A Congregational Wellness Challenge: The Feasibility of a Holistic Church-Based Health Promotion Program in Durham, North Carolina

by

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Thesis submitted in partial fulfillment of
the requirements for the degree of
Master of Science in the Duke Global Health Institute
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<u>ABSTRACT</u>

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Abstract

Background: Church-based health promotion programs have been shown to be effective in improving health outcomes, but rarely do they approach wellness from a holistic standpoint. This is a missed opportunity for fuller integration within congregations. This study sought to assess and evaluate the feasibility of a holistic multi-site church-based health promotion program, through engagement, acceptability, and preliminary behavior change outcomes. Methods: This study utilized a concurrent mixed-methods approach in order to evaluate the "Congregational Wellness Challenge" (CWC), a pilot initiative that encouraged behavior change in three areas of holistic wellness: body, spirit, and soul, over six weeks. Participants were asked to complete one activity from each of the three categories every day for forty days, and congregations were encouraged to support those participating in the challenge. This study utilized a pre-post one-group design. Participants were surveyed at baseline and at six weeks about their health behaviors and opinions of the programs, as well as recording their behaviors on activity logs. Seventeen semi-structured in-depth interviews were conducted eight weeks post-challenge. Results: The 39 participants in the study completed 64.2% of the activities during the challenge. There was a significant increase in several of the body health variables. The number of people reporting 30 minutes of physical activity about once a week, two or three times a week or every day, compared to (no times a week?) nearly doubled, from 43.5% to 82.6% ($p=0.012$). Vegetable and fruit intake also significantly increased, from 52.2% of people reporting eating at least 5 servings of vegetables and fruits daily to 100% of respondents ($p=0.001$). Frequency of reading for pleasure significantly increased, as did Scripture meditation, bible study, and singing to the Lord. Qualitative results indicated an overall acceptability of the program. Participants had a variety of motivations for joining, and gave valuable feedback on the importance of recording their activities. Conclusion: The CWC pilot initiative was feasible in a wide variety of churches, and future research should focus on the effectiveness of holistic wellness programs and improving implementation practices.

Dedication

To Nanna and Pappa – you are a constant inspiration.

Contents

List of Tables

List of Figures

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1. Introduction

Research has shown that church-based health promotion (CBHP) programs have been able to improve health outcomes (Campbell, Hudson, et al., 2007; DeHaven, Hunter, Wilder, Walton, & Berry, 2004). In addition to improving health outcomes, they also have potential to reduce health disparities because of their ability to reach underserved populations, particularly African-American congregations (Campbell, Hudson, et al., 2007; Peterson, Atwood, & Yates, 2002; Winett et al., 1999). As CBHP programs become a more popular choice as a way to promote health behaviors on a community level, it is increasingly important to study the efficacy and effectiveness of such programs (Campbell, Hudson, et al., 2007; DeHaven, Hunter, Wilder, Walton, & Berry, 2004). Most published material on such programs lacks rigorous outcome evaluation, but programs that do include evaluation demonstrate the effectiveness of CBHP programs on changes in health behavior (Campbell, Hudson, et al., 2007).

Although CBHP programs are promising for health promotion, major weaknesses of many of the implemented CBHP programs include the failure to utilize a theoretical framework when designing their intervention, especially with programs that include more than just bodily health interventions. Moreover, only a limited number have demonstrated effectiveness before implementation (Campbell, Hudson, et al., 2007). In addition, many evaluated CBHP programs have failed to take into account any sort of model of holistic health; programs have nearly exclusively focused on physical health behavior changes and measures (and often only on one health behavior at that), despite the demonstrated effectiveness of changing multiple behaviors at one time (Allicock et al., 2013; Baruth & Wilcox, 2013). Nevertheless, these CBHP physical health interventions typically promoted the reduction of risk behaviors for obesity, cardiovascular disease, diabetes, and other non-communicable diseases (Allicock et al., 2013; Baruth & Wilcox, 2013; Campbell, Resnicow, Carr, Wang, & Williams, 2007; Cowart, Sutherland, & Harris, 1995; DeHaven et al., 2011; Gutierrez et al., 2014; Kumanyika & Charleston, 1992; Lasater, Becker, Hill, & Gans, 1997; McNabb, Quinn, Kerver, Cook, & Karrison, 1997; K. Resnicow et al., 2001; Ken Resnicow et al., 2002). While these programs have mostly proven effective in improving physiological indicators, barriers to the implementation and reach of these CBHP remain (Allicock et al., 2013; DeHaven et al., 2004).

One major gap identified in the literature is the lack of CBHP programs that look at health from a multi-faceted approach. We could not find a CBHP program targeting congregation members that included spiritual outcomes as part of the intervention, a finding supported by other literature reviews (Campbell, Hudson, et al., 2007; DeHaven et al., 2004). Very rarely did studies include any sort of emotional outcomes (excluding reports on parish nursing programs, where registered nurses work with local congregations); one study included a stress management indicator and only one of their sites showed a significant decrease for that indicator (Cowart et al., 1995). Likewise, the literature assessing mental health interventions, an important indicator of holistic wellness, is extremely limited in CBHP programs (Hankerson & Weissman, 2012). Those programs that included some sort of spiritual "element" in the intervention materials did so as a means to promote changes in physical health; spiritual and emotional wellness were not primary outcomes themselves (DeHaven et al., 2011). The lack of emotional and spiritual well-being measures is partially a result of the tendency for CBHP programs to be "faith-placed" rather than "faith-based", where the churches are used as sites for outside-developed interventions rather than the program being integrated into the more general work of the congregation (Campbell, Hudson, et al., 2007; DeHaven et al., 2004). To fully take advantage of the opportunities that churches allow for health promotion, interventions need to be fully faith-based.

There have been a number of limitations of CBHP programs identified by researchers, including: 1) the need to improve motivation of congregants; 2) the need for changes in belief to occur prior to changes in health behavior; and 3) the need to integrate spiritual elements (Allicock et al., 2013; DeHaven et al., 2004; Lasater et al., 1997; Odulana et al., 2014). Clergy have indicated that programs will be more successful if they integrate spirituality (Lumpkins, Greiner, Daley, Mabachi, & Neuhaus, 2013). All of these identified limitations support the need to implement and evaluate a holistic health intervention, such as the one proposed by Stephen Hawks (Hawks, 2004). Hawks proposes that a dynamic, functional, multidimensional model of holistic health should include spiritual, emotional, social, physical, and intellectual health. However, no published interventions were found that explicitly utilized that model (Hawks, 2004). An additional holistic health model is the Spirited Life model used by The Duke Endowment-funded Duke Clergy Health Initiative. This model includes spiritual and emotional well-being, and also takes into account socioecological conditions that can influence health behaviors (Proeschold-bell et al., 2011; Proeschold-Bell et al., 2013). Such a model, initially used with United Methodist clergy in North Carolina, was yet to be used on a congregational level. Two community-based organizations (DurhamCares and Bull City Forward), in consultation with the Duke Clergy Health Initiative, developed a holistic CHBP program for a collection of churches based in Durham, NC, using the findings of the Clergy Health Initiative.

Bowen, et. al. propose criteria that support the use of a feasibility study for this particular pilot intervention (Bowen et al., 2009). First of all, this study involved the establishment and strengthening of community partnerships between local congregations, local nonprofit organizations (i.e. DurhamCares and Bull City Forward), and a local university (Duke University). Additionally, there are few previously published studies of holistic wellness programs, so it is important to understand the feasibility of such programs before vast resources are used in more rigorous study designs to establish the effectiveness of this type of program. Although highly controlled efficacy trials obviously have the advantage of high internal validity, practitioners in recent years have called for more studies in which community constraints “are prioritized over optimal conditions and settings”, which was the case for this particular study (Bowen et al., 2009). Therefore, we determined to assess the feasibility, as opposed to the efficacy, of the Congregational Wellness Challenge (CWC) intervention as a pilot program for local churches.

1.1 Overall Aim

This research aims to assess the feasibility of the pilot Congregational Wellness Challenge (CWC) program.

1.2 Specific Objectives

To assess and evaluate the feasibility of the pilot CWC program utilizing both quantitative and qualitative measures. The analysis will cover the following areas:

Engagement:

1. The extent to which participants engaged in the activities of the CWC during the timeframe of the program.

Acceptability:

1. Participants’ motivations for participating in the CWC.

2. Participants’ general feedback about the program and suggestions for improvement.

Preliminary Behavioral Change Outcomes

1. To analyze preliminary and short-term behavioral outcomes of the CWC in the three areas that the program addresses: body, soul, and spirit.

2. Methods

2.2 Study Design

This study utilized a concurrent mixed-methods approach in order to evaluate the “Congregational Wellness Challenge” (CWC), a community-organized, multi-site congregational wellness pilot initiative that addressed three areas of holistic wellness: body, spirit, and soul. A survey was given using a pre-post one-group design, and participants tracked their activities using behavior logs. Given the high propensity for spillover into the rest of the congregation from the group of participants, no control group from within the same congregation was used. In addition to the survey, semi-structured, qualitative, in-depth interviews were conducted at the end of the challenge with participants.

2.2 Setting

The program was funded in part by the Duke Clergy Health Initiative (Duke Endowment) and BullCity Forward, and was spearheaded by a community organization called DurhamCares, which also contributed funding and resources. As this was a community-organized project, other local organizations also sponsored portions of the program and provided various incentives to program participants.

2.3 Description of Program

The CWC was implemented in seven churches in the Durham, NC area. The seven churches represented a range of denominations: United Methodist (n=1), nondenominational (n=4), Presbyterian Church of America (n=1), and Baptist (n=1). Four of the churches were predominantly African-American, two of the churches were intentionally cross-cultural, and one church was predominantly white. Due to the convenience sampling of the churches, and the low N for each category, it was not possible to compare differences across race and denomination, and as such, that was not a primary outcome of this study.

The wellness program was conducted in the spring of 2015. The timing of the challenge roughly overlapped with the Christian liturgical season of Lent, a time of preparation before the celebration of Easter. Twelve members from each church (termed "Wellness Disciples"), committed to participating fully in the challenge. In addition to those twelve people, at least one pastor from the church was encouraged to participate. Additionally, all congregation members were encouraged to participate in different components of the challenge as they saw fit, but only the twelve "Wellness Disciples" were fully committed to the program. Hereafter, "participants" refers to the pastors and the twelve committed "Wellness Disciples" from each church. After the pastors committed to having their church participate in the challenge, they recruited members of their congregation through a variety of methods: announcements in worship, personal invitations, email blasts, etc.

2.3.1 Individual Level

Those participating in the wellness challenge committed to completing activities in all three areas (body, soul, spirit). "Challenge" was the term used for the pilot program in order to encourage participants to "challenge" themselves for a relatively short time period to change their health habits. For 40 days (which was designed to mirror the forty days of the Lenten period), they completed one activity in each of the three areas every day. Some types of activities were strongly encouraged for all participants. Specifically, they were asked to complete some form of exercise (at least 30 minutes) at least three days each week as part of the body category. Observation of Sabbath time was also encouraged throughout the 40 days. The initiative was designed with the intent to allow participants to tailor the wellness activities to their lifestyle, as research has shown that more tailored interventions are more effective than standardized ones (Peterson et al., 2002). See Appendix A for the suggested activities that were given to the participants.

2.3.2 Communal Level

Since this was a congregational wellness initiative, the CWC also encouraged participation on the level of the congregation. The congregation was asked to engage in the wellness challenge in the following ways:

1. Commit to healthier approaches at church events (e.g., no fried foods, offering water as a drinking option, holding walking meetings)

2. Participate in select activities from the Spirit, Soul, and Body lists of their choosing (see Appendix A for examples).
3. Support their team of Wellness Disciples with prayer, words of encouragement, and/or action.

In addition, all of the participating congregations were invited to participate in a "Launch Celebration" to happen prior to the start of the challenge, and a "Closing Celebration" that happened at the end of the challenge. The Launch Celebration included recognition of the participants, a communal meal, and distribution of health information. The Closing Celebration happened in conjunction with the Florence Forth race, a local Durham race, which participants were encouraged to run/walk with their fellow disciples at the end of the challenge. Additionally, the sponsoring organizations offered a "Sabbath Workshop" midway through the challenge, which was based off of Matthew Sleeth's book <u>24/6: A Prescription for a Happier, Healthier Life</u>, that all the participants were given to read.

2.2 Participants

Anyone who participated in the CWC as a "disciple" (meaning they were one of the 12 people from their church who were committed to the challenge) or who were an employed pastor or associate pastor of the participating churches, were eligible to participate in the data collection. Participants were required to be over the age of 18. Disciples were not required to participate in data collection as part of their commitment to the challenge. Therefore, it was possible to be a disciple and not want to participate in the study, although we attempted to recruit all potential disciples for participation in the study.

As the study was intended to measure the feasibility of a community-driven congregational wellness initiative, there were limitations surrounding the sampling of the participants. The sampling of the congregations was purposive towards those congregations who were thought to produce a high response rate, and utilized pre-existing social networks of community organizers. However, since this was a feasibility study of a pilot program, representative sampling was not prioritized.

The twelve participants from each church were self-selected to join the CWC program provided by DurhamCares. They were recruited by the pastors and other lay leaders from each of the seven churches through announcements at church events, bulletin announcements, and individual conversations. The first twelve people in each congregation who were interested in joining the CWC and who met the inclusion criteria (listed below) were enrolled in the program. Although there were a few minors who did participate in the challenge as disciples, they were not included in the feasibility study and data collection. Survey and logged activity data were by staff of the Duke Clergy Health Initiative on behalf of DurhamCares. CWC participants were invited to share the data collected by DurhamCares with Duke University in order for the data to be used for the feasibility study. They were also asked to share their logged activities with Duke University. However, it was made clear to participants that they could participate in the CWC and decline to share their data with Duke University, with no consequences. Since consent to share their data required no additional effort on part of the participants, we anticipated a high agreement rate and expected to reach a total of at least 75 participants (out of a total possible 93 participants) to consent to share their data for analysis by Duke. Participants in the main data sharing study did not receive additional compensation for agreeing to share their data. It should be noted that they received several incentives for participation in the CWC program as a whole (i.e., sweatshirts, water bottles, access to free, locally-grown food, books and resources on Sabbath-keeping).

Recruitment for the qualitative interviews, conducted by Duke University, targeted one pastor from each of the churches, and two additional participants, randomly sampled from the Wellness Disciples from each church. Participants were eligible to participate if they had been one of the disciples at the beginning of the challenge. If the randomly selected participants declined to participate when initially approached about completing in-depth interviews, additional participants were randomly selected. We had a goal of reaching three participants (2 laypeople and 1 pastor) from each church. Participants in the sub-study received $20 as compensation for their time in the qualitative interview.

Inclusion Criteria

- Participant must be over the age of eighteen.
- Participant must be a regular, active member in the congregation (as determined by the pastor).
- Participant must be identified as a full participant in the CWC program, with intentions to complete activities in the 3 health and well-being areas, for 40 days, and to log their activities.
- For the qualitative interviews, participants who had consented to participate in the CWC evaluation study were eligible.

Exclusion Criteria

- Participants were excluded if they anticipated needing to quit the 40-day challenge before it was completed.

2.3 Procedures

Researchers from the Duke Clergy Health Initiative and Duke University consulted with DurhamCares in order to design the pre and post surveys for the feasibility evaluation. . After securing Duke University's Institutional Review Board's review approval (#CO764 Congregational Wellness Challenge: Evaluation of a Church-Based Health Promotion program in 7 local churches), participants were asked to consent to DurhamCares sharing their collected information with the team of researchers from Duke University.

At the pre- and post-intervention sessions, participants were given a survey to complete that included questions about their motivations and experiences with the wellness challenge. The instrument consisted primarily of close-ended, ordinal and categorical questions, with a few open-ended questions, that addressed the three areas that the initiative addresses: body, soul, and spirit. The pre-test survey also included a set of demographic questions.

CWC staff and volunteers at the pre-challenge celebration collected all of the pre-intervention data. Participants were pre-assigned a unique numerical code in order to ensure privacy. Participants completed the written surveys on paper themselves, although CWC staff were available to answer any questions they might have had. We did not receive IRB approval prior to the start date of the pre-challenge celebration. As such, we were not able to obtain consent at the pre-challenge celebration. Participants were later given the opportunity to consent to share their data that was collected by DurhamCares with Duke University researchers. Duke's role in the initial design of the CWC program and the evaluation measures was disclosed to all CWC participants at the time of data collection. Participants whose data were collected who either chose not to consent or were not able to be reached in order to consent to their data being shared were not included in the analysis.

The post-survey data were collected in a variety of settings. There was low turnout at the closing celebration (Florence Forth race), so after the challenge ended, researchers went to the various participating congregations to administer the post-surveys either after Sunday or midweek services. Many participants were consented to data sharing during the collection of the post-survey as well.

A subset of participants (including pastors or church health leaders) were invited, and consented separately, to participate in the follow-up qualitative component approximately eight weeks after the conclusion of the study. The qualitative study occurred eight weeks after the conclusion of the study to explore whether or not the challenge had any lasting short-term effects on health behaviors, both on an individual and a congregational level. However, in order to avoid performance bias, participants were not randomly sampled or contacted until the week before the interviews were scheduled (see "Participants" for more information about recruitment). The same researcher conducted all of the qualitative interviews, and met the participants in locations and times that were convenient for them and suggested by the participant, which included personal vehicles, local churches, university campuses, homes, local restaurants, etc. The researcher made sure that the participant was comfortable with the potential breach of privacy if the interview was conducted in a semi-public area before proceeding.

2.4 Measures

2.4.1 Pre-Surveys

Demographics

Age, marital status, number of children, household income, perceived financial stress, race, ethnicity, and education level were all collected as categorical variables, unless otherwise indicated. Participants were also asked to select their church, length of attendance, whether they were an official member of their church or not, whether or not they held a leadership position, and if they identified with a different denomination than that of their church, and church denomination (open-ended). All measures were collected as categorical variables unless otherwise noted.

Wellness Behaviors

Participants were asked a number of questions in order to gauge their current level of engagement in different wellness behaviors, in each of the three categories, body, soul, and spirit.

For the body, we asked participants a number of categorical questions: whether or not they smoke, and if they would like to quit, how often they drink, how many standard drinks containing alcohol they have on a typical day, and how often they have six or more drinks on one occasion. Participants were asked how many hours on average they sleep per night (a continuous variable) and whether or not they usually wake feeling rested. They were also asked in the past month, how often they participated in the following activities: 30 minutes of moderate or vigorous exercise, drinking at least 8 glasses of water, eating at least 5 servings of vegetables and fruits, keeping a food journal, walking at least 10,000 steps, and participating in a fitness class. The NHIS FFQ Diet and Nutrition questionnaire was also used in order to ascertain participants' eating behaviors (Yaroch, et. al., 2012). However, the number of answer categories were condensed in order to avoid survey fatigue. We also used the Godin Leisure-Time Exercise questionnaire in order to approximate the frequencies of different levels of exercise that participants completed on a regular basis (Godin & Shepherd, 1997).

For the soul behaviors, we asked participants how frequently within the past month they participated in the following activities: serving a neighbor or friend, engaging in community service, using mindfulness exercises, reading, working on hobbies, and spending time relaxing (all categorical). The creators of the pilot program conceptualized soul activities as practices of self-care and social engagement that would improve emotional, mental, and social health.

For the spirit behaviors, we asked participants how frequently within the past month they participated in the following activities: praying, meditating on Scripture, engaging in Bible study, observing Sabbath time, listening to sermons, and singing to the Lord (all categorical). They were also asked in how many of the past 4 weeks they had kept an intentional Sabbath (categorical).

Challenge Expectations and Assessment

Participants were asked how they first heard about the challenge, what made them decide to commit to participate in the challenge, and how their decision to join was influenced by the challenge being offered at the church. In addition, we asked to what extent their pastor's support and guidance influenced their decision to participate. These questions were measured using a Likert scale, with the answers ranging from very influential to not at all influential.

2.4.2 Post-Surveys

The post-surveys asked participants for their demographics again, as well as all of the current wellness behavior questions listed above. In addition, they were asked several questions around their experience with the challenge. They were asked to rank the different components on how critical they were to their success in the CWC (from 1-5), whether or not they would have participated if it wasn't offered at their church, how successful they thought they were at the program, and how influential their church, other people, and their pastor was to their success (from very influential to not at all influential). They were also asked categorical questions on their opinions on the length of the program (ranging from way too short to way too long), the Sabbath workshop (options were given for whether they attended, their opinion of it, or why they did not attend), and the Florence Forth race (options were given for different levels of participation in the race, or why they did not attend).

2.4.2 Activity Logs

Included in the CWC program were activity logs that asked participants to track their behaviors throughout the program (see Appendix B). Email reminders were sent out weekly to participants reminding them to complete their tracking logs. For each of the forty days, we asked participants to record what activity they did for each of the three categories (body, soul, and spirit), and an approximate length of time (if applicable) they spent on each activity. For example, a participant might write "read to my granddaughter" in the soul category for Day 3, and record spending 20 minutes on that activity. Alternatively, a participant might write "drank eight glasses of water" in the body category for Day 5, and record "N/A" for time that day. Since participants were able to vary the activities as much as they desired (excepting the highly encouraged 30 minutes of exercise 3 days per week in the Body category) the analysis looked at how frequently participants completed behaviors, rather than on what particular behaviors they chose to engage in. The logs were collected at the post-test survey, although some participants chose to give their tracking sheets each week to their team leader, who then turned gave them to CWC staff. The activity logs had cover sheets on them in order to protect participants' privacy.

2.4.3 Qualitative Interviews

In order to explore the various motivations behind participation in and adherence to the CWC, we conducted in-depth qualitative interviews (n=17) with randomly selected participants from each congregation. We utilized a semi-structured interview guide and each interview lasted about 30-45 minutes. The interview occurred in a private, quiet area mutually agreed upon beforehand by the interviewer and participant. These interviews occurred between 8-12 weeks after the conclusion of the challenge. Eight weeks was chosen as an appropriate time frame in order that 1) participants would still have recall about their experience in the intervention, and 2) researchers could begin to assess the impact of the intervention on the changed habits of participants. These in-depth interviews covered the following topics: motivations behind participating in the wellness challenge, experience in participating in the wellness challenge, role of one's congregation the wellness challenge, and expected and perceived changed behaviors on an individual and congregational level.

2.5 Analysis

Quantitative Data:

The pre and post-surveys were administered on paper to participants at large group events (the kick-off and the Florence Forth race), after services at their respective services, and in individual follow-up meetings. Research staff personnel were present when respondents were filling out the survey if the respondents had questions or concerns, but respondents filled out the surveys independently. The paper copies were scanned and the digital files were stored on a secure database. The surveys were entered into Microsoft Excel 2011, version 14.6.9 by two different research staff, whose entries were checked against each other, and corrected by comparing against the original survey. We used IBM SPSS Statistics Version 24 for the majority of data analysis, however Stata version 13.1 was also used for the reporting of the demographic characteristics. The tables were created in Microsoft Word, and graphs were created both through SPSS v.24 and through Microsoft Excel for Mac 2011, version 14.6.9. The digital files of the surveys, the Excel files, the Stata files, and the SPSS files were all kept on the same encrypted Box database through Duke University.

The vast majority of the quantitative data were categorical. Frequencies and percentages were reported for each of the demographic measures. Measures that were taken at both pre and post-challenge time points were dichotomized in order to assist in the ease of interpretation of the statistical test. For example, a measure using the Likert scale of never, once or twice, about once a week, two or three times a week, every day, was condensed into never or once or twice, and about once a week, two or three times a week, or every day. The details of these dichotomizations for each measure are clearly represented in the respective tables. Since these were categorical data from two related samples taken at two different points in time, the McNemar test was used to determine significance, and the p-value was reported for each of the appropriate measures. Tests were considered significant if there was a p-value of <0.05. Only complete cases were used in these analyses.

Four of the body behavioral engagement measures were numerical variables (hours of sleep, # of strenuous/moderate/mild exercise times per week on average). For each of those measures, the mean and 95% confidence interval were reported for both the pre and post-challenge. A two-tailed paired t-test was used to determine statistically significant differences between the pre and post-measurements, and the p-values for each of those respective tests are reported in Table 5. Tests were considered significant if there was a p-value of <0.05.

A singular measure in the post-survey asked participants to rank the helpfulness of several different components of the challenge. The Friedman test was used in order to determine any statistically significant difference between the mean ranks of the different items. We conducted a post hoc Wilcoxon signed rank test, after a Bonferroni correction was applied, in order to establish which pairs of the different items significantly differed from one another. The Friedman test was considered significant if there was a p-value of <0.05. Due to the Bonferroni correction (the original p-value divided by the number of Wilcoxon tests to be run, which for this analysis was 15), the Wilcoxon signed rank tests were considered significant if there was a p-value of < 0.00333.

Qualitative Data:

The qualitative interviews were recorded through three separate mechanisms in order to avoid the loss of data due to device malfunction. We used ExtraVoice Recorder Lite, and Garage Band version 6.0.5 on an encrypted computer and Voice Recorder Lite on an Android device to record the interviews. The recordings were then moved off of the storage of those individual devices and stored on an encrypted Box database through Duke University, and on an encrypted external hard drive. A professional transcription company transcribed the interviews, and the transcription files were then imported into NVivo for Mac, Version 11.3.2 for qualitative analysis.

Content analysis was used for the purposes of this analysis in order to understand the phenomena identified in the quantitative data, as well as to identify particular areas of the challenge that were particularly crucial or particularly detrimental to the feasibility and acceptability of the challenge (Bradley, Curry, & Devers, 2007). After the interviews were transcribed, the sole interviewer and coder read multiple times through the interviews to ensure deep familiarity with the data and to avoid coding out of context and misunderstanding emerging concepts (Bradley et al., 2007; Vaismoradi, Turunen, & Bondas, 2013). After reading through the interviews multiple times, a preliminary codebook was created. This codebook was adjusted after an initial pass through the data. A single coder was used for this data analysis due to the intimate knowledge of the researcher of the particular communities involved and that the coder acted as the sole interviewer. This is considered an appropriate approach as the analysis would be difficult to repeat by "others who have differing traditions and paradigms" (Bradley et al., 2007). After the interviews were fully coded, queries were run for each appropriate node in order to supplement and explain the phenomena that were identified in the quantitative analysis. Representative quotes were identified and included in order to illustrate particular concepts relevant to the thematic content identified.

3. Results

In order to present our results as cohesively as possible, the quantitative and qualitative results will be grouped together under their respective results sections (body, soul, spirit, etc.), as opposed to reporting the qualitative and quantitative results separately. The qualitative findings serve to explain and illuminate different phenomena identified in the quantitative findings.

3.1 Demographics

3.1.1 Quantitative Demographics

There were 39 unique respondents between the pre-survey and the post-survey out of 94 participants who were still enrolled at the beginning of the challenge (for a response rate of 37%). The response rate was low primarily because of the logistical issues explained in the Procedures section, not primarily because of a lack interest in participating in the evaluation. Of those respondents, the majority were female, comprising nearly three-quarters (74.3%) of the respondent pool. The respondents tended to be older, with only 40% under the age of 40. Nearly 70% (68.6%) were married, and almost half reported having at least one child under the age of 18 living at home with them. The sample of respondents was predominantly African-American, with 25 (64.1%) identifying that as their primary race. Eleven respondents identified as white, one as Asian, and two as "other." The vast majority of respondents identified as non-Hispanic (94.3%). Most of the sample was highly educated, with 16 (41.0%) reporting having a college degree, and 20 (51.3%) having a graduate or professional education. While over half (54.5%) had a household income over $60,000 per year, 68.6% of the sample reported some level of stress when asked to describe their financial situation.

Respondents were from six out of seven of the participating churches. At one of the churches, Faith Assembly, the researchers were not able to collect any data. The two most responsive churches were Refiner's Fire Community Church (n=11, 28.2%) and Union Baptist Church (n=9, 23.2%). Most of the respondents had been attending their church for over ten years (n=14, 46.7%), but a large portion of them had also only been attending between one and three years (n=9, 30.0%). Over half of them (n=15, 51.7%) reported being in some sort of leadership position in the church. This finding was confirmed by the qualitative interviews. Nearly all of the participants who were interviewed were involved in one, if not multiple leadership positions in the church, and spent significant amounts of their free time on church-related activities. This lends some insight into what sorts of people are most attracted to doing these sorts of programs, and what sort of recruitment can/should be done in order to improve the relational diversity in participants.

It should be noted that due to the sampling strategy, these demographics should not be taken as representative of the different congregations as a whole.

Table 1: Survey Demographics

Age Category		N	% of total
	21-30	6	15.4%
	31-40	10	25.6%
	41-50	6	15.4%
	51-60	13	33.3%
	60+	4	10.3%
	Total	**39**	**100.0%**
Gender			
	Female	28	73.7%
	Male	10	26.3%
	Total	**38**	**100.0%**
Marital Status			
	Married	24	68.6%
	Single, Divorced, Widowed	11	31.4%
	Total	**35**	**100.0%**
Children Living at Home			
	No	18	51.4%
	Yes	17	48.6%
	Total	**35**	**100.0%**
Income level (personal)			
	less than $20,000	2	6.1%
	$20,000-$39,999	1	3.0%
	$40,000-$59,999	7	21.2%
	$60,000-$79,999	10	30.3%
	more than $100,000	8	24.2%
	Prefers not to respond	5	15.2%
	Total	**33**	**100.0%**
Perceived financial stress levels			
	Not at all stressful	11	31.4%
	Slightly stressful	10	28.6%
	Moderately stressful	10	28.6%
	Very stressful	3	8.6%
	Extremely stressful	1	2.9%
	Total	**35**	**100.0%**

Race			
	African-American	25	64.1%
	Asian	1	2.6%
	Other	2	5.1%
	White	11	28.2%
	Total	**39**	**100.0%**
Ethnicity			
	Hispanic	1	2.9%
	Non-Hispanic	33	94.3%
	Prefers not to respond	2	2.9%
	Total	**35**	**100.0%**
Education			
	Some college (less than 4 years)	3	7.7%
	College/University degree	16	41.0%
	Graduate or professional education	20	51.3%
	Missing	1	2.9%
	Total	**35**	**100.0%**
Church Affiliation			
	Christ Central Church	6	15.4%
	One Love Ministries	4	10.3%
	Refiner's Fire Community Church	11	28.2%
	The Citywell United Methodist Church	5	12.8%
	Tobacco Trail Church	4	10.3%
	Union Baptist Church	9	23.1%
	Total	**39**	**100.0%**
Length of time attending the church			
	<1 year	1	3.3%
	1-3 years	9	30.0%
	3-5 years	3	10.0%
	5-10 years	3	10.0%
	>10 years	14	46.7%
	Total	**30**	**100.0%**
Member of the			

church			
	Yes	27	93.1%
	No	2	6.9%
	Total	**29**	**100.0%**
Participant is in an official leadership position in the church			
	Yes	15	51.7%
	No	14	48.3%
	Total	**29**	**100.0%**

3.1.2 Qualitative Demographics

Table 2 lays out the demographics for the participants of the qualitative interviews. We interviewed 10 females (58.8%) and 7 males (41.2%), a slightly higher representation of males than in the quantitative portion. 11 (64.7%) of the interviewees were African-American, and 6 (35.3%) were white. We did not interview any Asian or Hispanic-Latino participants. 23.5% (n=4) of our interviews were pastors at their churches, and the remaining 76.5% (n=13) were laypeople. We were able to interview at least one person from each of the seven participating churches, with the majority of interviewees coming from Refiner's Fire Community Church (n=4), The Citywell United Methodist Church (n=3), Tobacco Trail Church (n=3), and Union Baptist Church (n=3).

Table 2: Qualitative Interviews Demographics

Gender			
	Female	10	58.8%
	Male	7	41.2%

	Total	**17**	**100.0%**
Race			
	African-American	11	64.7%
	White	6	35.3%
	Total	**17**	**100.0%**
Church Status			
	Pastor	4	23.5%
	Layperson	13	76.5%
	Total	**17**	**100.0%**
Church Affiliation			
	Christ Central Church	1	5.9%
	One Love Ministries	2	11.8%
	Refiner's Fire Community Church	4	23.5%
	The Citywell United Methodist Church	3	17.6%
	Tobacco Trail Church	3	17.6%
	Union Baptist Church	3	17.6%
	Faith Assembly Christian Center	1	5.9%
	Total	**17**	**100.0%**

3.2 Engagement

3.2.1 Activity Logs

We received n=29 unique sets of activity logs, although not all of them were complete. Of the possible 120 activities completed over the course of the challenge (3 activities: body, spirit, soul, each day, over 40 days), individuals completed a median of 77 activities (64.2%) (IQR: 51-98), and reported not completing a median of 12 activities (10.0%) (IQR: 6-31). “Not completing” indicates that they indicated via their own writing that they did not do an activity that day, either by writing “none”, “skip”, or some other indicator. There was additional median of 15 activities missing, meaning that those cells were either left blank on the tracking sheet or we were missing the entire sheet that week from the participant (12.5%) (IQR: 0-57). When those activities are sorted into the body, spirit, and soul categories, the numbers of logs received for each of the wellness categories were comparable. Out of a possible 40 days, respondents completed a median of 26 (65.0%) (IQR: 15-33) for the body activities, a median of 27 (67.5%) (IQR: 17-36) for spirit activities, and a median of 25 (62.5%) (IQR: 15-32) for soul activities.

There was a great amount of mixed feedback about the tracking that was elucidated through the qualitative interviews. While respondents often recognized the value in the “mindfulness” that came with writing down their daily activities, it was frequently cited as one of the more difficult parts of the challenge, but simultaneously one of the “most helpful”. Multiple respondents talked about the activity logs as both one of their most favorite and least favorite parts of the challenge, which is illustrated by this quote:

> *I think the least favorite part was actually -- although I liked reflecting on it, also having to write it down and stuff like that. And I think -- but, I mean, I think it was a good thing. I don't think it's a bad thing at all. But I just think that -- and I think it also can be easily turned to these are three things you need to be doing, just like a chore or something like that.* -Male layperson

When a mobile or computer-friendly version of the tracking was suggested as an alternative to paper, most respondents were not opposed to the idea:

> *Something most definitely you could do on a phone because when you think about it, you take your phone everywhere you go. As far as on the computer, I'm saying no but paper most definitely was not my best friend.* -Female layperson

One respondent suggested a voice-activated tracking system. Another respondent touted the additional benefit of being able to see easily what you had done over the past forty days with an electronic system:

> *It would be better with something electronic because you can look back and -- well, I made copies of my sheets, but if you have it on some kind of electronic device, you can always look back and reference what you did the day before, maybe last week, or whatever.* -Female layperson

An interesting theme that emerged was the conceptual difficult of tracking, especially when it came to the soul and spirit categories:

> *And then I think the way -- I don't think people are used to timing themselves with their spiritual practices, so for people to have to go did I pray five minutes, or was that two minutes? I don't think people honestly know. And people kind of do it all together. So some people are like I sang and I prayed and I wrote in my journal. Now how long have I been sitting here? Whereas it's much more if you say well, I did a nature walk and that was for my spirit. That I can maybe -- it's discrete. But if it's some of those other things, you know… I might say a quickie prayer in the morning but I kind of stop throughout, so then I can't kind of quantify that again.* -Female pastor

The tracking of activities contributes to the theme of mindfulness that came up when participants were asked to talk about their engagement with the different body, soul, and spirit activities. Tracking activities, in some form or fashion, appears to be a valuable part of the challenge, even if participants didn't always enjoy the act of tracking itself.

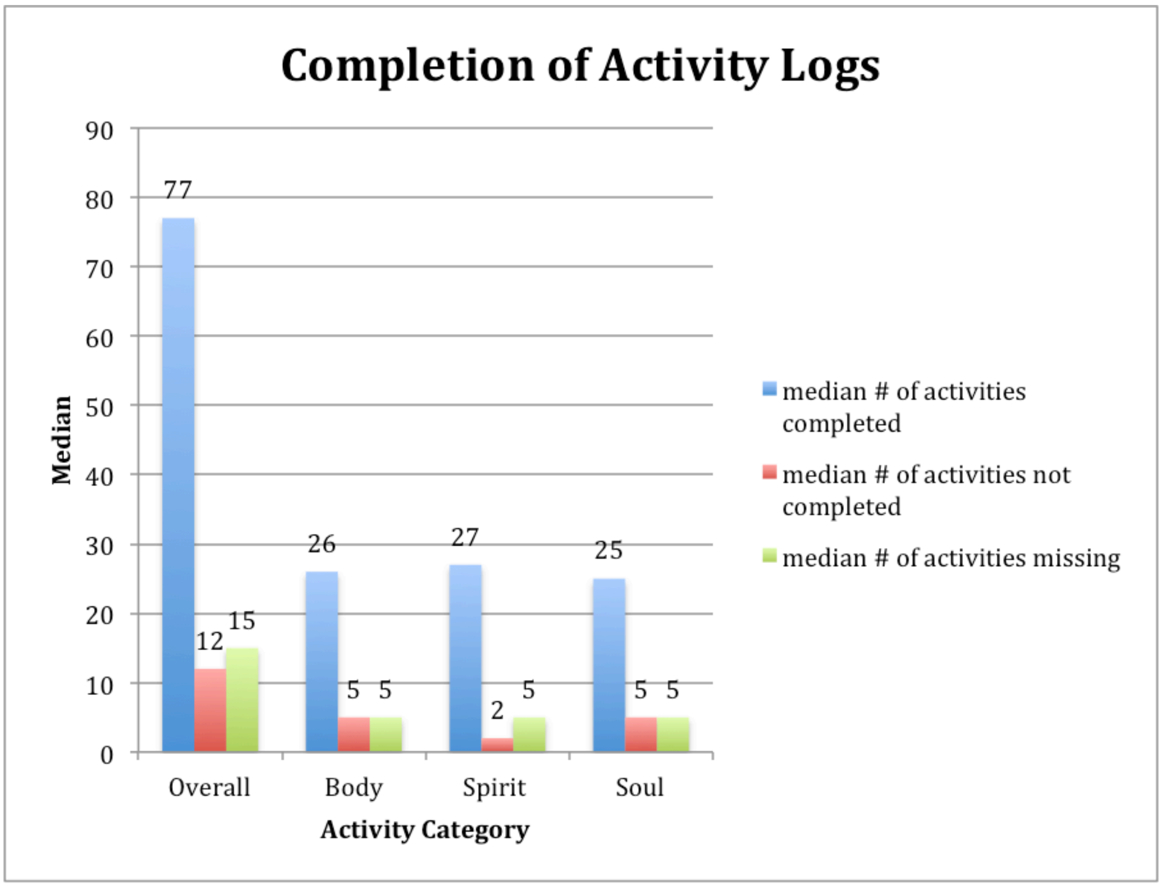

Figure 1: Completion of Activity Logs

3.3 Acceptability

3.3.1 Pre-Challenge Recruitment and Influences

Individual invitations and social networks were largely responsible for participants hearing about the challenge for the first time. 10 respondents (32.3%) reported hearing about it from a friend or family member in the church, and 8 respondents (25.8%) reported hearing about it from an individual conversation with the pastor. Other ways that respondents heard about the challenge included announcements in worship (n=6, 19.4%), church bulletins (n=2, 6.5%), church email blast (n=2, 6.5%), directly from a CWC staff person (n=2, 6.5%), and church newsletters (n=1, 3.2%). See Figure 2 for more details. Once they heard about the challenge, respondents gave a variety of reasons for wanting to do the challenge. The most frequently cited responses were to "form better habits" (n=21), to "improve spiritual health" (n=19), and "to lose weight" (n=17). Respondents could choose more than one reason for wanting to do the challenge.

The qualitative interviews revealed that participants cited a number of different excitements and anxieties before beginning the challenge. While some participants felt like they didn't know what to expect, most had at least one thing that they were looking forward to, and several reported no concerns or anxieties prior to starting the challenge. Several participants cited wanting to get healthier or lose weight, although another common refrain was the ability to get to know other people in their church, but also across other churches, and to journey with them on the challenge. An emphasis on improving their holistic health, or balance in different areas of their life, was also something that was discussed as an area of excitement:

> *Mainly for balance. I believe that when you are balanced in all areas of your life whether it's mentally, physically, emotionally and spiritually, you flow better. When you're off balance, it's kind of chaotic so mainly just to create balance because sometimes we get off balance as Christians, as mothers, as employees. We have to maintain balance…*
>
> -Female layperson

Participants had a variety of reasons for wanting to join the challenge (see Figure 3). However, it is important to note that all of the participants in the qualitative interviews did have something that they were excited about, creating an internal motivation for commitment to the challenge that might have otherwise been missing.

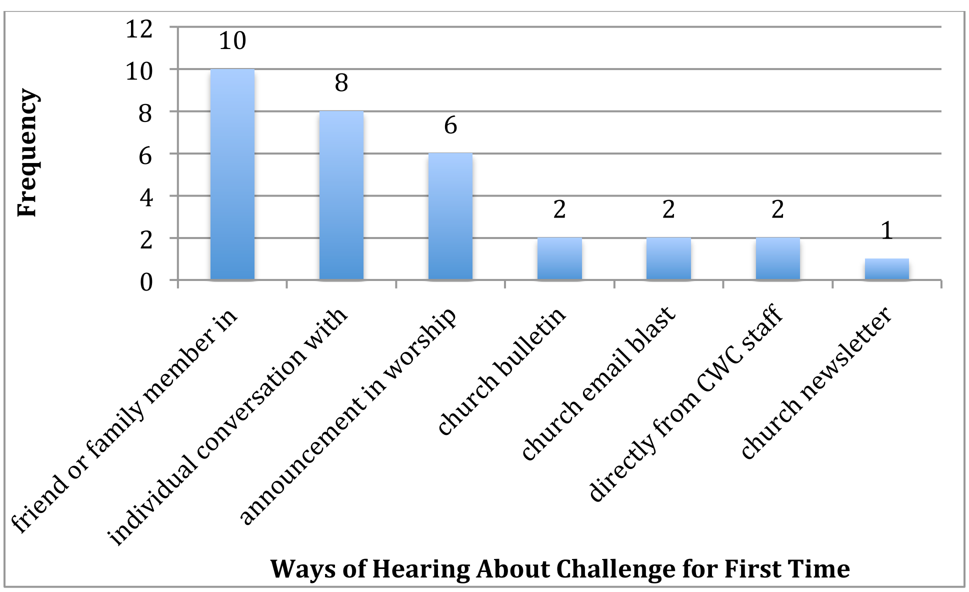

Figure 2: Ways of Hearing about Challenge for the First Time

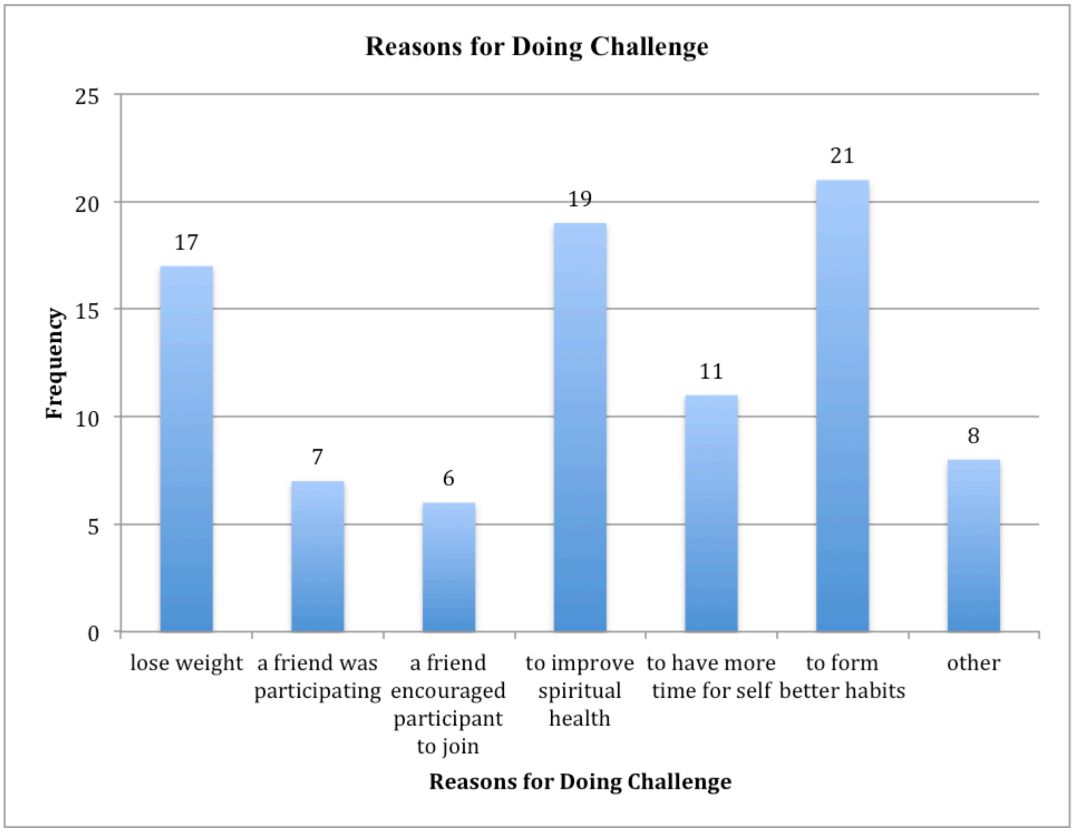

Figure 3: Reasons for Doing Challenge

3.3.2 Post-Challenge Feedback and Influences

Most respondents felt that they had been somewhat (n=15, 53.6%) or very successful (n=5, 17.9%) at the challenge, and a large majority of them said that the challenge being offered at their church was very (n=13, 33.3%) or somewhat (n=10, 25.6%) responsible for the participant's success at the challenge. The respondent pool was split evenly on whether or not they would have participated if the challenge had not been offered at their church. Participants perceived that their success was in part due to other people participating in the challenge and their pastor's support and guidance, with 52.0% reporting a perception that other people were very influential on their success, and 44% reporting a perception that the pastor was very influential on their success.

Table 3: After the Challenge Feedback and Perceived Influences

	N	Yes	No	-	-	-
If program had not been offered through the church, participant would had still participated	24	12 (50%)	12 (50%)	-	-	-
	N	**Very**	**Somewhat**	**Neutral**	**Not very**	**Not at all**
Influence of other people on participant's success in challenge	25	13 (52.0%)	7 (28.0%)	3 (12.0%)	1 (4.0%)	1 (4.0%)
Influence of pastor's support and guidance on participant's success in challenge	25	11 (44.0%)	6 (24.0%)	4 (16.0%)	1 (4.0%)	3 (12.0%)
Influence of congregants participating in challenge on pastor's success in challenge	3	1 (33.3%)	2 (66.7%)	0 (0%)	0 (0%)	0 (0%)

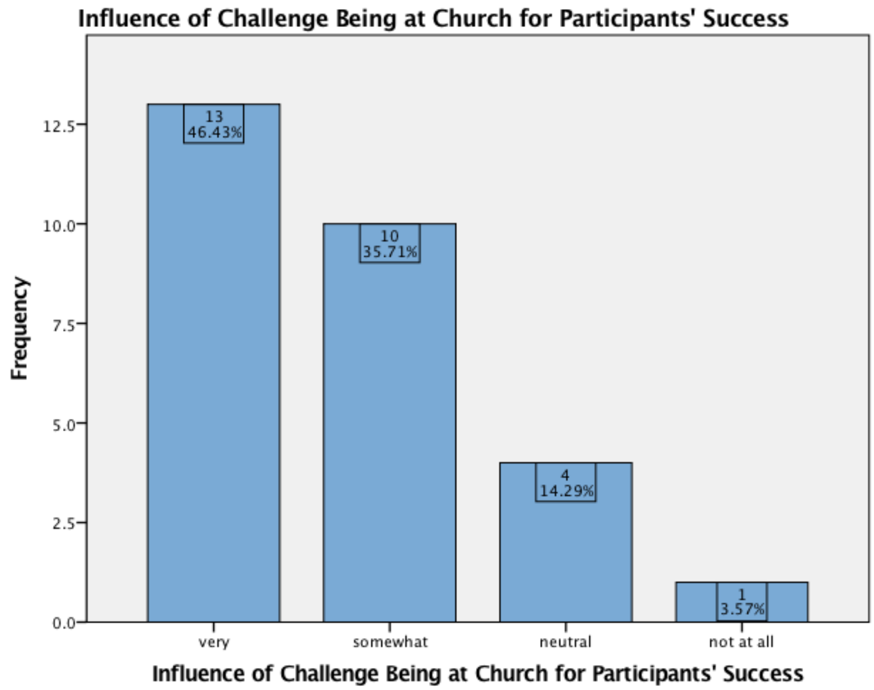

Figure 4: Perceived Influence of Challenge Being at Church for Participants' Success

Figure 5: Pastor's Perception of Church's Success at Challenge

Participants were asked to rank the following components of the CWC, from most helpful to least helpful: being able to choose their own activities, knowing that their friends were participating, knowing that their pastor was participating, taking a day off from the activities each week, and knowing that there was an end to the challenge. There was a statistically significant difference in which activities were ranked as most helpful, $\chi 2(4) = 30.025$, $p < 0.001$. The mean rank and median (IQR) rank for each of the different components of the challenge can be found in Table 4. There were significant differences between the following pairs: having a day off vs. choosing their own activities ($Z=-0.3082$, $p=0.002$), having a day off vs. knowing their friends were participating ($Z=3.226$, $p=0.001$), having an end point to the challenge vs.

choosing their own activities (Z=-0.3492, $p<0.001$), having an end point vs. friends participating (Z=3.700, $p<0.001$), the challenge being offered at their church vs. knowing their pastor was participating (Z=-3.270, p=0.001), the challenge being offered at their church vs. having a day off (Z=-3.735, $p<0.001$), and the challenge being offered at their church vs. knowing there was an end point (Z=-0.3819, $p<0.001$). These results demonstrate that the ability for participants to choose their own activities, having the challenge offered through their church, and knowing that their friends were participating were largely perceived as instrumental in the acceptability of the wellness challenge as an intervention.

Table 4: Perceived Helpfulness of Challenge Components

	N	Median (IQR)	Mean
Ability to choose their own activities	24	1.00 (1.00-3.00)	1.88
Having the challenge offered through their church	24	1.50 (1.00-2.00)	1.50
Knowing that their friends were participating	22	2.00 (1.00-3.00)	2.05
Knowing that their pastor was participating	21	3.00 (2.00-3.50)	2.71
Having a day off each week	22	4.00 (2.75-5.00)	3.68
Knowing that there was an end point to the challenge	22	4.00 (3.75-5.00)	4.00

Participants gave additional feedback on the challenge in their post-surveys. Half (56.4%) of the respondents thought that the program was a good length. The additional respondents said that the challenge was either somewhat too short (7.1%) or way too short (14.3%).

In the qualitative interviews, participants responded positively to the symbolic importance of the challenge being forty days long. Aligning the program with the liturgical season was encouraged by four of the participants. As one participant put it, forty days was, *"appropriate within the framing of the whole challenge"* (male layperson). Participants acknowledged that the forty days felt like just long enough to get them into using particular habits, but if they were to change the length, they would make it longer, in order to see real physiological change. None of the interviewees in the qualitative interviews suggested making the challenge shorter.

Despite the affinity for the liturgical symbolism, some participants suggested moving the challenge to another time of year. There was a severe snowstorm in the middle of the challenge, and participants reported it impacting their ability to exercise. Several participants in their activity logs reported the snowstorm where they would normally record their body activities. Participants suggested moving the challenge to the warmer months in the summer, or the beginning of the fall season:

> *Most of the time people who are not trying to be healthy on a normal basis, you know, they're eating habits change when it's about to be spring or summer because they got to shed their coats.* -Male layperson

However, some participants liked the time of year that the challenge was put on for the very same reason:

> *I wouldn't even change the time of the year because I think working out and walking in the winter for us it's like we're getting in shape for the spring.* -Female layperson

Another suggestion was starting the challenge in the beginning of the "new year for church" (not the beginning of the liturgical year, so probably around September) in order to catch the momentum that comes with everyone getting into the full swing of things for the school year.

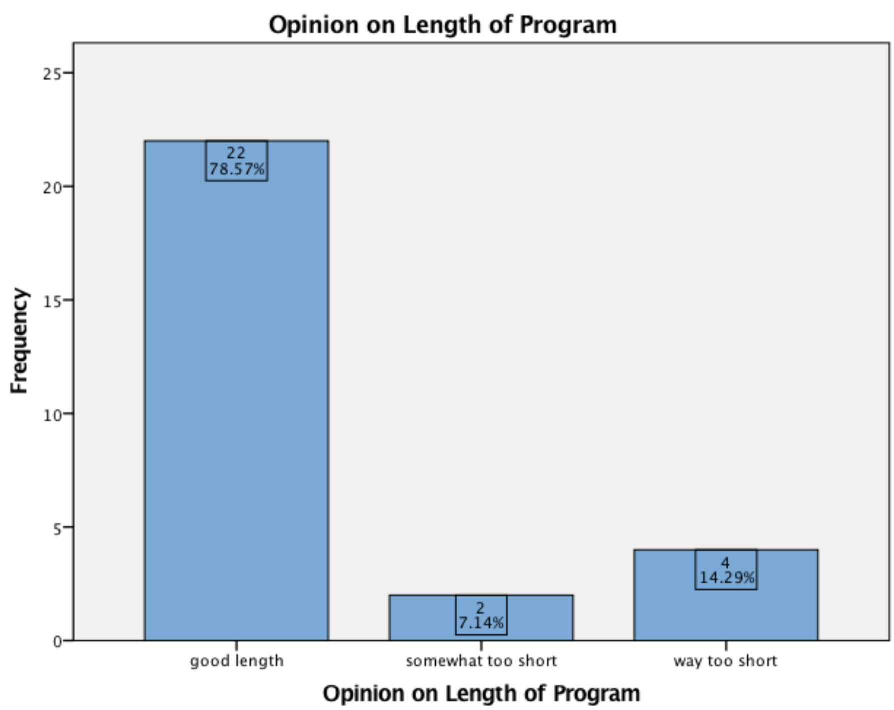

Figure 6: Opinion on Length of Program

Only 17.9% of respondents (n=5) attended the Sabbath workshop; those who did not attend primarily did not do so due to a scheduling conflict (n=14, 50.0%). Only two of the people interviewed were able to go to the Sabbath workshop, but those that did go thought that it well worth their time, as indicated by the qualitative interviews:

> *Because it made you think about what the Sabbath really was. It's not your Sabbath. It's not my Sabbath, and I think sometimes, we want to take and put everything together. It was just so refreshing to say, "Okay, this is my Sabbath. A half a day may be my Sabbath, but that's my Sabbath that I can really give that time to God and push everything else aside." An emergency comes about and everything, but if we take that time and spend it with him, how much more beneficial it could be to us so that we can be more beneficial to our sisters and brothers, so I think it was great.* – Female layperson

The Sabbath workshop was one of the few inter-church offerings of the challenge, and therefore a unique component of the challenge. If a program wanted to include something similar in future research, they would have to be more creative in their dissemination and implementation of such an event in order to increase attendance.

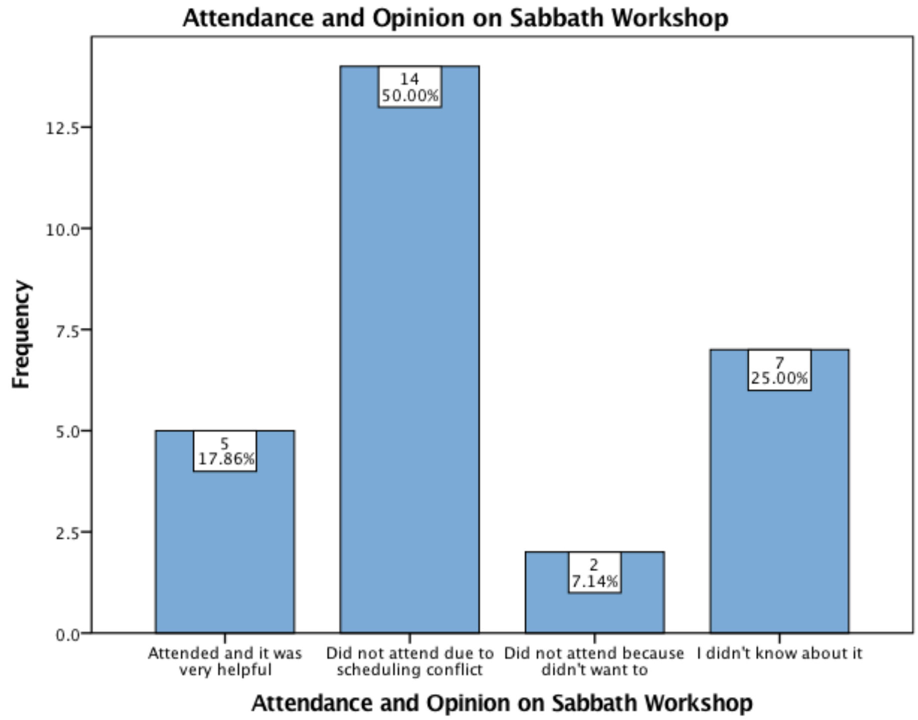

Figure 7: Attendance and Opinion on Sabbath Workshop

Only 2 respondents (7.4%) participated in the Florence Forth, and again, the majority (70.4%) did not participate due to a scheduling conflict. Most people interviewed did not attend the Florence Forth race, which was intended as a sort of "big closing" event. Barriers to attendance included not knowing about the events, or having other things already scheduled. Two of the participants who were interviewed participated, but it did not function as a closing celebration how it was initially imagined.

3.4 Preliminary Behavioral Health Outcomes

3.4.1 Body

We used a number of different measures in order to measure engagement with different "body" activities over the course of the challenge. More details on those can be found in the "Measures" section and in Table 6. Of all the different variables, only a few of them showed a significant change from the pre-challenge to the post-challenge time points. Participants' eating of sweets decreased significantly, from 65.2% reporting eating them sometimes or usually/often to 39.1% eating them sometimes or usually/often ($p=0.031$). Respondents also reported a significant increase in answering "yes" to the question of whether or not they cook most nights, from 60.9% to 91.3% ($p=0.016$). Several of the suggested activities given to participants also increased in frequency. The number of people reporting 30 minutes of physical activity about once a week, two or three times a week or every day nearly doubled, from 43.5% to 82.6% ($p=0.012$). The proportion of participants reporting drinking at least 8 glasses of water per day about once a week, two or three times a week, or every day also increased, from 70.8% to 91.7% ($p<0.001$). Vegetable and fruit intake also significantly increased, from 52.2% of people reporting eating at least 5 servings of vegetables and fruits to 100% of respondents ($p=0.001$), as reported in Table 6. This result is confirmed by another measure, where participants were asked how often they ate less than 2 servings a fruit a day. Those participants that answered sometimes or usually/often decreased to 47.8% over the course of the challenge, from 78.3% pre-challenge (p=0.016). While the result is marginally significant, 60.9% of people said that they ate less than two servings of dairy a day sometimes/usually or often after the challenge, compared to 82.6% of people before the challenge, revealing a trend of an increase in dairy consumption throughout the challenge (p=0.063). There were no statistically significant changes in the hours of sleep that participants reported, or number of times that participants reported engaging in strenuous, moderate, or mild exercise over an average week (see Table 5).

In the qualitative interviews, participants tended to initially equate their success in the challenge with improvements in body behaviors, until prompted to talk about the other aspects of the challenge. This makes sense, as physical behavioral outcomes are often the focus of typical "wellness challenges." While there was a spread across participants as far as how successful they were in their adherence to their chosen activities (some participants reported losing upwards of 10 lbs. over the course of the challenge, while others reported a decrease in activity after the first couple of weeks), an emerging theme through the interviews was the importance of the enhancement of mindfulness that the challenge provided when it came to the body activities. One participant explained:

> *A lot of times we don't do things because the thought don't come into our mind and then when we was really focused in on it and when you're focused on things, you're able to do it more. You might not do it every day but you are able to do it more. I know I was able to drink the water, do the walks and watch what I was eating because I was*

conscious of that. –
Female pastor

There was a sense of positive mutual reinforcement between the different parts of the challenge,

> *So I was more diligent in exercising because I was more diligent about what I was eating, but that was all tracked, and it was monitored, and it was, you know what I mean? And I had support, and I had all that stuff.* -
> Female layperson

The body activities were considered by participants to be an essential part of the challenge.

Table 5: Numerical Body Behaviors

Variable	N	Pre-Challenge Mean (95% CI)	Post-Challenge Mean	p-value (paired t-test, 2-tailed)
Hours of sleep each night over the past month	24	6.56 (6.23-6.89)	6.72 (6.37-7.06)	0.309
# of strenuous exercise times/week on average	23	1.80 (0.895-2.714)	2.26 (1.281-3.241)	0.136
# of moderate exercise times/week on average	23	1.48 (0.760-2.197)	1.39 (0.79-2.00)	0.800
# of mild exercise times/week on average	23	1.57 (0.53-2.60)	1.717 (0.83-2.60)	0.522

Note: Significant p values have been bolded.

Table 6: Categorical Body Behaviors

Body	N	Pre-challenge	Post-Challenge	p-value

In an average week (7-day period), how often do you…		Rarely/Never	Sometimes or Usually/Often	Rarely/Never	Sometimes or Usually/Often	
Engage in any regular exercise enough to work up a sweat	23	8 (34.8%)	15 (65.2%)	15 (65.2%)	8 (34.8%)	0.118
Skip Breakfast	23	12 (52.2%)	11 (47.8%)	12 (52.2%)	11 (47.8%)	1.000
Eat 4 or more meals from sit-down or take-out restaurants	21	11 (52.4%)	10 (47.6%)	10 (47.6%)	11 (52.4%)	1.000
Eat less than 2 servings of whole grain products or high fiber starches a day	23	7 (30.4%)	16 (69.6%)	9 (39.1%)	14 (60.9%)	0.625
Eat less than 2 servings of fruits a day	23	5 (21.7%)	18 (78.3%)	12 (52.2%)	11 (47.8%)	**0.016**
Eat less than 2 servings of vegetables a day	23	10 (43.5%)	13 (56.5%)	15 (65.2%)	8 (34.8%)	0.180
Eat or drink less than 2 servings of milk, yogurt or cheese a day	23	4 (17.4%)	19 (82.6%)	9 (39.1%)	14 (60.9%)	0.063
Eat more than 8oz of meat, chicken, turkey or fish per day	23	7 (30.4%)	16 (69.6%)	6 (26.1%)	17 (73.9%)	1.000
Use regular processed meats	22	9 (40.9%)	13 (59.1%)	13 (59.1%)	9 (40.9%)	0.125

instead of low fat processed meats						
Eat fried foods	23	5 (21.7%)	18 (78.3%)	7 (30.4%)	16 (69.6%)	0.688
Eat regular snack foods instead of low-fat snack food options	23	6 (26.1%)	17 (73.9%)	8 (34.8%)	15 (65.2%)	0.625
Add butter, margarine or oil to food at the table	23	7 (30.4%)	16 (69.6%)	8 (34.8%)	15 (65.2%)	1.00
Eat sweets more than 2 times a day	23	8 (34.8%)	15 (65.2%)	14 (60.9%)	9 (39.1%)	**0.031**
Drink 16 oz. or more of non-diet soda, or fruit drink	23	15 (68.2%)	7 (31.8%)	19 (86.4%)	3 (13.6%)	0.219
		Yes	**No**	**Yes**	**No**	
Participant or a family member usually shops and cooks at home	23	14 (60.9%)	9 (39.1%)	21 (91.3%)	2 (8.7%)	**0.016**
Participant feels well enough to cook most nights	22	20 (90.9%)	2 (9.1%)	22 (100%)	0 (0%)	0.500
Over the last month, tends to feel rested when waking	23	12 (52.2%)	11 (47.8%)	15 (65.2%)	8 (34.8%)	0.453
		Not at all willing, somewhat not willing, or willing*	**Somewhat willing, very willing**	**Not at all willing, somewhat not willing, or willing***	**Somewhat willing, very willing**	
How willing	22	2 (8.7%)	21 (91.3%)	2 (8.7%)	21 (91.3%)	1.000

the participant is to change eating habits in order to be healthier						
Over the last month, how often have you engaged in the following?		**Never, once or twice**	**About once a week, two or three times a week, every day**	**Never, once or twice**	**About once a week, two or three times a week, every day**	
30 minutes of physical activity	23	13 (56.5%)	10 (43.5%)	4 (17.4%)	19 (82.6%)	**0.012**
Drinking at least 8 glasses of water	22	17 (70.8%)	7 (29.2%)	2 (8.3%)	22 (91.7%)	**<0.001**
Eating at least 5 servings of vegetables and fruits	23	11 (47.8%)	12 (52.2%)	0 (0%)	23 (100%)	**0.001**
Keeping a food journal	24	19 (79.2%)	5 (20.8%)	16 (66.7%)	8 (33.3%)	0.508
Walking at least 10,000 steps/day or tracking steps with a pedometer	21	14 (66.7%)	7 (33.3%)	9 (42.9%)	12 (57.1%)	0.302
Participating in a fitness class	24	14 (58.3%)	10 (41.7%)	14 (58.3%)	10 (41.7%)	1.000

Note: Significant p values have been bolded.

3.4.2 Soul

There were several categories in which participants differed from pre-challenge and post-challenge time points (Table 7). However, the only category in which there was a significant difference was reading, which increased from 33.3%

saying they read about once a week, two or three times a week, or every day to 91.7% saying they read about once a week, two or three times a week, or every day ($p=0.001$).

The soul category seemed to be the most difficult for people to grasp conceptually. The qualitative interviews revealed confusion about what the soul category encompassed:

> *A: Yeah, I think I was naturally already doing it, and it was just having to think through does this qualify for soul activity? I realized yeah. I was almost wondering does this really count, but when I really read it…*
>
> *Q: It seems too easy.*
>
> *A: …it was like, yeah, well, we're doing that.*
>
> -Male layperson

Participants seemed reticent to label things they were already doing as soul activities:

> *I don't really always necessarily have a soul activity per se, but I did notice that oftentimes I call it soul activities when I was hanging out with people, or I was making, cooking dinner, usually for some people, friends or whatever. A couple of times where I got a chance to read in there.* -
>
> Male layperson

Soul activities were generally understood as a positive thing, even creating some cultural change, even as there was categorical confusion. For example, one of the pastors interviewed, indicated that congregants had started disclosing their practices of self-care more openly after the challenge:

A lot of people in my church they're telling me now when their vacations are

-Female pastor

Future challenges should reconsider shifting the categories, or their labels, or spending more time training the group leaders in exactly what the different categories are supposed to represent, in order that they can be of more assistance to the participants.

Table 7: Soul Behaviors

Soul	N	Pre-challenge		Post-Challenge		p-value
		Never, once or twice	**About once a week, two or three times a week, every day**	**Never, once or twice**	**About once a week, two or three times a week, every day**	
Serving a neighbor or friend	23	8 (34.8%)	15 (65.2%)	5 (21.7%)	18 (78.3%)	0.581
Engaging in community service	22	7 (31.8%)	15 (68.2%)	9 (40.9%)	13 (59.1%)	0.754
Using mindfulness exercises	24	14 (58.3%)	10 (41.7%)	8 (33.3%)	16 (66.7%)	0.109
Reading	24	16 (66.7%)	8 (33.3%)	2 (8.3%)	22 (91.7%)	**0.001**
Working on hobbies	24	8 (33.3%)	16 (66.7%)	7 (29.2%)	17 (70.8%)	1.000
Spending time relaxing	24	5 (20.8%)	19 (79.2%)	5 (20.8%)	19 (79.2%)	1.000

Note: Significant p values have been bolded.

3.4.3 Spirit

As shown in Table 8, there were several spirit behaviors whose reported frequency increased as a result of the CWC program. Almost all (95.8%) participants reported meditating on Scripture about once a week, two or three times a week, or every day post-challenge, compared to just 41.7% pre-challenge ($p<0.001$). Participants also reported a significant increase of singing to the Lord, from 41.7% reporting singing about once a week, two or three times a week or every day, compared to 83.3% after the challenge ($p=0.021$). In the qualitative interviews, participants were either already very strong in their prayer life, and so the spirit part of the challenge simply reinforced what they were already doing, or it increased their mindfulness around their spiritual engagement:

> *…because it also helped me to think about ministering to other people, encouraging other people. I would say that was my favorite aspect of it.* –Female layperson

Having a spirit category reinforced for people the need to have that part of their life as robust as the other categories:

> *Spiritually, I think for me, I think it's harder sometimes for me to just kind of like sit, be quiet, and so a lot of my spiritual life -- a lot of it happens on the go, if that makes any sense. I pray and I listen and I so on throughout my day, but it's not always 20 minutes or whatever it is of concentrated time. I don't know how to be in the right mood for that. Actually, I don't think you need to be in the right mood, but just -- I don't know…I don't really approach my own spiritual life as a -- at least I try not to do -- but like something I need to*

tick off. But I do, like, you know, it's like gosh, I really need to pray. I really need to pray. An extended sentence of what prayer is, not just like you're praying as you go to work or something. Praying here and there, whatever. Because I feel like there are things that I've just needed, I need that nourishment in a way. –Male layperson

Participants talked about participating in a range of activities for the spirit activities. Some of the activities were typical, such as prayer, and attending worship. However, some participants explored more creative options, such as purchasing battery operated candles and bringing them around with them to create spaces for moments of meditation throughout the day.

Table 8: Spirit Behaviors

Spirit	N	Pre-challenge		Post-Challenge		p-value
		Never, once or twice, about once a week	**Two or three times a week, every day**	**Never, once or twice, about once a week**	**Two or three times a week, every day**	
Praying	24	4 (16.7%)	20 (83.3%)	4 (16.7%)	20 (83.3%)	1.000
		Never, once or twice	**About once a week, two or three times a week, every day**	**Never, once or twice**	**About once a week, two or three times a week, every day**	
Meditating on Scripture	24	14 (58.3%)	10 (41.7%)	1 (4.2%)	23 (95.8%)	**<0.001**
Engaging in Bible study	24	11 (45.8%)	13 (54.2%)	2 (12.5%)	21 (87.5%)	**0.021**
Observing Sabbath time	22	9 (40.9%)	13 (59.1%)	5 (22.7%)	17 (77.3%)	0.388
Listening to sermons	24	3 (12.5%)	21 (87.5%)	4 (16.7%)	20 (83.3%)	1.000
Singing to	24	14 (58.3%)	10 (41.7%)	4 (16.7%)	20 (83.3%)	**0.021**

the Lord						
		0 weeks, or 1 week	**2 weeks, 3 weeks, or 4 weeks**	**0 weeks, or 1 week**	**2 weeks, 3 weeks, or 4 weeks**	
Kept a full day of intentional Sabbath	20	11 (55.0%)	9 (45.0%)	10 (50.0%)	10 (50.0%)	1.000

Note: Significant p values have been bolded.

4. Discussion

4.1 Overview of Findings

This study demonstrated that a holistic CBHP program is feasible in a congregational setting. Participants demonstrated engagement and acceptability of the program, while simultaneously showing some preliminary behavioral change outcomes. The results of this feasibility study will be important for future designs and evaluations of CBHP programs.

Our results showed a moderate level of engagement with the program. Participants completed nearly three-quarters of the activities that they were supposed to over the course of the program, and those proportions were roughly equivalent between the three categories: body, soul, and spirit. This demonstrated that participants were equally engaged in all three areas of the challenge, even though participants were more likely to begin talking about the body activities first when asked about their experience in the challenge. This moderate level of engagement demonstrates the feasibility of successfully implementing what we considered to be a "light-touch" program. The program required relatively low amounts of human and financial resources, and therefore it would be relatively easy for different churches to adapt in a variety of settings. Our results demonstrated a varying level of engagement with the large group activities of the challenge. While there was a high level of involvement in the kick-off event, participation in the other two inter-group events, the Sabbath workshop and the

Florence Forth Race, was limited. This was due primarily to a lack of interest or knowledge of the event, both of which point to an area of improvement for future programs.

Overall, participants found this program acceptable, and we collected helpful feedback and suggestions for improvement for future implementations. Participants greatly appreciated the chance to explore the concept of wellness balance in their life, by using the three categories of body, soul, and spirit in a wellness challenge. Participants had a variety of reasons for wanting to participate in the challenge. Given that the challenge was so adaptable, it allowed for greater levels of acceptability because participants were able to tailor the intervention to their particular goals and focuses. The most frequent responses were similar to what is typically encouraged in wellness programs (to lose weight), but the next highest reasons for participating were improving spiritual health, and the ability to form better habits, which indicate that there is room to expand wellness programs in order to improve engagement and excitement about participating in a similar program.

Our feasibility study demonstrated positive preliminary behavioral change outcomes in each of the three categories for body, soul, and spirit. Participants reported a significant increase in fruit and vegetable intake, cooking meals at home, instances of physical activity, and consumption of water, while reporting a significant decrease in consumption of sweets. In the soul category, participants reported a significant increase in their levels of reading. For the spirit category, we found a significant reported increase in meditating on Scripture, participating in bible study, and singing to the Lord between the pre and post-challenge measurements. It is important to note that while we tried to capture as many different activities as possible that participants could have done in these three categories on the surveys, many participants completed many other activities in their participation in the challenge, which we ascertained from the variety of activities that participants reported on their activity logs. We cannot report, therefore, whether there was any pre/post change in those activities not included on the surveys. Additionally, it is important to note that we found in our results positive significant improvements in behavioral outcomes even with a small sample size. These preliminary positive results bode well for the outcomes of future evaluation studies of similar programs.

4.2 Engagement with the Literature

An important motivation for joining was the opportunities for interpersonal interaction, both within churches and between churches. This is important to keep in mind for the development of future programs, as most programs we found in the literature did not include an aspect of any sort of inter-church support or social interaction, even if it was a multisite program.

Some of our preliminary behavioral change outcomes were on par with what we found in the literature, specifically the increase in fruit and vegetable intake (Allicock et al., 2013). Our results also demonstrated levels of engagement with the different activities of the CWC similar to other CBHP programs (Campbell, Resnicow, Carr, Wang, & Williams, 2007).

The CWC added to the literature supporting the use of a theoretical framework in designing health interventions in congregational settings, something that is a frequent weakness in similar programs (Campbell, Hudson, et al., 2007; DeHaven et al., 2004). Additionally, it was a “faith-based” program through the fact that spiritual health components were fully integrated into the program instead of just being used as a tool or promotion technique in order to improve health outcomes (Campbell, Hudson, et al., 2007; DeHaven et al., 2004). This study attempted to capitalize on the missed opportunities of other programs that did not have a holistic approach. It showed promising preliminary behavioral outcomes, indicating that targeting multiple behaviors using a holistic approach may be effective.

4.3 Strengths and Limitations

This study has a number of strengths and limitations. Its strengths lie in the fact that it was an intervention that considered the real-world constraints in implementing a CBHP program. By working with multiple community partners and congregations, this study demonstrated that evaluating a CBHP program is possible even with not being able to perfectly control all the different aspects of the design, timeline, and implementation. It evaluated a program that the researchers did not design solely by themselves; rather this is an example of an evaluation of a community-based program. While the CWC was inspired by a program implemented with United Methodist clergy, there were adaptations made to the program in the conversations between the university, the nonprofit organizations, and the churches in the development of the CWC (Proeschold-Bell et al., 2013). Given our moderate success in evaluating a program in its real-world constraints, our study demonstrates that it is possible to evaluate a program in a meaningful way while not controlling all of the different aspects of the design.

Another strength of the study was the feasibility study's mixed-methods design. The quantitative surveys allowed us to evaluate the change in health behaviors over the course of the challenge, and to lend some preliminary information on motivations and feedback. We had a variety of variables that we used to measure different behavioral health outcomes within each of the three categories: body, soul, and spirit. The strength of using a variety of variables indicates that we tried to expand the ways in which behavioral outcomes in these three categories could be measured, as opposed to only limiting them to one or two discrete behaviors each. The qualitative interviews allowed us to explore the relationships between the different categories of body, soul, and spirit, while revealing different ways that participants engaged in the challenge that we would have not been able to approximate from the quantitative measures. The qualitative interviews also allowed us to explore more in-depth the strengths and limitations of the

CBHP program in order to form a more robust understanding of the most important parts of the program and those areas that could be improved upon.

Our study also had high levels of external validity because of our lack of constraints on participants. Participation in the study was open to anyone over the age of 18 who was one of the “disciples” in their respective congregations. Given the broad range of types of churches that participated, in denomination, size, and predominant ethnic affiliation, it is encouraging that there were high levels of engagement in churches. This is promising for the implementation of future CBHP programs in a variety of settings.

However, in order to maintain its strengths, the study accepted some limitations. We were only able to get 39 study participants out of the 96 participants in the program to participate in the study. While we encouraged all of the 96 participants in the program to participate in the study, they were not required to do so to participate in the CWC. This impacted our ability to recruit and retain participants. Additionally, since the nonprofit organization and church partners set the start date of the challenge, this led to us not being able to consent the participants to sharing their data with us until after the beginning of the challenge since our IRB protocol was not approved by that date. Our inability to control the timeline of the challenge was a weakness of the feasibility study. As there was the highest level of attendance at the kick-off event, we missed a large opportunity to consent as many people as possible at that time. Since there were substantially fewer people at the Sabbath workshop and the Florence Forth race, we were only able to get consents and do follow-up data collection by going to individual churches and attempting to reach out to individual participants (only some of whom the researchers ever had direct contact information for). This infringed on our ability to collect follow-up data.

Due to the pre-post one-group design with no control group, there was a lack of strong internal validity. However, demonstrating the effectiveness of the program on measures of holistic health was outside the scope of the aims of this feasibility and acceptability study. Additionally, it would be unethical and logistically difficult to withhold the program from other congregants in the same church; therefore any sort of experimental or quasi-experimental design would require cluster sampling. Due to the lack of the control group, there might be other factors and variables impacting our findings that we did not control for. For example, the program may have self-selected the most motivated congregants who were already invested in lifestyle changes.

Additionally, attrition bias is a possibility given the 20% loss to follow-up rate of pre-surveys (n=35) to post-surveys (n=28). It is possible that those participants who completed the data collection were more invested in the program as a whole, and were therefore more likely to show greater levels of engagement and changes in preliminary behavioral outcomes that those participants who did not complete the data collection at follow-up, which would skew our results to show that the program is more feasible than it actually was in reality. Another limitation was the lack of clarity around the "soul" activity category. In future programs, it would be helpful to spend more time with the committed participants in order to explain the categories more clearly, as opposed to mostly relying on the pastors to disseminate that information.

4.4 Gaps and Future Directions

While this study demonstrated the feasibility of a holistic CBHP program in a variety of different church settings, our data and process also revealed several important areas for future studies looking at the best ways to improve implementation and success of these programs.

One of the unique aspects about the CWC program was the large amount of flexibility built into it. While there was a basic structure for each individual participating, the group of disciples from each church were given latitude as to what they wanted the program to entail (e.g., how often congregants met to support each, what topics they covered, etc.). This variability in program implementation ranged considerably between the churches; some churches met every week, had books that they read together, and an accountability partner, while other churches might have met only once with all of the disciples. Some churches had a greater amount of support from the pastors and other individuals depending on their institutional set-up. Given the importance of social support as a key component of CBHP programs, it is important for future research to examine the different methods of implementation, and to determine which approaches are most successfully in encouraging participation in the program and changing church culture surrounding holistic health behaviors (Peterson, Atwood, & Yates, 2002).

One of the strengths of this study was the variability in the types of churches that participated. Each of these churches has some level of variability in their congregants' income levels and education levels. However, we believe that variability was not fully reflected in the participants in the CWC program, as the participants had higher levels of education and income than we expected. While there was variability in the program participants' race, it would be good for future studies to explore the best methods of recruiting and supporting participants with lower income levels and lower levels of education, especially because CBHP programs are often used to reach underserved populations (Campbell, Hudson, et al., 2007; Peterson, Atwood, & Yates, 2002; Winett et al., 1999). There are institutional barriers would be important for future studies to consider. For example, churches that have a greater proportion of low-income individuals as part of their congregation have limited financial and human resources to devote to additional programming. Implementing a holistic CBHP program at churches with a majority of low-income congregants requires finding creative solutions to overcome institutional barriers.

Finally, future evaluations of holistic CBHP programs should try to utilize cluster randomized or quasi-experimental designs in order to demonstrate a higher level of causality between these holistic CBHP programs, holistic health behaviors, and holistic health outcomes (physical, mental, social, emotional, and spiritual). These sorts of programs have the potential to improve health behaviors with minimal intervention for a large numbers of people in the United States, but further research needs to be done before stronger recommendations can be made.

5. Conclusion

This study showed that a holistic, multi-component 6-week church-based health promotion program is feasible in a variety of different types of churches. Participants had a high level of engagement, found the program acceptable, and had positive preliminary behavioral outcomes in all three categories of body, spirit, and soul. A cluster randomized trial or quasi-experimental design would provide more information about the effectiveness of holistic, multi-component church-based health promotion programs in improving health behaviors and health outcomes in both the short-term and long-term. Initial results suggest a variety of implementation practices in different churches, with varying levels of acceptability from participants. Future studies should focus on the best implementation practices for different types of churches. Overall, this study shows promise for the growth and adaptation of holistic CBHP programs that require low resources, making them highly adaptable for a variety of congregational settings.

Appendix A: Suggested Activities for Participants

Body:

- 30 minutes of moderate or vigorous physical activity
- Drinking at least 8 glasses of water per day
- Eating at least 5 servings of vegetables and fruits per day
- Keeping a food journal
- Walking at least 10,000 steps/day or tracking steps with a pedometer
- Participating in a fitness class

Soul:

- Serving your neighbor or friend
- Engaging in community service
- Using mindfulness exercises
- Reading
- Working on hobbies like cooking, gardening, knitting, fishing
- Spending time relaxing

Spirit:

- Praying
- Meditating on Scripture
- Engaging in Bible study
- Observing Sabbath time
- Listening to sermons
- Singing to the Lord

Appendix B: Sample Activity Log

CWC999

Date: xx/xx/xxxx

	Sample Day 1:	Sample Day 2:	Sample Day 3:	Sample Day 4:	Sample Day 5:	Sample Day 6:	Sample Day 7:
Body: Activity	Ran 3 miles	Drank 8 glasses of water	Ate: apple, two green salads, banana	Biked with family	Drank 8 glasses of water	Fellowship Hall Fitness Class	REST
Body: Time (if applicable)	32 minutes			1 hour		40 minutes	
Spirit: Activity	Prayed for friends and family	Bible Study	Prayed for friends and family	Bible devotion time	Listened to a podcast sermon	Attended worship service	REST
Spirit: Time	15 minutes	20 minutes	10 minutes	15 minutes	18 minutes	1 hour	
Soul: Activity	Read Harry Potter	Read Harry Potter	Read Harry Potter	Cooked dinner with spouse	Sat quietly with coffee outside	Visited with elderly neighbor	REST
Soul: Time	20 minutes	30 minutes	10 minutes	30 minutes	10 minutes	20 minutes	

Appendix C: Qualitative Interview Guide, Layperson

Semi-Structured Interview Guide: Congregant

Part I: Establishing Baseline

1. How would you define health in your own words?
    a. Would you describe yourself as healthy? Why or why not?
    b. Are you trying to become healthier (using your definition of health)?
        i. Tell me what you're doing to become healthier.
2. How would you describe your involvement in your church?
    a. How long have you been involved in this church?
    b. How well are you connected to other people in your church?
        i. Has your connection to other people in your church changed at all because of your participation in the CWC? Tell me about that.
    c. How well are you connected to your pastor?
        i. Has your connection to your pastor changed at all because of your participation in the CWC? Tell me about that.
3. How do you think that your health is related to your faith, if at all?

Part II: Participation in CWC

1. How did you first hear about the CWC?
2. Why were you interested in participating in CWC?
3. Did any of your friends participate in CWC?
    a. If not, how did that make you feel?
4. What part about the CWC were you most looking forward to when you were first deciding to participate?
5. Was there anything about the CWC that concerned you when you were first deciding to participate?

Intervention Experience:

1. Tell me about your participation in the challenge.
    a. Frequency of participation in daily activities
    b. Frequency of recording of participation in daily activities
    c. Frequency of participation in other activities related to challenge by the individual church
    d. Participation in additional events supported by CWC (Florence Forth Race, Sabbath Workshop, kick-off event, etc.)
2. Tell me about your favorite parts of the challenge.
3. Tell me about your least favorite parts of the challenge.

4. What made it possible for you to participate in the challenge?
5. Was there anything that made it challenging to participate in the challenge?
6. What would you change about the challenge?
    a. Timing
    b. Support
    c. Content
7. Tell me a little bit about how you think your fellow church members view their health.
    a. Has the CWC has had any influence on this?
    b. Do you think that they care about your health?
        i. Has the CWC has had any influence on this?
8. Tell me a little bit about how you think your pastor views his/her health.
    a. How do you think that the CWC has had any influence on this?
    b. Do you think that your pastor cares about your health? Why or why not?
        i. How do you think that the CWC has had any influence on this?
    c. Does your pastor talk about health or the body at all? How does he/she do that?
        i. How do you think that the CWC has had any influence on this?
9. Tell me about your support system during the challenge. How did you feel supported by…
    a. By those who were participating in CWC?
    b. By those who weren't participating in CWC who are in your congregation?
    c. By those who weren't participating in CWC who are not in your congregation?
10. What part of CWC did you find to be the most helpful? The least helpful?
11. Prior to the CWC, did you ever think about approaching your health holistically? Did you ever consider the need for your pastor to address his/her health holistically?

Since the Intervention:

12. Have you noticed any changes in the way that your church engages with health and conversations about health since the intervention? For example, different options at potlucks, more discussion about the body in sermons and Sunday school classes, etc. Tell me about them.
    a. How would you describe these changes?
13. Is your church planning on doing something related to health that they weren't planning on doing beforehand?
14. Have you noticed any changes in the way the other members at your church interact with your pastor after the CWC?
15. Have you continued doing any of the activities that you were doing during the challenge?
    a. Which ones? Why or why not?
16. Thinking of health in the way that the CWC defined it (body, soul, spirit), tell me about how you perceive your health after the challenge.
17. Would you recommend that another church do the challenge?
    a. Why or why not?

Appendix D: Qualitative Interview Guide, Pastor

Semi-Structured Interview Guide - Pastor:

Part I: Establishing Baseline

1. How would you define health in your own words?
    a. Would you describe yourself as healthy? Why or why not?
    b. Are you trying to become healthier (using your definition of health)?
        i. Tell me what you're doing to become healthier.
2. How would you describe your role as a pastor in your church?
    a. How long have you been serving at this church?
    b. How connected are you connected to your parishioners?
        i. Has your connection to other people in your church changed at all because of your participation in the CWC? Tell me about that.
3. How do you think that your health is related to your faith, if at all?
4. How do you think your church members perceive their health, in relation to their life of faith?
    a. Do you think that they care about your health?
    b. How do you think the intervention have any effect on this?

Part II: Participation in CWC

1. How did you first hear about the CWC?
2. Why were you interested in having your church participate in CWC?
3. How did you communicate information about the challenge to your church?
4. Tell me about the part of the CWC were you most looking forward to when you were first deciding to participate.
5. Tell me about anything in the CWC that concerned you when you were first deciding to participate.

Intervention Experience:

4. Tell me about your participation in the challenge.
    a. Frequency of participation in daily activities
    b. Frequency of recording of participation in daily activities
    c. Frequency of participation in other activities related to challenge by the individual church
    d. Participation in additional events supported by CWC (Florence Forth Race, Sabbath Workshop, kick-off event, etc.)
5. Tell me about your favorite parts of the challenge.
6. Tell me about your least favorite parts of the challenge.
7. What made it possible for you to participate in the challenge?
8. Was there anything that made it challenging to participate in the challenge?
9. What would you change about the challenge?

    a. Timing
    b. Support
    c. Content
10. Tell me a little bit about how you think your parishioners view their health.
    a. Has the CWC had any influence on this?
11. Do you think that your parishioners care about their own health?
    a. Has the CWC had any influence on this?
12. Tell me about your support system during the challenge. How did you feel supported by…
    a. By those who are participating in CWC?
    b. By those who weren't participating in CWC who are in your congregation?
    c. By those who weren't participating in CWC who are not in your congregation?
13. What parts of CWC have you found to be the most helpful? The least helpful?

Since the Intervention:

14. Have you noticed any changes in the way that your church engages with health and conversations about health since the intervention? For example, different options at potlucks, more discussion about the body in sermons and Sunday school classes, etc. Tell me about them.
    a. How would you describe these changes?
15. Is your church planning on doing something related to health that they weren't planning on doing beforehand?
16. Have you continued doing any of the activities that you were doing during the challenge?
    a. Which ones? Why or why not?
17. Thinking of health in the way that the CWC defined it (body, soul, spirit), tell me about how you perceive your health after the challenge.
18. Would you recommend that another church do the challenge?
    a. Why or why not?

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