with heart disease or cardiovascular disease?

Less than half | About half | More than half | I don't know

75. Approximately, what percentage of the youth in the congregation currently have or have ever been diagnosed with cancer?

Less than half | About half | More than half | I don't know

76. Approximately, what percentage of the youth in the congregation currently have or have ever been diagnosed with respiratory disease (i.e. chronic obstructive pulmonary disease, asthma, etc.)?

Less than half | About half | More than half | I don't know

77. Approximately, what percentage of the youth in the congregation currently have or have ever been diagnosed with any mental health problems or learning difficulties (i.e. depression, hyper activity, down syndrome, autism, etc.)?

Less than half About half More than half I don't know

78. Approximately, what percentage of the youth in the congregation currently have or have ever been diagnosed with any physical, speech, or visual health problems or difficulties

Less than half About half More than half I don't know

79. Approximately, what percentage of the youth in the congregation are overweight or obese?

Less than half About half More than half I don't know

80. Overall, how would you describe the health of the youth in the congregation?

Excellent Very good Good Fair Poor I don't know

Appendix T: Chapter 5 IRB Approval Letter

Office of Research Compliance
Institutional Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website http://www.irb.vt.edu

MEMORANDUM

DATE: September 23, 2014

TO: Dr. Kathryn Hosig, Monica Motley

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: Church Capacity & Readiness Assessment: Evaluating church activities, resources, and infrastructure that influence capacity and readiness to develop and deliver successful health and wellness programs

IRB NUMBER: **14-881**

Effective September 23, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Exempt, under 45 CFR 46.110 category(ies) 2,4**
Protocol Approval Date: **September 23, 2014**
Protocol Expiration Date: **N/A**
Continuing Review Due Date*: **N/A**
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

Appendix U: BGCVA Announcement Tabling Script

Script for Annual Conference Community Breakfast

Good Morning! I'm excited to share with you all that BGCVA is partnering with Virginia Tech to implement another awesome project. Three hundred BGCVA churches will be randomly selected to participate in a survey related to church health and wellness programs. Participating churches will be the leaders in providing valuable information to help BGCVA churches start or strengthen their ability to implement health and wellness programs, as well as take action on health issues affecting their congregation and community.

Dr. J. Elisha Burke, BGCVA Health Ministry Director, is working with the Virginia Tech's public health program to conduct the survey. Selected churches will receive an invitation letter in the mail and via email and/or be contacted via telephone by Monica Motley who will be the Survey Coordinator. Monica will also be downstairs tabling and sharing more information about the study if you are interested. Churches that complete the survey will be placed in a raffle to win one of six $100 prizes to help with a church health and wellness program. That's about a 1 in 50 or better chance of winning the raffle. Participating churches will also be acknowledged in the BGCVA newsletter! Everyone should have a flyer in their conference program so please take a look at it and if you have any questions feel free to find me or Monica. Thank you.

Script for Tabling

Hi can I tell you more about the Church Health Assessment BGCVA is doing in partnership with Virginia Tech?

[no] Okay well feel free to take a flyer or if you have any other questions about BGCVA health programs I'd be more than happy to answer them for you.

[yes] Wonderful! 300 BGCVA churches will be randomly selected to participate in a survey related to church health and wellness programs. Participating churches will be the leaders in providing valuable information to help BGCVA churches start or strengthen their ability to implement health and wellness programs, as well as take action on health issues affecting their congregation and community.

Dr. J. Elisha Burke, BGCVA Health Ministry Director, is working with the Virginia Tech's public health program to conduct the survey.

This one-time survey will ask questions about your church's: 1) health and wellness resources; 2) calendar and availability, health and wellness activities, and congregational health. The survey should take no longer than 45minutes to complete and you will be provided an electronic and hard copy of the questionnaire and be given a minimum of two weeks to complete and submit the survey. There is also an option to answer the survey questions over the phone.

Do you have any questions before I go on?

[no] Okay

[yes] answer question(s)

Churches that complete the survey will be placed in a raffle to win one of six $100 prizes to help with a church health and wellness program as well as be acknowledged in the BGCVA newsletter! This means participants have a 1 in 50, or better chance of winning the raffle.

Virginia Tech will also use this information for research purposes Therefore, participation in the questionnaire is completely voluntary and the church may withdraw from participating in the questionnaire at any time. Additionally, completing the questionnaire poses minimal risk. Questions are about church characteristics, not individual characteristics, and questions are not sensitive in nature. Information you provide on the questionnaire will remain confidential and anonymous; only approved researchers will have access to this information; and submission of the questionnaire will act as consent to participate. This initiative has been approved by BGCVA Health Ministry and Virginia Tech Institutional Review Board.

If you have any questions or would like any additional information, my contact information, along with Dr. Burke is provided on the flyer.

Do you have anymore questions for me?

[no] Wonderful! Enjoy the conference

[yes] answer

Appendix V: Participant Recruitment Flyer

HELP BGCVA IMPROVE CHURCH HEALTH & WELLNESS PROGRAMS!!

Three hundred BGCVA churches will be randomly selected to participate in a survey related to church health and wellness programs. Participating churches will be the leaders in providing valuable information to help BGCVA churches start or strengthen their ability to implement health and wellness programs, as well as take action on health issues affecting their congregation and community.

Dr. J. Elisha Burke, BGCVA Health Ministry Director, is working with the Virginia Tech's public health program to conduct the survey. Selected churches will receive an invitation letter in the mail and via email and/or be contacted via telephone from Dr. Burke and Monica Motley (Virginia Tech Survey Coordinator). **Churches that complete the survey will be placed in a raffle to win one of six $100 prizes to help with a church health and wellness program (1 in 50 or better chance of winning raffle) as well as be acknowledged in the [insert month] BGCVA newsletter!**

WE NEED YOUR HELP!!

QUESTIONS?

Contact Monica Motley
Survey Coordinator,
Virginia Tech

540-231-6637 or email
motleym@vt.edu.

Or

Contact Dr. J. Elisha Burke
Director, BGCVA Health
Ministry

804-228-2421 or email
eburke@bgcva.com

Appendix W: Recruitment and Consent Script

Script Guide

A combination of the following options will be used to contact the participants. However, participants will not be contacted more than three times using the identified methods. A graph to outline possibilities for participant contact has been provided below.

Participant Recruitment Email Script 1

- This will be the first email sent to participants regarding the survey

Telephone Script 1

- Phone conversation used to follow-up if participant does not respond to "Email Script 1"

Email Script 2

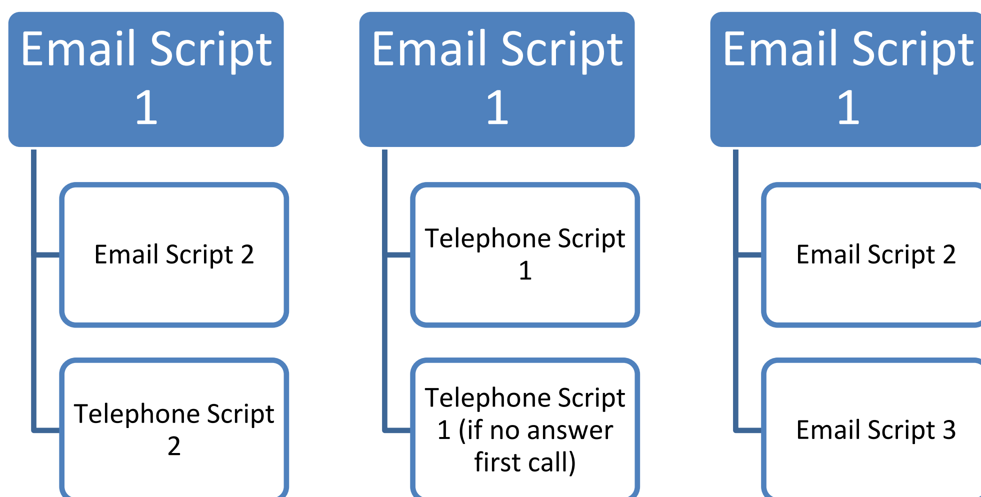
- Email used if participant does respond to "Email Script 1"

Telephone Script 2

- Phone conversation used to follow-up f participant does follow-up to "Email Script 2"

Email Script 3

- If participant does not follow-up to "Email Script 2" proceed to "Email 3"



Participant Recruitment Email Script 1

[Attach electronic or pdf of questionnaire]

Instructions: This will be the first email sent to participants regarding the survey.

- **If participant responds to "Email Script 1" proceed to "Email Script 2**
- **If participant does not respond to "Email Script 1" proceed to "Telephone Script 1"**

Greetings **[insert church name]**!

Your church is 1 of 300 BGCVA churches that have been randomly selected to participate in a survey related to church health and wellness programs! [Insert church name} along with other churches will be the leaders in providing valuable information to help BGCVA churches start or strengthen their ability to implement health and wellness programs, as well as take action on health issues affecting their congregation and community.

Dr. J. Elisha Burke, BGCVA Health Ministry Director, is working with the Virginia Tech's public health program to conduct the survey.

This one-time survey will ask questions about your church's: 1) health and wellness resources; 2) calendar and availability, health and wellness activities, and congregational health. The survey should take no longer than 45 minutes to complete and you will be provided an electronic and hard copy of the questionnaire and be given a minimum of two weeks to complete and submit the survey via email, by telephone, or pre-postmarked envelop. It is recommended that churches identify knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees to help complete the questionnaire (example: Pastor, Church Clerk, Health Ministry Coordinator, Church Nurse, Kitchen Committee Leader, Church Secretary, Youth Minister, etc.)

All churches that submit the questionnaire will be entered into a raffle for a chance to win 1 of 6 $100 checks to use for health and wellness activities. This means participants have a 1 in 50 chance of winning the raffle. If you are interested, please contact me, **Monica Motley**, at **[insert email]** or **[insert telephone]**. I will also follow-up with you on **[insert date]** or **[insert date]** via telephone to tell you more about the survey!

I look forward to hearing from you soon!

Monica Motley, MSEd, MPH
Virginia Tech, BGCVA Survey Coordinator

Participant Recruitment Telephone Script 1

[Voicemail]: Hello! This is **[insert name]** with the Virginia Tech and BGCVA Church Survey. I sent an email on **[insert date]** because your church has been selected to participate in a survey related to church health and wellness programs. You may have also received a package from us in the mail. I'm excited to chat with you! When you get a chance please give me a call at **[insert number]**. I'll also try and give you a call on **[insert date]**. Okay Thanks!

[Answer]: Hello, my name is **[insert name]** and I'm with Virginia Tech and BGCVA Church Survey, may I speak to **the church clerk, church secretary, or pastor**?

[no] Okay is it okay if I leave a message? **[no]** Okay, well I'll try again another time! **[yes]** Can you have her/him give **[insert name]** a call at **[insert number]?** If I don't hear back from her/him in a few days I'll try back again. Thank you!

[yes] Hi **[insert name]**! This is **[insert name]** from Virginia Tech and BGCVA Church Survey, how are you? I sent the church an email on **[insert date]** because your church has been selected to participate in a VT/BGCVA survey related to church health and wellness programs. You may have also received a package from us in the mail. I hadn't heard back from anyone at the church yet, so I wanted to make sure you received it.

[no] Okay do you have a few minutes so that I can tell you a little more about it? **[yes]** Great! **[no]** Okay is there another day or time that would work for me to call you back? **[no]**Okay, well thank you so much for your time and enjoy your day!

[yes] I'm excited that you are interested in chatting more with me! As I mentioned in the email, your church is 1 of 300 BGCVA churches that have been randomly selected to participate in a survey related to church health and wellness programs! [Insert church name} along with other churches will be the leaders in providing valuable information to help BGCVA churches start or strengthen their ability to implement health and wellness programs, as well as take action on health issues affecting their congregation and community.

Dr. J. Elisha Burke, BGCVA Health Ministry Director, is working with the Virginia Tech's public health program to conduct the survey. We also promoted the survey at the BGCVA Annual Session, to try as best as possible to let church's know about the survey.

Do you have any questions before I move on?

[yes: researcher answer questions]

Once I've gone over all of the information, you can let me know if you would be the best person to lead completing the questionnaire or if there is someone else that may be better fit.

[Review implied consent information and be sure to periodically ask participant if there are any questions]
This one-time survey will ask questions about your church's: 1) health and wellness resources; 2) calendar and availability, health and wellness activities, and congregational health. The survey should take no longer than 45 minutes to complete and you will be provided an electronic and hard copy of the questionnaire and be given a minimum of two weeks to complete and submit the survey. It is recommended that churches identify knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees to help complete the questionnaire Therefore, the following options may help complete the questionnaire more successfully:

- Complete as much of the questionnaire individually and then seek the help of other knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees as needed (example: Pastor, Church Clerk, Health Ministry Coordinator, Church Nurse, Kitchen Committee Leader, Church Secretary, Youth Minister, etc.)
- Identify knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees to complete the questionnaire during a group session (example: Pastor, Church Clerk, Health Ministry Coordinator, Church Nurse, Kitchen Committee Leader, Church Secretary, Youth Minister, etc.)

Do you have any questions thus far?

[no] Great!
[yes: researcher answer questions]]

There are three ways the questionnaire can be submitted: 1) you can complete the electronic version of the questionnaire that will simply allow you to type in your responses directly, and then send it back to me via email; or 2) you can print a copy of the questionnaire from the email or use the hard copy we sent in the mail to the church, and send it back in the pre-stamped envelope or 3) we can set-up another date and time and I can ask you the questions over the phone. Then I can email you the questions you need more time to figure out, and you get it back via email, in the mail, or over the phone.

Do you have any questions thus far?

[no] Great!
[yes: researcher answer questions]]

Participation in the questionnaire is completely voluntary and the church may withdraw from participating in the questionnaire at any time. However, if you do complete the questionnaire, your church will be entered into a raffle for a chance to win 1 of 6 $100 gift cards or checks to use towards health and wellness efforts. This means participants have a 1 in 50 chance of winning the raffle. The incentive will be mailed to you.

Lastly, Virginia Tech will also use this information for research purposes. Ultimately, what this means is that we will compare all of the information we collect in hopes of enhancing church's capacity and readiness to develop and implement life-style related health and wellness efforts independently or via collaborative partnerships. Completing the questionnaire poses minimal risk. Questions are about church characteristics, not individual characteristics, and questions are not sensitive in nature. If your church does agree to participate, it is important that the information you provide us remains confidential and anonymous. Therefore, your church and lead will receive an ID number to use in place of names, only approved researchers will have access to this information, and submission of the questionnaire will act as consent to participate. This initiative has been approved by BGCVA Health Ministry and Virginia Tech Institutional Review Board.

Do you have any questions thus far?

[no] Great!
[yes: researcher answer questions]]

Do you think your church may be interested in participating?
[no] Okay, well are there any questions I can answer to possibly ease any hesitation you may be having?
[yes]: researcher answer questions] [no] Okay well thank you so much for your time and enjoy your day!

[need more time] Okay, is there a day or time that works best over the next few days that I can contact you [collect date and time] Okay great! I'll follow-up with you then! Enjoy the rest of your day!

[yes] Great! Do you think you would be interested in being the lead to complete the questionnaire?
[yes] Great! Is it best to contact you using the church's email or your own personal email?
[Notate best contact information]
[no] Who would be the best person to lead this? Is it possible to get their contact information or can you have them contact me? **[Notate contact information]**

Lastly, do you need to get permission from the Pastor or the church board before we can move forward?
[no]
[yes] Okay, can we schedule another call in [suggest time frame] so that you can present this to them? Also I would be more than happy to speak to anyone about this as well. **[notate response]**

Do you have any additional questions for me?

[no] [review methods for submission and questionnaire] Okay well if you think of something later you can reach me at **[insert contact information] between [insert times]** Monday through Friday. I will follow-up with you over then next few days. Thank you for your time and enjoy your day!
[yes: researcher answer questions] Okay well thank you for your time and enjoy your day!

Follow-up Participant Recruitment Email Script 2

Instructions:

- **If participant does follow-up to "Email Script 2" proceed to "Telephone Script 2"**
- **If participant does not follow-up to "Email Script 2" proceed to "Email 3"**

Greetings **[insert name]**!

We are excited that you are interested in the survey! There is some more information that I would like to share with you. Are you available over the next few days to chat? If so, please send me a few dates and times, and we will get going.

Look forward to talking to you soon.

Monica Motley, MSEd, MPH
Virginia Tech, BGCVA Survey Coordinator

Participant Recruitment Telephone Script 2

[Voicemail]: Hello! This is **[insert name]** with the Virginia Tech and BGCVA Church Survey. We've been chatting via email because your church has been selected to participate in a survey related to church health and wellness programs. You may have also received a package from us in the mail. I'm excited to chat with you! When you get a chance please give me a call at **[insert number]**. I'll also try and give you a call on **[insert date]**. Okay Thanks!

[Answer]: Hello, my name is **[insert name]** and I'm with Virginia Tech and BGCVA Church Survey, may I speak to **[insert name]**?

[no] Okay is it okay if I leave a message? **[no]** Okay, well I'll try again another time! **[yes]** Can you have her/him give **[insert name]** a call at **[insert number]?** If I don't hear back from her/him in a few days I'll try back again. Thank you!

[yes] Hi **[insert name]**! This is **[insert name]** from Virginia Tech and BGCVA Church Survey, how are you? We've been chatting via email because your church has been selected to participate in a VT/BGCVA survey related to church health and wellness programs. You may have also received a package from us in the mail.

[no] Okay do you have a few minutes so that I can tell you a little more about it? **[yes]** Great! **[no]** Okay is there another day or time that would work for me to call you back? **[no]**Okay, well thank you so much for your time and enjoy your day!

[yes] I'm excited that you are interested in chatting more with me! As I mentioned in the email, your church is 1 of 300 BGCVA churches that have been randomly selected to participate in a survey related to church health and wellness programs! [Insert church name} along with other churches will be the leaders in providing valuable information to help BGCVA churches start or strengthen their ability to implement health and wellness programs, as well as take action on health issues affecting their congregation and community.

Dr. J. Elisha Burke, BGCVA Health Ministry Director, is working with the Virginia Tech's public health program to conduct the survey. We also promoted the survey at the BGCVA Annual Session, to try as best as possible to let church's know about the survey.

Do you have any questions before I move on?

[yes: researcher answer questions]

Once I've gone over all of the information, you can let me know if you would be the best person to lead completing the questionnaire or if there is someone else that may be better fit.

[Review implied consent information and be sure to periodically ask participant if there are any questions]
This one-time survey will ask questions about your church's: 1) health and wellness resources; 2) calendar and availability, health and wellness activities, and congregational health. The survey should take no longer than 45 minutes to complete and you will be provided an electronic and hard copy of the questionnaire and be given a minimum of two weeks to complete and submit the survey. It is recommended that churches identify knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees to help complete the questionnaire Therefore, the following options may help complete the questionnaire more successfully:

- Complete as much of the questionnaire individually and then seek the help of other knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees as needed (example: Pastor, Church Clerk, Health Ministry Coordinator, Church Nurse, Kitchen Committee Leader, Church Secretary, Youth Minister, etc.)
- Identify knowledgeable individuals or leaders from the church ministries, auxiliaries, and/or committees to complete the questionnaire during a group session (example: Pastor, Church Clerk, Health Ministry Coordinator, Church Nurse, Kitchen Committee Leader, Church Secretary, Youth Minister, etc.)

Do you have any questions thus far?

[no] Great!
[yes: researcher answer questions]]

There are three ways the questionnaire can be submitted: 1) you can complete the electronic version of the questionnaire that will simply allow you to type in your responses directly, and then send it back to me via email; or 2) you can print a copy of the questionnaire from the email or use the hard copy we sent in the mail to the church, and send it back in the pre-stamped envelope or 3) we can set-up another date and time and I can ask you the questions over the phone. Then I can email you the questions you need more time to figure out, and you get it back via email, in the mail, or over the phone.

Do you have any questions thus far?

[no] Great!
[yes: researcher answer questions]]

Participation in the questionnaire is completely voluntary and the church may withdraw from participating in the questionnaire at any time. However, if you do complete the questionnaire, your church will be entered into a raffle for a chance to win 1 of 6 $100 gift cards or checks to

use towards health and wellness efforts. This means participants have a 1 in 50 chance of winning the raffle. The incentive will be mailed to you.

Lastly, Virginia Tech will also use this information for research purposes. Ultimately, what this means is that we will compare all of the information we collect in hopes of enhancing church's capacity and readiness to develop and implement life-style related health and wellness efforts independently or via collaborative partnerships. Completing the questionnaire poses minimal risk. Questions are about church characteristics, not individual characteristics, and questions are not sensitive in nature. If your church does agree to participate, it is important that the information you provide us remains confidential and anonymous. Therefore, your church and lead will receive an ID number to use in place of names, only approved researchers will have access to this information, and submission of the questionnaire will act as consent to participate. This initiative has been approved by BGCVA Health Ministry and Virginia Tech Institutional Review Board.

Do you have any questions thus far?

[no] Great!
[yes: researcher answer questions]]

Do you think your church may be interested in participating?
[no] Okay, well are there any questions I can answer to possibly ease any hesitation you may be having?
[yes]: researcher answer questions] [no] Okay well thank you so much for your time and enjoy your day!

[need more time] Okay, is there a day or time that works best over the next few days that I can contact you [collect date and time] Okay great! I'll follow-up with you then! Enjoy the rest of your day!

[yes] Great! Do you think you would be interested in being the lead to complete the questionnaire?
[yes] Great! Is it best to contact you using the church's email or your own personal email?
[Notate best contact information]
[no] Who would be the best person to lead this? Is it possible to get their contact information or can you have them contact me? **[Notate contact information]**

Lastly, do you need to get permission from the Pastor or the church board before we can move forward?
[no]

[yes] Okay, can we schedule another call in [suggest time frame] so that you can present this to them? Also I would be more than happy to speak to anyone about this as well. **[notate response]**

Do you have any additional questions for me?

[no] [review methods for submission and questionnaire] Okay well if you think of something later you can reach me at **[insert contact information] between [insert times]** Monday through Friday. I will follow-up with you over then next few days. Thank you for your time and enjoy your day!
[yes: researcher answer questions] Okay well thank you for your time and enjoy your day!

Follow-up Participant Recruitment Email Script 3

[Follow-up email 2 sent if no response in 3-5 business days]

Greetings **[insert church name/name**]!

I sent an email on [insert date] because your church has been selected to participate in a survey related to church health and wellness programs! I have not heard back and wanted to try again. If you are available it would be great to setup a brief phone call with you to review this information, answer any immediate questions you may have, and confirm your participation.

If you have any immediate questions before then, feel free to contact me at [insert email] or [insert telephone] between [insert times] Monday through Friday.

I look forward to talking with you!

Monica Motley, MSEd, MPH
Virginia Tech, BGCVA Survey Coordinator