Direct Effects of Church Leader-Student Motivational Interview on Student Achievement: An Experimental Study

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Purpose: The Black church plays a multifaceted role in the lives of African Americans. For many in the African American community, education and spirituality are inseparable. Given that low student motivation has been noted to influence the academic achievement of African American students, the Black church should be a resource that school leaders and educators harness in the education of this population. The study aimed to investigate the direct effect of church leaders' caring, transformative leadership on Black students' intrinsic motivation, pro-academic behavior, and academic outcomes in a large urban community. *Research Methods*: Using a randomized controlled trial design, the study involved 52 students in grades 5-8 participating in after-school programs at Black churches in New York. The participants were randomly assigned to an experimental versus a delayed treatment group. Each member of the experimental group received a one-on-one, one-hour-long motivational interview with a senior church leader who holds advanced degrees in educational leadership and was trained and certified to conduct motivational interviews. *Findings:* Students in the experimental group achieved statistically significant gains in academic motivation, class participation, and math achievement, as well as reduced time spent on video games and computer use for fun, all with medium to large effects. *Implications:* Findings from the study provide initial evidence for rethinking the possibilities of community (e.g., faith-based organizations) and school partnerships to maximize the learning potentials for students, especially African American youths in the inner city.

Keywords: Black church; Transformative community leadership; Student motivation; Student achievement; Experimental research; Motivational interview

Introduction

Learning can be enhanced when it takes place in caring environments (Glowacki-Dudka et al., 2018). However, strict and racially biased enforcement of discipline codes systematically pushes disproportionate numbers of African American students out of school, creating a direct pipeline from academic failure to juvenile incarceration (Fabelo et al., 2011). The dehumanization of Black students is sometimes internalized by youth, creating a void for deep caring relationships with educators who could otherwise positively impact their lives. In such circumstances, the Black church has often stepped in to fill this void (Warren et al., 2022).

As a community-based organization, the Black church has played a crucial role in the daily lives and education of African American students. Historically, it has been a strong advocate for equity, social justice, and cultural preservation for African Americans (Ladson-Billings, 2014). In supporting education, church members have been found to provide homework assistance and proactively build relationships with school leaders and teachers (Ladson-Billings, 2014). Additional efforts by Black churches include offering after-school tutoring programs for elementary school students, hosting college fairs, and developing courses to help high school students prepare for college entrance exams, such as the ACT and SAT (McIntosh & Curry, 2020; Tripses & Scroggs, 2009).

The established trusting and caring relationships between African American students, their families, and the Black church can be further magnified by leveraging transformative, caring church leadership and evidence-based approaches, such as Motivational Interviewing, to address pressing challenges like student motivation and academic achievement.

Motivational Interviewing (MI), grounded in person-centered principles, employs a collaborative conversation style to strengthen a person's motivation and commitment to change

(Miller & Rollnick, 2012). When used in school settings, this approach intentionally avoids teacher and leader behaviors such as persuasion and confrontation, which can lead to student disengagement (Snape & Atkinson, 2016). Essentially, MI has the potential to be a promising tool for enhancing the motivation of African American students in today's challenging racial and ethnic context. Emerging evidence demonstrates the general effectiveness of MI on a wide range of student outcomes, including math grades, English Language Arts (ELA) grades, classroom participation, homework completion, and overall behavior (Snape & Atkinson, 2016).

The purpose of this small-scale pilot study was to test this hypothesis by employing a randomized controlled trial that leverages the established caring relationship between the Black church and students through Motivational Interviewing. We hypothesize that when trained church leaders employ evidence-based practices to develop students' intrinsic motivation and autonomy for positive change, the power of what Gilligan called the "ethic of care" would be greatly enhanced within the Black church, positively impacting students' motivation and academic performance (Gilligan, 1982, p. 206).

Autonomy Support and Student Motivation

People who are intrinsically motivated exhibit higher levels of confidence, interest and excitement, which leads to increased performance, creativity and persistence, even when they face challenges or low self-efficacy (Ryan & Deci, 2000). Since the initial review of the two major types of motivation—intrinsic and extrinsic—the field of psychology has rapidly evolved, undergoing a "Copernican turn" through the integration of self-determination theory (SDT) into the motivation theory. This framework has contributed to a comprehensive theory of human development and well-being with significant implications for education (Ryan & Deci, 2020). SDT posits that humans are inherently inclined toward learning, mastery, and forming

connections with others. However, these proactive tendencies are not automatic; they require supportive environmental conditions. For students to thrive in their learning and skill development, it is essential to nurture and support their basic psychological needs—autonomy, competence, and relatedness. Student autonomy, in particular, involves a sense of initiative and ownership and underlies the pro-academic behaviors targeted by our intervention. It can be supported by bolstering the internalization of social values of tasks and self-regulatory behaviors, enhancing motivation to engage in activities that are perceived as valuable, even if they are not inherently enjoyable, such as homework, and to avoid negative behaviors that might seem appealing. In other words, treatments embedded with autonomy support, such as MI, can be particularly effective in fostering positive changes when working with youths.

MI as a Promising Tool for Bridging Motivation Theory with Church Leadership Practice

Considering Black students' stigmatized status pertaining to academic motivation in educational contexts (Chang et al., 2011) and Black teens' penchant for religious involvement (Madyun & Lee, 2010), a leverage point exists to test the effect of change discussions between church leaders and the students served by the church. We anticipate the MI approach will promote student achievement gains through enhancing their intrinsic motivation within the African American community. The MI procedure represents an instrument that can help translate theory into practice (Vansteenkiste & Sheldon, 2006).

MI was originally developed as a client-centered counseling practice used to motivate adolescents and adults to change risky behaviors, such as substance and alcohol abuse, and to adopt healthy or productive ones (Miller & Rollnick, 2012). When using MI, the emphasis is on fostering effective language about change, enabling individuals to explore and challenge their

own patterns of behavior, “so that people talk themselves into change, based on their own values and interests” (p. 4).

Though originally developed in clinical settings, MI is gaining traction in schools and other educational establishments (Herman et al., 2020; Snape & Atkinson, 2016). Strait and colleagues (2014) identified two main approaches to MI use in schools: student-focused school-based MI (SBMI) and consultative-focused SBMI. Student-focused SBMI involves carrying out MI directly with students, while consultative SBMI involves using MI with teachers and parents to enhance evidence-based practices and increase the implementation fidelity of existing interventions (Lee et al., 2014). This study focuses on student-centered SBMI.

Snape and Atkinson (2016) conducted a comprehensive review of student-focused SBMI and identified the general effectiveness of MI. Of the studies they reviewed, three were RCTs conducted in the U.S. (Strait et al., 2012; Terry et al., 2013; Terry et al., 2014). Snape and Atkinson (2016) conducted a separate meta-analysis of these three studies and found an average effect size of MI on student participation to be 0.29, homework completion 0.10, overall behavior 0.26, self-efficacy 0.19, math grades 0.46, ELA grades 0.05, and science grades 0.17.

While this embedded meta-analysis of rigorous evidence provided insight into the effectiveness of MI with adolescents, the studies reviewed did not use racially diverse samples. Our own systematic review of the literature on MI use among African Americans pointed to a paucity of such studies, with few located in church settings, and the majority focused on diet, HIV risk reduction, and health-related outcomes instead of academic behavior and performance (Montgomery et al., 2011). This study aims to close these gaps by extending MI to a church setting that serves primarily Black youths. Our goal is to employ church leaders as implementers of MI with African American students and to determine the impact of this intervention. We are

specifically interested in finding out the extent to which MI helps to develop participants' pro-academic behaviors and academic outcomes.

Black Churches as Community Resources

Improving student achievement has primarily been the responsibility of teachers and school leaders, yet the daunting task of closing the persistent Black-White achievement gap has brought attention to the need for additional supports outside of the school. One promising community resource to support efforts to increase student achievement gains is the African American church, which has been considered a trusted, safe haven for its congregants and an agent for social reform among African Americans (Billingsley & Caldwell, 1991; Lincoln & Mamiya, 1990; Tribble, 2005).

Several quantitative studies attest to the continued effectiveness of the Black Church as a trusted institution, conducive for implementing interventions and social programs to improve the lives of their congregants in various areas (Corbie-Smith et al., 2003; Hankerson & Weissman, 2012; Hays & Aranda, 2016; Lincoln & Mamiya, 1990; Ogedegbe et al., 2008; Thompson et al., 2013; Trost et al., 2009). Additionally, various qualitative studies have contributed to the literature on the importance and influence of the Black Church in a host of categories, including improved educational outcomes (Barrett, 2010a, 2010b; Billingsley, 1999; Billingsley & Caldwell, 1991; Tribble, 2005). Toldson and Anderson (2010) found that religious involvement is a meaningful predictor of academic success, and Black students in general displayed the highest level of commitment to the church. Yet, in the same study, the authors found that Black students reported the lowest grades in school, despite their highest commitment levels to the church. This paradox "may suggest that churches in the Black community are not fully using the potential of their social capital to improve academic outcomes" (Toldson & Anderson, 2010, pp.

211-212). This calls for church leaders to focus more directly on academics and its strong correlates, such as student motivation and other pro-academic behaviors, when working with African American youths.

Effect of Leaders on Student Achievement

Studies consistently show that African American pastors have been effective in delivering mental and physical health care services within the church context, confirming the strength of Black clergy as gatekeepers for their congregations and as transformational leaders (Allen et al., 2010; Rowland & Isaac-Savage, 2014; Young et al., 2003). Although the transformational leadership framework is not explicitly referenced, it is apparent that church leaders in the aforementioned studies applied several of its dimensions, such as inspirational motivation (e.g., articulating an appealing vision for the future, speaking with enthusiasm and encouragement about tasks that need to be done), intellectual stimulation (e.g., fostering an environment that encourages followers to critically evaluate their attitudes and approaches to problem-solving), and individualized consideration (e.g., recognizing followers as individuals, attending to their unique abilities and needs, listening attentively, and offering personalized advice and coaching) (Bass, 1985; Webb, 2007). The effect of church leaders on members, similar to the effect of school principals on student achievement, is also often indirect. Yet, as demonstrated by Silva et al. (2011), it does not have to be that way. Using a rigorous experimental design, Silva and colleagues showed that one-on-one discussions between a principal and a nonproficient student, focused on the student's previous academic performance and achievement potential, had a direct and significant effect on the student's subsequent achievement gains.

Refocusing church leaders' work with African American youths on academics is both feasible and viable. Faith-based organizations have long been credible and respected community resources, especially within the African American community (Billingsley & Caldwell, 1991; Glanville, Sikkink, & Hernandez, 2008; Muller & Ellison, 2001; Regnerus & Elder, 2003; Toldson & Anderson, 2010). The church setting is often considered a safe space, where students can gain vision for their lives based on the reflections of themselves seen in church leaders.

Research Questions

Like their school leader counterparts, church leaders could have a direct impact on student achievement, and Motivational Interviewing (MI) can be an instrumental technique in translating this effect into reality. Such intervention enhances the power of religious fellowship and spiritual beliefs that many youths experience at their local church (Jordan, 2013). The current study provided an opportunity to test this experimental effect, thereby helping to close the gap in the literature regarding church leaders' direct impact on student achievement or youth success. Consequently, the main research questions are: Do church leaders have a significant direct effect on individual students' motivation, academic behavior, and learning achievement, as indicated by the differences between pre- and post-treatment reading and math fluency, student academic behavior, and motivation when church leaders engage students in a structured four-phase Motivational Interview? If so, to what degree is the effect?

Method

Research Design and Procedures

The research design for this study was a randomized controlled trial in which participants—Black youths—were randomly assigned to either an experimental group or a control group, with the latter receiving the intervention after the post-test was completed. The

first author, then a doctoral student and a church leader, approached several church leaders in her network about their interest in having their churches participate in the trial. Two churches (referred to hereafter as Church A and B) in New York City volunteered. Both are predominantly Black congregations led by a Black senior pastor. After receiving approval from the Institutional Review Board (IRB) of the researchers' institution, the first author began recruiting students and obtaining consent from both the students and their parents. Data for this study were collected between November 2019 and February 2020.

Participant Characteristics

Participants in the trial included youths of all ages who attended one of the two Sunday worship services or other youth-related programs at both churches. Table 1 presents the participant characteristics for this study. All students in grades 5 to 8 from each church were invited to participate. A minimum of 52 students were sought based on a power analysis with the following parameters: $\alpha = .05$, power = .80, Cohen's d = .80, a lower threshold of large effect size with a two-group Analysis of Variance (ANOVA). The effect size measure is based on Silva et al.'s study (2011), where the authors identified a moderate to large effect ($d = .67$). We anticipated a larger effect size of d = .80 since we used a more comprehensive intervention protocol and treatment effects tend to be larger with marginalized groups. Fifty-two students were subsequently recruited (42 from Church A and 10 from Church B), all in grades 5 to 8.

Table 1

Participant Characteristics

	Experimental Sample		Control Sample	
Demographic Characteristics	Original (*n*=26)	Final (*n*=26)	Original (*n*=26)	Final (*n*=23)
Gender				
Female	16	16	20	17

Male	10	10	6	6
Average Age	12	12	12	12
Grade				
5th	6	6	3	2
6th	5	5	7	7
7th	9	9	7	6
8th	6	6	9	8

Note. All participants were Black children. Non-English-speaking children were removed from the study due to language barrier.

The participants for this study were all African American students, from both public and private schools, including both male and female students from varied socioeconomic status families. Males represented 33% of the sample, while females represented 67% of the sample. These students were randomly assigned to either the treatment or control condition. Chi-square tests demonstrated no significant difference between the experimental and control groups in terms of gender distribution ($\chi^2 = .85$; $p = .36$), state math test performance ($\chi^2 = 6.38$; $p = .10$), state ELA test performance ($\chi^2 = 2.12$; $p = .55$), grade attended by the students ($\chi^2 = 3.05$; $p = .38$), or whether or not the student received private tutoring ($\chi^2 = .06$; $p = .81$). Note that the information about students' state test scores was self-reported. These measures were used solely to confirm that the random assignment procedure effectively created equivalent groups in the treatment and control conditions.

The church leaders who implemented the Motivational Interview (MI) were African American and included a senior pastor (male), an associate minister (female), and a lay leader (female), all of whom were middle-class. The associate minister, who is also the first author of the study, oversaw all operations. The lay ministry leader from Church B assisted in recruiting and administering pre- and post-treatments for students from Church B.

The senior pastor from Church A was assigned 13 students randomly selected from both the experimental and delayed treatment control groups. The associate minister from Church A was assigned 8 students, each from both the experimental and control groups. Additionally, she was assigned 10 students from Church B, evenly distributed between the experimental and control groups.

Two students from the control group did not complete the pretreatment survey and were excluded from the study. One non-English speaking student from Church B was unable to complete the study due to a language barrier. As a result, the study experienced a 6% dropout rate, resulting in a final sample of 49 students, with 26 in the treatment group and 23 in the control group.

Measures

Independent Variable – Treatment Condition

This randomized controlled experiment included an experimental and a control condition, which together comprised the two levels of the independent variable. Random assignment was used to assign participants to an experimental or treatment condition, using an online random number generator designed specifically for creating random numbers for scientific experimentation (Urbaniak & Plous, 2011). Students in the experimental condition (n = 26) completed a pretreatment survey (see Appendix A) documenting their academic beliefs and behaviors (Strait, 2018), two weeks before the MI session. Permission to adapt, use, and print the Student Checkup protocol (Strait, 2018) for the purpose of this research was sought and granted by the author. Students in both the experimental condition (n = 26) and the control condition (n = 23) completed a pretreatment academic motivational survey and the math and reading pretests at the same time. Students in the treatment condition participated in one 50-minute MI session

with a church leader to discuss the students' motivation, academic behavior, and learning achievement. Students in the delayed treatment control condition (n=23) received treatment two weeks after the post tests were administered to all students in the study.

The church leaders were provided with an MI training session by certified MI providers. During the training sessions, MI skills were taught with the opportunity to practice skills through role-playing scenarios and debriefing. The church leaders demonstrated mastery of the protocol and MI skills after more than 14 hours of intense training in order to begin intervention with participants in the study.

During the intervention, each church leader followed a semi-structured interview protocol (see Appendix B) as outlined by Strait (2018), which guided the interview sessions. Although the protocol was provided, the interviewers were trained to use open-ended questions, affirmations, reflections, and summaries (OARS) to build rapport, reinforce active listening and empathy, and evoke change talk (Naar-King & Suarez, 2010; Strait, 2018). The MI session consisted of four phases: (1) introduction, (2) self-assessment, (3) summary and support and normative feedback, and (4) change plan development. Supplemental material was provided, including a normative feedback worksheet (see Appendix C) and a goal sheet (see Appendix D). The normative feedback worksheet was derived from the pretreatment survey responses of a high-performing student within the interviewed students' grade. The goal sheet was used to help students set specific, measurable, attainable, result-oriented, time-based goals. Students were given the option of ending the session at any point during the discussion or completing a goal sheet towards the end of the discussion during the change plan development phase of the treatment. All MI sessions for the experimental group were held at the church attended by the student, after school on weekdays or on weekends at the end of the fall semester.

Dependent Variables

The dependent variables included four categories:

- Student self-reported positive academic behavior, such as class participation, homework completion, and time spent on reading. These behaviors were measured using a 10-point Likert-type scale. Strait et al. (2012) reported a Cronbach's alpha of .62 for this scale. Regarding the content validity of these academic behaviors, research has shown that student academic performance can be improved through various positive academic enabling behaviors including but not limited to class participation, percentage of homework completed and submitted, out-of-school time spent reading, and church attendance (Anderson et al., 1988; Duckworth & Seligman, 2005; Sharif & Sargent, 2006; Toldson & Anderson, 2010; Wang et al., 1993). Anderson, Wilson, and Fielding (1988) found the best predictor of reading achievement to be time spent reading books.
- Self-reported negative academic behavior, including average time spent in minutes watching television on weeknights, playing video games, using the computer for leisure, and using social media. The content validity of negative academic behavior is also supported by empirical literature. For example, Anand (2007) detected a negative correlation between time spent playing video games and students' GPA and SAT scores. Research has also found a strong, negative relationship between television, movie, and video game screen time and certain digital content and school performance (Sharif & Sargent, 2006).
- Academic Achievement, measured by students' reading and math fluency using the Woodcock-Johnson IV Tests of Achievement (WJ IV ACH). Form A was used for the pretest and Form B for the post-test. The test-retest reliabilities for the Word Reading

Fluency test are .92 in the 7 to 11 age range and .91 in the 14 to 17 age range, and for the Math Facts Fluency test are .95 in the 7 to 11 age range and .97 in the 14 to 17 age range (Mather & Wendling, 2014).

- Student Motivation, assessed using the Academic Self-Regulation Questionnaire (SRQ-A) developed by Ryan and Connell (1989). SRQ-A measures four subscales: external regulation, introjected regulation, identified regulation, and intrinsic motivation, reflecting different levels of self-regulation. The reliability coefficients for these subscales range from .75 to .88. Following Grolnick and Ryan's (1989) approach, the four subscales were weighted to create a composite score known as the Relative Autonomy Index (RAI). The change in RAI scores from pretest to posttest was used to assess changes in student motivation in this study.

Fidelity Check

As part of the fidelity check, church leaders were asked to time and note the length of each session with students, which ranged from 45 to 60 minutes. Additionally, student participants were asked to complete a questionnaire, adapted from Silva (2010) and Strait (2018), after the MI session. Results of the experimental check indicated that students in the treatment group received the treatments from the church leaders as intended.

Results

Descriptive Statistics

Table 2 presents net gain scores across all outcome measures by conditions (experimental and control). It is evident that the experimental group achieved better results across all four dimensions of outcome measures. Next, we will report the statistical significance and magnitude of these changes using inferential statistics.

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Inferential Statistics

A series of independent-samples *t*-tests was run to determine the effects of MI on each dependent measure.

Effect of MI on Class Participation

The *t*-test revealed a significant difference between conditions, t (45) = 2.27, p = .03, Cohen's d = 0.66. On average, students in the experimental group displayed higher mean net gains in class participation than students in the control group (experimental: M = 0.75, SD = 1.26; control: M = -0.17, SD = 1.53). The mean in the control group showed slight decline.

Effect of MI on Homework Completion

The *t*-test did not support the prediction that church leaders would have a significant direct effect on individual students' homework completion, t (45) = .84, p = .41, Cohen's d = 0.25. Nevertheless, homework completion did show a slight increase for the experimental group (M = 0.04, SD = 1.30) and a decline for the control group (M = -0.27, SD = 1.24).

Effect of MI on Out-of-school Reading Time

The results of the *t*-test did not support the prediction that church leaders would have a significant direct effect on individual students' out-of-school time spent on reading, t (45) = 0.53, p = .59, Cohen's d = 0.15. The means in both conditions decreased, with a higher level of decline for the control group (M = -3.06 minutes, SD = 5.72) compared to the experimental group (M = -0.20 minutes, SD = 25.60).

Effect of MI on School Night TV Time

The *t*-test failed to support the prediction that church leaders would have a significant direct effect on individual students' time spent watching television on school days, t (45) = -0.73, p = .47, Cohen's d = -0.22. However, the experimental group, on average, watched less TV. The reduction in TV time was also more consistent within the experimental group (M = -5.41 minutes, SD = 14.57) compared to the control group (M = 0.65 minutes, SD = 37.09).

Effect of MI on Video Game and Computer Use for Fun Time

The *t*-test revealed a significant difference between conditions, t(45) = 2.14, p = .04, Cohen's d = -0.63. On average, participants in the experimental group reduced their time spent playing video games and using the computer for fun, whereas participants in the control group increased their time (experimental: M = -14.24 minutes, SD = 31.55; control: M = 3.86 minutes, SD = 25.77).

Effect of MI on Social Media Time

The results of the *t*-test failed to support the prediction that church leaders would have a significant direct effect on individual students' time spent using social media on school days, t (42) = -0.66, p =.51, Cohen's d = -0.20. However, time spent on social media did show a decrease for the experimental group (M = -2.57 minutes, SD = 15.47) and a slight increase for the control group (M = 0.86 minutes, SD = 18.89).

Effect of MI on Math Achievement

Despite the varied effects on student academic behaviors, the *t*-test revealed a significant difference between conditions, t (45) = 2.17, p = .04, Cohen's d = 0.64. On average, students in the experimental group displayed higher math achievement gains from the WJIV ACH Math Facts Fluency tests compared to students in the control group (experimental: M = 2.28, SD = 3.71; control: M = -0.09, SD = 3.75). The mean of the control group showed a slight decline.

Effect of MI on Reading Achievement

A direct effect on individual students' reading achievement approached significance, t (45) = 1.73, p = .09, Cohen's d = 0.50. Students in the experimental group (M = 9.23, SD = 9.60) achieved higher gains than students in the control group (M = 4.64, SD = 8.68).

Effect of MI on Student Motivation

The t-test also showed a significant difference between conditions, t (22) = 2.29, p = .03, Cohen's d = 0.69. On average, participants in the experimental group displayed a smaller decline in motivation than participants in the control group (experimental: M = -0.50, SD = 2.12; control: M = -6.56, SD = 12.23).

In summary, MI significantly increased student Class Participation (t (45) = 2.27, p = .03, Cohen's d = 0.66), reduced Time on Video Game and Computer Use for Fun (t (45) = 2.14, p = .04, Cohen's d = -0.63), improved Math Achievement (t (45) = 2.17, p = .04, Cohen's d = 0.64) and Student Motivation (t (22) = 2.29, p = .03, Cohen's d = 0.69). All effects reached a moderate to large effect size. These effects were achieved by participating in a one-time, one-hour motivational interview with a senior church leader.

MI did not have a significant impact on Homework Completion, Out-of-School Reading Time, School Night TV Time, Social Media Time, or Reading Achievement. Reasons for these inconsistent results need further exploration. It is worth noting, however, that students showed improvements in all these areas as well, although not to a statistically significant degree.

Discussion and Conclusions

This experimental study opens the door to new possibilities for supporting children of color while contributing to closing gaps in the existing literature on this topic. Findings from the current study provide evidence to reconsider the role of church leaders in improving student

academic behaviors and achievement. It also suggests the potential for partnerships between churches and schools to enhance learning outcomes for students, particularly African American youths in urban areas.

This study builds on the findings related to direct principal leadership by Silva et al. (2011) and school-based MI by Strait et al. (2012) and Terry et al. (2013, 2014). It contributes to this small rigorous corpus of RCTs in several ways. Firstly, the subjects in the current study were Black youths, a group often stigmatized in academic contexts. This study enhances the validity of direct leadership intervention via MI among a diverse, marginalized group. This point is significant as it demonstrates that MI could be an effective tool for achieving equity for underrepresented populations.

Second, our study improved upon Silva et al.'s RCT (2011) by using a more comprehensive and structured discussion protocol. This approach proved effective across a broader range of outcomes, including both intrinsic motivation and various pro-academic behaviors. Due to a small sample size, we could not test the mechanism of positive change, specifically the positive effects of direct leadership passing through student motivation to achieve higher student performance. However, it provides promising evidence for future research to test this mechanism. It is plausible that through motivational interviews, leaders met the students' autonomy, competence, and relatedness needs, thereby producing behavior changes that subsequently led to improvements in academic achievement.

Most importantly, the current study provides evidence that Black children can be empowered to make responsible choices when caring, transformational leadership approaches and behaviors that undergird the MI approach, such as inspirational motivation, intellectual stimulation, and individualized consideration, known to support lasting change, are demonstrated

by the leader, rather than coercion or punishment which lead to frustration and temporary behavior changes. While our study demonstrates that integrating MI and transformational leadership helped support students' autonomy and led to promising short-term gains in various aspects of academic behavior, lasting change may require embedding this approach into regular school or community practice. More longitudinal data are needed to evaluate the enduring effects of this approach.

Finally, the findings from this study can expand the church's role in enhancing Black youth motivation, work habits, and academic achievement. The well-documented historical influence of the Black Church, despite current trends of overall membership decline, was leveraged in this study to directly improve the educational outcomes of students. The high level of commitment that Black students generally display to the church, compared to other groups, has not always translated to positive educational outcomes (Toldson & Anderson, 2010). However, the findings from this study help to bridge that gap.

In congruence with the existing literature, our study confirms the efficacy of the core principles of MI and its use with adolescents, within school settings and beyond, to effect change and reduce ambivalence in youth. This gentle, respectful method for communicating with youth "can lead to healthier behaviors that are in accord with their own goals and values" (Naar-King & Suarez, 2010, p.5), maximizing the youths' academic potential. MI is an effective tool through which church leaders can engage and support youth in a collaborative manner that leads to significant and effective behavior change, triggered from the internal process of the youth, rather than the common prescriptive approaches where leaders often act as the experts responsible for directing and controlling others' behavior. School leaders serving marginalized groups may consider adopting similar approaches to develop the motivation and commitment to change

among their students. The significant demands and time constraints placed on school leaders underscore the need for collaborative support from community stakeholders in meeting the holistic needs of youth. Faith communities and their leaders often exemplify values such as compassion, empathy, and affirmation—core principles that closely align with the spirit and practice of Motivational Interviewing (MI). Given the urgent need to improve educational outcomes for students, particularly those identified as at-risk, the findings from this study provide support for schools to engage trusted community partners, such as churches and other local organizations, to enhance student engagement and participation. Notably, culturally adapted intervention approaches have been shown to yield improved outcomes among ethnic minority populations (Montgomery et al., 2011).

Limitations of the Study

The current study has many strengths as it is the first experimental study to test MI by church leaders within a church context as an instrument to improve academic outcomes for students who attend church. However, the study involved a small number of participants from only two churches, which limits the generalizability of the results to communities and faith-based organizations with similar ecological characteristics.

The pre- and post-treatment self-reported scores could have been affected by the timing of the experiment, which was conducted between semesters, potentially leading to inconsistencies in students' school-centered daily routines. Additionally, the time frame from treatment to post-test might not have been sufficient for the treatment to have its full effect. While the one-time, one-session treatments were effective in generating many positive outcomes, ongoing programming that embodies the MI core principles will likely generate stronger and more lasting effects among students.

Several of the dependent variables measured in this study likely required more than the five weeks between treatment and post-treatment surveys for students to internalize the effects of the intervention and exhibit significant changes. Although statistically significant effects were observed for variables such as motivation, class participation, time spent on video games and recreational computer use, and math achievement after a single approximately 50-minute MI session, other outcomes—such as homework completion, television viewing, social media usage, time spent reading, and reading achievement—may have required a longer duration or additional sessions to yield meaningful and measurable improvements.

Future Research Recommendations

Replication studies should consider multiple sessions, larger sample sizes, variations of students by grade, type of faith community, level of church leadership, and format of treatment sessions (small groups versus individuals). Future studies could integrate a qualitative approach to explore in depth the actual expressed needs of the students within the MI sessions and the process of changes experienced by students.

The results from this relatively small sample support the promise for future studies with larger samples as well as two or more sessions for each student within a church context. Terry et al. (2014) found significant dosage effects for math, science, and history grades when two MI sessions were used with middle-school children in a school setting, instead of one session, which produced significance for math grades only, and with a smaller effect.

Future research should also examine the long-term effects of Motivational Interviewing (MI) on youth to assess the sustainability of behavioral and academic changes over time. Some of the short-term gains in this study, such as improvements in motivation, class participation, and academic performance, have shown promise, yet it remains unclear whether these effects are

maintained beyond the immediate post-intervention period. Longitudinal studies would provide valuable insights into the long-term impact on student outcomes.

Church leaders could also consider experimentally testing MI with high school or college students within churches and other faith communities. Testing academic motivation in late teens and young adults has the potential for larger effect sizes due to the maturity level and greater self-regulation of the participants (Ryan & Deci, 2017).

Training lay people, parents, peers, and church volunteers to effectively deliver MI interventions and use design thinking to collaboratively adapt the MI protocol can improve engagement and participation of students. Such a process can incorporate cultural adaptations to traditional approaches and is more likely to develop an improvement instrument and process that is more user-centered, meeting the unique needs of ethnic minorities (Montgomery et al., 2011). Making this more inclusive also helps to increase the capacity of the church to serve a greater number of students and families.

Table 2

Net Gain Scores: Post Test Scores Minus Pretest Scores, Academic Behavior, Academic Achievement and Student Motivation

	Experimental Sample		Control Sample			*t-test*	
Dependent Variable	*M*	*SD*	*M*	*SD*	*t*	*p*	*ES*
Self-Reported Positive Academic Behaviors							
Class Participation	0.75	1.26	-0.17	1.53	2.27	.03	0.66
Homework Completion	0.04	1.31	-0.27	1.24	0.84	.41	0.25
Time Spent Reading	-0.20	25.60	-3.16	5.72	0.53	.59	0.15
Self-Reported Negative Academic Behaviors							
Time Spent Watching TV	-5.41	1457	0.65	37.09	0.73	.47	-0.22
Time Spent Playing Video Games and Using Computer for Fun	-14.24	31.55	3.86	25.77	2.14	.04	-0.63
Time Spent on Social Media	-2.57	15.47	0.86	18.89	-0.66	.51	-0.20
Academic Performance							
Math Fluency	2.28	3.71	-0.09	3.75	2.17	.04	0.64
Word Reading Fluency	9.23	9.6	4.64	8.68	1.73	.09	0.50
Student Motivation	-0.50	2.12	-6.56	12.23	2.29	.03	0.69

Note. The degree of freedom for all *t*-tests is 45. *ES* = effect size, measured in Cohen's *d*.

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