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Use of the Theory of Diffusion of Innovations to Explore Decision-Making Units for the Adoption of HIV Prevention Programs in Atlanta Public Schools

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An abstract of A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements for the degree of Master of Public Health in Behavioral Sciences and Health Education 2016

Abstract

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By Zainab Grace Nizam

Due to the disproportionate burden of HIV among youth ages 13-24, there is a need for agespecific interventions that consistently reach large portions of the youth population. Schools have provided suitable platforms for delivery of health-related interventions in the past, and may also serve to promote HIV prevention programs. The purpose of this qualitative case study was to provide insight into the processes through which schools in the Atlanta Public School (APS) system adopt new HIV prevention programming.

Interviews were conducted in person or over the phone with APS administrators, teachers and administrators from an APS charter school, and employees from three organizations that work with APS schools to provide sexual health initiatives. Participants were asked about the decision-making process that precedes adoption of new HIV-related programming at the district and individual school levels, as well as other factors that impact the adoption of new programming. Participants were recruited through referrals and snowball sampling methods. Interviews were transcribed and thematic coding was used to identify emergent themes related to the research questions.

Qualitative analysis of the data revealed that though power to approve or reject new programs ultimately lay within school and district leadership structures, successful adoption is reliant on a spectrum of individuals that each play key roles at different points in the adoption process. Additionally, successful adoption of programming is impacted by factors such as the felt need, leadership readiness, availability of resources, ease of program implementation, provision of training, current staff workload, buy-in, and logistics. The Theory of Diffusion of Innovations (DOI) was found to be an appropriate model for the study of HIV program adoption in schools, and should be expanded in the future to include constructs pertaining to external collaborations and circumstance external to the unit of adoption. Based on the findings, this study recommends that teams looking to work with schools to provide HIV prevention initiatives do the following: 1) work to raise community awareness about the benefits of programming, and 2) engage and open communication channels between all program stakeholders throughout the entire adoption process for early identification and resolution of potential obstacles. Use of the Theory of Diffusion of Innovations to Explore Decision-Making Units for the Adoption of HIV Prevention Programs in Atlanta Public Schools

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CHAPTER 1: INTRODUCTION

Statement of the Problem

With the advent and improvement of anti-retroviral treatments (ART) and pre-exposure prophylaxis drugs (PrEP), rates of HIV infection and HIV-related mortality have declined over the last decade (Zanoni & Mayer, 2014). However, of the estimated 50,000 new HIV infections every year, the majority are concentrated within specific populations and geographic locations in the United States (Centers for Disease Control and Prevention, 2015). Adolescents and young adults (AYA) between the ages of 13-24 are disproportionately burdened by HIV, accounting for 22% of all incident HIV cases in the United States in 2014 (Centers for Disease Control and Prevention, 2016a). This trend holds true in the state of Georgia as well, which was designated as one of the top five states with the highest HIV burden in the country in 2014 (Centers for Disease Control and Prevention, 2014a). In 2013, the Georgia Department of Public Health reported that 60% of all individuals being newly diagnosed with HIV lived within the Atlanta Metropolitan Statistical Area (MSA), and that 25% of incident infections in the Atlanta MSA were among AYA between the ages of 13-24 (Georgia Department of Public Health, 2013). Among the counties most heavily burdened by AYA infection in the Atlanta MSA are DeKalb and Fulton counties, where 403 and 352 of every 100,000 AYA (respectively) are currently living with HIV (AIDSVu). In addition to high rates of infection, AYA in the Atlanta MSA were found to present with the highest rates of late stage HIV (CD4<200) at time of diagnoses and the lowest rates of viral suppression of all age groups. Since HIV takes up to 10 years to manifest symptomatically, these high rates of late stage diagnoses suggest that many AYA are becoming infected as early as middle school (AIDS.gov, 2014). Gaps at every stage in the HIV care continuum for AYA

indicate a need for HIV prevention interventions targeted early, consistently, and specifically at individuals between the ages of 13-24.

In exploring platforms from which to deliver targeted, age-specific HIV prevention interventions, schools stand out as an attractive possibility (Ogusky & Tenner, 2010). While schools have been used to deliver HIV prevention initiatives in some parts of the country, there is a dearth of literature regarding the use of school-based HIV programs in Georgia. This may be due to an overall lack of the presence of HIV prevention programming in schools in Georgia. Additionally, research exploring the use of health interventions in schools often focuses on the effectiveness of programs without addressing how the process of program adoption impacts program success and sustainability. This study seeks to address these gaps in research by focusing on the process of HIV prevention program adoption, as well additional factors that may impact adoption in public schools in the Atlanta Public School system, which caters to both DeKalb and Fulton county.

Purpose and Research Questions

This study seeks to provide insight into the decision-making process that precedes the adoption of HIV prevention programs in Atlanta Public Schools. Due to a paucity of literature regarding the processes surrounding adoption of HIV prevention programs, particularly in states with abstinence-only curricula, this study is largely exploratory in nature. In order to gain a comprehensive understanding of the decision-making process, including the roles and characteristics of individuals involved, this study was framed with the following broad, open-ended research questions:

1) Who has the power to decide whether or not HIV prevention programs are adopted in Atlanta Public Schools?

2) What factors impact whether or not HIV prevention programs are successfully introduced and adopted into Atlanta Public Schools (APS)?

- a. What is the perceived need for HIV prevention programs among individuals or groups who influence the decision to adopt new HIV prevention programs?
- b. How ready to adopt a new HIV prevention program are the individuals or groups who influence the adoption decision?
- c. What are barriers and facilitators to program adoption in the public schools?

Two theoretical frameworks guided development of the research questions for this study: the Theory of Diffusion of Innovations, and the Community Readiness Model. Research Questions 1 and 2a were framed based on the Theory of Diffusion of Innovations, while Research Question 2b relates to the Community Readiness Model. Research Question 2c was guided by a grounded theory approach and intentionally left broad so as to allow for the exploration of emergent themes.

Theoretical Framework

Theory of Diffusion of Innovations

The Theory of Diffusion of Innovations provides a model by which we may understand how an innovation is adopted by an individual or an organization (Rogers, 1983c). In this theory, innovation is taken to mean "an idea, practice, or object that is perceived as new by an individual or other unit of adoption" (Rogers, 1983b). For the purposes of this study, the innovation being considered is school-based HIV prevention programming, and the units of adoption are twofold: I will consider the process of adoption for schools as independent systems, as well as for school districts. At the organization level, the Theory of Diffusion of Innovations outlines a decisionprocess model that includes five stages, which can be categorized into two phases. The first phase, initiation, encompasses the first two stages of the model: agenda-setting and matching. During this first phase, information about an innovation is gathered and examined to determine how that innovation aligns with organizational goals and structure. Potential problems are hypothetically considered and resolved in this phase in order to determine all-around fit. Following initiation, a decision to adopt or not adopt is made. If the decision is made to adopt the innovation, the organization enters the second phase of the process, implementation. The implementation phase encompasses the final three stages of the process: redefining or restructuring an innovation to work within the organization, clarifying how the program fits into the organization. These stages closely resemble the stages of the individual innovation-decision process outlined by the Theory of Diffusion of Innovations, but allow for more complexity in the process by accounting for multiple individuals throughout the process.

Community Readiness Model

The Community Readiness Model was developed by the Tri-Ethnic Center for Prevention Research at Colorado State University in order to help communities create and sustain health change for a wide range of health issues (Tri-Ethnic Center for Prevention Research, 2014). The model is a derivation of Prochaska and DiClemente's Transtheoretical Model of Behavioral Change (TRM). The TRM, also known as the Stages of Change Model, assesses an individual's readiness to adopt a new behavior. However, communities are comprised of many individuals with varying influence, opinions, interests, and behaviors. Therefore, assessing the readiness of an entire community to adopt a new behavior requires that a model account for the complexities of a dynamic and multifaceted group. In this study, the Community Readiness Model was used to assess "leadership readiness" to adopt new HIV prevention programming in schools.

CHAPTER 2: LITERATURE REVIEW

HIV Transmission and Prevention

While there are currently over 1 million people living with HIV in the United States, rates of overall infection have declined over the last ten years (Centers for Disease Control and Prevention, 2016b). This is largely due to innovations and advancements in testing and treatment options (Zanoni & Mayer, 2014). HIV is transmitted in a variety of ways, the most common of which are through sexual activity or sharing needles (Centers for Disease Control and Prevention, 2016b). HIV can be transmitted when bodily fluids such as blood, semen, or rectal and vaginal fluids from an infected person come into contact with a mucus membrane or open tissue site of a non-infected person. While both vaginal and anal sex present high risks for HIV transmission, anal sex is riskier, particularly for the partner receiving penile penetration. As such, men who have sex with men are at a disproportionately high risk for contracting HIV. The most effective forms of prevention include using condoms during anal or vaginal intercourse, reducing number of sexual partners, discussing the use of pre-exposure prophylaxis with a doctor, and getting tested for other sexually transmitted diseases. While HIV is a commonly understood, preventable disease with widely available effective treatment, behavioral risk factors pose significant obstacles for HIV prevention (DiClemente, Salazar, & Crosby, 2007)

Behavioral Risk Factors for Adolescents and Young Adults (AYA)

Adolescents and young adults are at particularly high risk for contracting HIV due to their frequent engagement in risky sexual behaviors (Centers for Disease Control and Prevention, 2014b; DiClemente et al., 2007). High-risk behaviors common among youth demographics include, but are not limited to, failure to use condoms, engaging with multiple sexual partners, and substance abuse. The CDC Youth Risk Behavior Survey found that, in 2013, 47% of American teenagers had had sex at least once, 15% had had four or more sexual partners, and only 60% of teenagers having sex had used a condom during their last sexual intercourse (Centers for Disease Control and Prevention, 2014b). AYA also face social pressure, high rates of mental illness, and are often developmentally unable to make fully informed, safe choices regarding their health and lifestyle. Furthermore, AYA utilize healthcare services (including STD and HIV testing) less than any other age group in the United States (Oberg, Hogan, Bertrand, & Juve, 2002). In a national survey, only 22% of sexually experienced students reported having been tested for HIV (Centers for Disease Control and Prevention, 2014b). This is particularly concerning because 44% of HIV-positive AYA are unaware that they are infected (Centers for Disease Control and Prevention, 2016a). AYA face numerous significant barriers in obtaining healthcare services, such as lack of health insurance, needing parental consent, lack of knowledge about how to obtain healthcare services, lack of transportation, and fears about confidentiality. Additionally, healthcare providers are often ill equipped to meet the unique needs of adolescents and young adults. In combination, proclivity among youth for engaging in risky sexual behaviors and disinclination towards usage of healthcare services put AYA at high risk for increased HIV-related morbidity and mortality.

Sex and HIV Education in Schools

Past studies concerning the adoption of behavioral interventions by public schools indicate that schools may be an effective platform from which to provide effective HIV education to at-risk populations by incorporating evidence-based interventions into pre-existing curricula (Ogusky & Tenner, 2010). In states with comprehensive sex education and state-level policy promoting HIV prevention education, school-based HIV prevention programs have been proven to be largely effective. However, over the last two decades, state and federal governments agencies have pushed for the use of abstinence-only education in public schools (US House of Representatives Committee on Government Reform Minority Staff, 2004). Abstinence-only education is based on the principle that the only way to avoid pregnancy and sexually transmitted infections (STIs) is to abstain from sexual activity until marriage. Abstinence-only education does not include information about contraceptives, except to highlight failure rates. Furthermore, overwhelming evidence has been found indicating that abstinence-only education does not work. For example, while abstinence only-education may delay intention to initiate sexual activity, it has not shown an ability to actually delay commencement of sexual activity among youth (Ito et al., 2006). Additionally, abstinence-only education often contains false and misleading information, and may actually increase negative sexual health outcomes (Guttmacher Institute, 2016; Kohler, Manhart, & Lafferty, 2008; Ott & Santelli, 2007; Stranger-Hall & Hall, 2011; US House of Representatives Committee on Government Reform Minority Staff, 2004). Conversely, comprehensive sex education teaches that abstinence is the only way to completely guard against the risk of contracting STIs, but also includes medically accurate information about the proper use of contraceptives in family planning and STI prevention.

School-Based HIV Education in Georgia

Currently, all states are required to provide sex education in public schools, but many states mandate an abstinence-only curriculum, including Georgia. The state of Georgia requires that all public schools provide both sex and HIV education (Guttmacher Institute, 2016). However, the curriculum stresses abstinence until marriage, and is not required to cover condom use. Furthermore, the curriculum is not required to be medically accurate, or tailored for specific age or cultural groups, despite the prevalence of disparities in HIV burden by race, gender, socioeconomic status, and sexual identity (Centers for Disease Control and Prevention, 2016b; Guttmacher Institute, 2016). State policymakers have gone so far as to ban the provision of contraceptive materials within schools, as well as the use of state funding to provide contraceptives (Guttmacher Institute, 2015).

The current state policy in Georgia regarding HIV and sex education would suggest that parents of high school aged children, whose interests policymakers are supposed to represent, largely support the use of abstinence-only education in public schools. Unfortunately, there is very little literature available about whether the opinions of parents in southern states with mandated abstinence programs actually do match the existing policy. There do not appear to be any studies specifically measuring the attitudes and opinions of Georgian parents. However, recent unpublished public policy polling results from DeKalb and Fulton counties (high HIVprevalence counties) indicate that the majority of parents support teaching students about how to use birth control (Public Policy Polling). Additionally, a 2006 study in North Carolina, another state that endorses abstinence-only education, surveyed 1306 parents of public school students (grades k-12) over the phone, in order to determine whether parents supported abstinence-only or comprehensive sex education (Ito et al., 2006). The results mirrored those of national surveys measuring parental opinion on sex education; the majority of respondents supported comprehensive sex education in schools for their children. Furthermore, 70% of respondents felt that it was important that their children be taught how to get tested for HIV/AIDS or STIs. The study by Ito et al. (2006) had several flaws, including low response rates and the potential for bias against those who do not own landlines (especially low income families). However, the researchers found no significant difference in opinion on any matter across race. The results of the study indicate disconnect between parental desires about sex education in schools and the reality of sex education in schools. The researchers also asked participants who they believed

should be designing the curriculum for school-based sex education. Parents identified themselves, health professionals, students, school administrators, and religious leaders as people whom they believed should have input into sex education curricula. These results may provide insight into possible decision-making units for the actual adoption of an HIV education intervention within the Atlanta Public School system.

Atlanta Public Schools as Delivery Platforms for HIV Prevention

The Atlanta Public School system has worked with external organizations in the past to incorporate health initiatives and programs for students. However, an examination of the literature reveals a dearth of evaluable information regarding the process and results of working with the school system. In recent years, the Atlanta Public School system, which caters to many low-income, underserved communities in zip codes with the highest rates of HIV infection in Atlanta, has faced obstacles in terms of finance and staffing shortages, credibility, and corruption charges among district administrators (AIDSVu). However, APS also boasts an impressive and innovative system of charters schools, many of which include staff and resources specifically tailored to meet the needs of communities with low matriculation rates. Without sufficient resources and support, the introduction of health initiatives will undoubtedly take second precedence to other pressing issues. Therefore, it is crucial that any interventions introduced are not only designed to fit the needs of the community, but also that they are introduced to the correct community stakeholders in order to obtain support within the community.

Evolution of Diffusion of Innovations Research

DOI research originally focused on the innovation decision-process of individuals, or groups of individuals coming together to make a unanimous decision (Rogers, 1983c). The three types of innovation-decision processes outlined by the earliest versions of the theory included: 1)

optional innovation-decisions, in which an individual makes a choice independent of the choices of those around them; 2) collective innovation-decisions, in which a group of individuals comes together to make a decision; and 3) authority innovation-decisions, in which one or a few individuals with power or expertise make a decision on behalf of a system of people. However, in the 1970s, DOI researchers began to study situations in which an organization, rather than an individual, might adopt an innovation. This shift in perspective also requires the conceptualization of a fourth type of innovation-decision: contingent innovation-decisions, in which an individual can only make a decision after another decision has been made prior. For example, a teacher may only be able to adopt a new HIV prevention program *after* the principal has made the decision for the school to adopt the program. Contingent innovation-decisions help to reflect the complexity of the adoption process within an organization, in which many different individuals may be involved in varying capacities.

Early research concerning the adoption of innovations by organizations focused on organizational characteristics that correlated with organizational innovativeness (Rogers, 1983c). However, while several characteristics were consistently found to be associated with innovativeness, such as size and centralization, these studies often failed to find strong correlations between these characteristics and overall innovativeness of the organization. Additionally, these studies often relied on cross-sectional data obtained from one leading individual in the organization. In order to address these shortcomings, researchers shifted the focus of their work to analysis of the diffusion processes within organizations. Process research limited the number of cases that could feasibly be included in studies, but allowed for greater insights into the complexity and temporality of diffusion within an organization. Diffusion process research also calls for the inclusion of multiple key sources from each organization

during data collection, restoring a broader perspective and greater validity to the findings than was seen in cross-sectional studies.

The purpose of this study is to provide insight into how new HIV prevention programming is adopted by public schools in the Atlanta Public School system. School systems, as well as individual schools, can be considered organizations as defined by Rogers for the purposes of diffusion research (Rogers, 1983c). While the organization innovation process may provide a useful framework with which to understand the macroscopic process of HIV prevention program adoption in schools, it is important to also examine the individuals who participate in that process, and in what capacity they participate. In organizations like schools, in which employees must balance adherence to authoritative decisions or contingent decisions with practical limitations like time, resources, and authority, it is important to ask two questions: First, who is involved in the organization innovation-process, and second, what factors may impact the adoption process. These factors or processes may differ depending on who, within the school, falls into each role along the organization innovation-process. Therefore, the questions posed to participants interviewed within the schools for this study will include questions related to both the organization and individual innovation-process models.

CHAPTER 3: METHODS

Research Design

In order to accommodate the exploratory nature of the research questions, a case study of the Atlanta Public School District was conducted using semi-structured interviews. The case study paradigm allows for assessment of a phenomenon about which little is known through a combination of document review and semi-structured interviews (Yin). This study included three levels of data collection: 1) District level, which includes interviews with administrators or employees of the APS district, 2) School level, which includes interviews with administrators, teachers, or parents from the case school included in the study, and 3) Organizational level, which includes interviews with individuals employed by organizations that have worked with APS – or schools within the APS district – in the past in order to bring sexual or health education to high school students.

Site Selection

The Atlanta Public School (APS) district was chosen based on the high prevalence of adolescent HIV in zip codes served by the school district (AIDSVu). This case study included the APS administrative system, one public charter high school within the APS system, and two Atlanta-based organizations that provide sexual health services or education to high school students. The case school and organizations selected for the study were chosen based on willingness and ability to participate. In order to recruit a school for the study, administrators of 12 Atlanta Public Schools were contacted by email or by phone. Of the 12 schools, 1 was responsive and agreed to set up initial interviews. The case school is a 9th-12th grade charter school within the APS system. Charter schools, rather than non-charter public schools, were

chosen based on cooperation from the administrations, as well as for their innovative nature in the APS system.

The two organizations included in this case study were chosen based on their history of working in or with Atlanta Public Schools. Individual contacts within the organization were identified via referral from other participants in the study, and were contacted via phone or email in order to request and schedule an interview.

Participants

Participants were identified using a combination of purposeful recruitment and snowball sampling. Initial interviews were conducted at the case school with the principal, the president of the Parent-Teacher Organization, and a school counselor. During each interview, the participants were asked to identify other individuals in the school community (at the district, school, or organization level) that influenced or were involved in: 1) the adoption of new health or HIV-specific programming, 2) health or HIV education in the school, and 3) school policy. Example questions designed to elucidate potential interviewees included:

- If you wanted to bring a program about HIV prevention to the school, who would you consult first?
 - a. Who would you need permission from?
 - b. Whose support would you need?
- 2) Has anyone at the school introduced any health programs or initiatives in the past?
- 3) Who else would you suggest I interview about this?

Individuals mentioned by multiple participants were prioritized when scheduling and conducting interviews.

Individuals at the district level eligible for interview included administrators, board members, or department leaders within the APS system. Individuals within the case school eligible for interview included school administrators, teachers, and parents of currently enrolled students at the case school. No more than one participant from a household was interviewed. At the organizational level, individuals that were involved, either directly or in a supervisory role, with school partnerships promoting health and sexual education were eligible for participation.

Data Collection

Data collected for this study included brief interviews conducted in-person or over the phone. Interviews followed one of 3 semi-structured guides that contained similar content, but were tailored to contain appropriate phrasing for each level of data collection (see Appendix A-C for interview guides). The district, school, and organization level interview guides consisted of 11, 15, and 17 questions, respectively. In all 3 interview guides, the broad nature of the questions allowed for exploration of unexpected topics, as well as in-depth, participant directed discussion.

Data Analysis

Interview data was analyzed using thematic analysis methodologies (Yin). Upon completion, recorded interviews were transcribed verbatim. The first two interview transcripts were reviewed in order to develop codes based on emergent themes. The majority of the codes were developed inductively from themes that arose during the interviews (See Appendix E). However, as the interview questions were guided in part by constructs from the Theory of Diffusion of Innovations and the Community Readiness Model, several themes were developed deductively. However due to the complexity of the topics explored in this analysis, inductive and deductive themes were often highly interrelated, and are therefore not distinguished from one another in this analysis. In order to increase the reliability of the coding process, after initial coding of the first two interviews, a second, unaffiliated reviewer recoded those interviews. After consideration and comparison of the two coding attempts, the codebook definitions were determined to be too vague in some cases (such as Decision-Making System), or too narrow in others. After additional inspection of the interview transcripts, a new codebook was devised in which the initial themes were reorganized to better address the research questions. After revision of the codebook, all 10 interviews were coded thematically. In order to organize and synthesize information gleaned from the thematic coding of interviews, each code was examined in context of the research questions and summarized accordingly. The results of this descriptive analysis are described in Chapter 4.

CHAPTER 4: RESULTS

Participation

A total of 10 interviews were conducted for this study, including: 1 interview with an APS administrator, 6 interviews with administrators, teachers, or other key community members from the case school, and 3 interviews with employees of organizations that work (or have worked) with Atlanta Public Schools (APS) to provide sexual or health education services. Excerpts from interviews are labeled as belonging to: Administrators (applies to both district and school level administrators), School Representatives (teachers or parents from the case school), or Organization Employees.

Study Findings

Research Question 1: Who has the power to decide whether or not HIV prevention programs are adopted in Atlanta Public Schools?

In exploring the first research question, four main themes arose: Differences Between Charter and Non-Charter Schools, Provision of HIV Programming, Decision-Making Units (DMU), and Distribution of Influence. Within Distribution of Influence, three sub-themes emerged, including: Point of Introduction, Point of Contact, and Driving Force.

Differences Between Charter and Non-Charter Schools

Differences between charter and non-charter schools were mentioned in every interview, either as a result of direct questioning, or as part of a discussion of a separate topic. The most commonly mentioned difference between charter and non-charter public schools was the system of governance under which each type of school falls.

"I would say that in a traditional system, I'm sure that there's different layers of bureaucracy that have to be cleared through things. A charter system is a little bit

different than a public school system. So if you're looking to try to integrate into Atlanta Public Schools, for instance, which is a little bit different, I think then you look at, from the district side of things, like who runs health education. Who does community outreach? Who does partnerships with the district? Because, then it might be a different "in". Like [in our school], coming to the principal was the right move. If you went to *APS, the principal might be like, you gotta talk to six other people, and they're just going* to ignore it. Whereas like, if you went to, I don't know if this person exists, but like student health coordinator, you know, and the nurse that runs the nursing programs, you know? Or people who do the student support services. Like the there are a bunch of different individuals in the district that might say "Hey, this is a great program for all of our high schools." And then they're going to tell the principals, "Here's what you're going to do". But again, the set up's a little bit different. There's very few programs in our charter system where the executive director comes to me and says, "You gotta have this at your program...at your school". But that's just not the way that we're set up. A bigger district usually is set up that way."

Administrator

This was corroborated by a second interview conducted with an organization employee. *Interviewer:* Ok, so, are you in communication with any individual schools about working with them? Or do you go through the district to create those partnerships? *Participant:* Are you talking about APS? We have to go through the district. We're not in communication with any individual schools.

Interviewer: Ok, and is that because you're not allowed to be, or for some other reason?

Participant: Well, we're not allowed to be, and if we approached an individual school, the first thing they would say would be, you know, you need to go to the district level, which is what they're supposed to do with some topic like this. And so, um, you know, it's the rules. It's the law.

Interviewer: Ok, and when you guys work with the charter schools, you said you went to the principal. So, you don't have to go through the board necessarily, or the district? **Participant**: It depends. You may approach the principal, and the principal says, "I got this, I present to the board, done deal." Or you may get to the principal, and the principal is like, "You know what? I need to look at this, ok? I need to look at this and we need to see what we can do." You know? And, "Let me present this to the board, can you come and speak to the board for us?" That sort of thing. So it just depends. Every situation is different.

Organization Employee

The differences in systems of governance for charter and non-charter schools were neither characterized as good nor bad, but simply different. An organization employee explained that the process of implementing new programming in charter schools may be faster and present fewer obstacles than working in a large school district.

"Charter schools are a little bit different. Charter schools are self-governed, okay? So, what they do is, you may present to their board, a particular board, or the principal may go ahead and decide that they want to implement a curriculum, and they go to the board with it, and it's a much faster, much, uh, I'm not going to use the word easier, but the process is much smoother than it is going to a large school district."

Organization Employee

However, benefits unique to working with the district, such as greater support and potential for dissemination, were cited as well.

Interviewer: If somebody were interested in introducing a new program to the school do you think it would be better for them to approach a school individually, or for them to approach the district?

Participant: It depends on how expansive you want to promote the program, and so if you want to get into multiple schools, and you want the district's stamp on it so that you can have a little bit of backing behind you, it would probably be a good idea to go through the [district] health and PE department.

Administrator

Additional differences between charter and non-charter schools included access to funding, as indicated in the following quote:

"I don't necessarily know that the funds are there. It just really depends. So it would probably have to, it might be a function of parents raising money, trying to do whatever, if we figure out a cost. I don't necessarily know at our school because funding is a little different. We don't get a lot of the money that traditional schools get. So we don't necessarily have it."

School Representative

Differences in staffing were also described. Several participants from the case school mentioned the unique counseling system employed within the school that may not be present in other APS schools.

"It's a little bit different in our charter schools. So, um, we have at the middle schools, we have one social and emotional counselor that's also a social worker. It's not really a guidance counselor, that's a misnomer. At the high school we have a different kind of design where we have three social and emotional counselors slash social workers. But they don't do any of the traditional guidance counseling stuff. They don't do schedules, they don't do transcripts. All they do is, like, meeting with kids and counseling, and, like, community support."

School Representative

Additionally, teachers within charter schools follow different career and promotion paths than employees at non-charter schools.

"One of the things that does happen a lot with the charter schools is turnover rate. Turnover rate is high... You know, I've went in, I've gone to charter schools where one year, you know, a teacher's been there two years, ok? And you come back the third year and they're a dean. Ok? Somebody that may have had their teaching certificate, and they were a school secretary first year, second year they're a teacher. Third year, they're a dean. Because you move right on up, those people leave and go on, whatever like that, the administration of most charter schools are relatively young. So like, I don't know, say for example, what high school you went to, but you go back to your high school days, you look at the principal, you might say my principal was...or middle school days, my principal, your principal was 55, 50, something like that. You walk into a lot of charter schools, the principal is 35."

Organization Employee

Provision of HIV Programming

Currently, there are no on-going programs that were solely or explicitly described as focusing on HIV prevention at the district or case school levels. However, between the case

school and the APS district as a whole, several programs or initiatives with at least a minor HIV prevention component were mentioned during the interviews. The first program, a series of testimonies presented by HIV positive youth to high school students, was implemented throughout the APS district. Within the case school, participants indicated that students are taught about HIV during their health class,

"We basically teach them, you know, what HIV is, and we teach them how HIV develops into AIDS. We teach them how HIV is contracted. We basically teach them how it works, how it breaks down your cells, how the number of t-cells are broken down, ad at what level your t-cells become, whatever number, to eventually be AIDS...We probably talked about it for three days...so I would say maybe about 6-7 hours, maybe, to go through the talk of communicable diseases including HIV and AIDS."

School Representative

And, other initiatives are also underway.

"My department is working specifically on, at this point, some classroom guidance sessions around personal responsibility and personal choices, which will include a component of sexual health, sexual relationships. Yeah, and we're also working on an empowerment health fair. Hopefully we can get it up and going sometime in the spring. But it's really, uh, we're going to connect with [an Atlanta non-profit], and a few other health oriented agencies in the community to do a lot of awareness around teaching about STDs and HIV and things of that nature."

School Representative

When discussing current HIV programming at the district and case school levels, it became apparent that the knowledge level about the existence and extent of current programming was very low. Most participants were unsure of the content of any current programming.

Interviewer: What are students typically taught here about HIV? Do you know? Participant: Um, I am not a hundred percent aware, only because I haven't really observed that part of health class. We do have a full health curriculum that is required of all ninth graders that they take. I know that part of the health class is communicable diseases and sexually transmitted diseases.

Administrator

Interviewer: So, do you know anything about what students are taught about HIV in your school?

Participant: Um, I'm pretty sure it's very little. When my daughter was a freshman I know they had a sex education class.

School Representative

Several participants were unaware of whether any HIV prevention education took place in the school at all.

Interviewer: So, do you know anything about what students are typically taught about *HIV at your school?*

Participant: To be honest, and this might just be my ignorance, but I don't think that they are. If they are taught, it would probably come through, maybe the health and fitness classes, our gym, something like that.

School Representative

When HIV prevention programming initiatives were brought up in the context of partnerships with outside organizations, participants were often unsure of how those partnerships started, or whether they were still in place. "In the past they've partnered with [a hospital], and they provided a, probably about an 8-week course on safe sex, and family planning, and all those types of matters. But I'm not sure that partnership is still in existence or not."

Administrator

"We had a partnership with, I'm trying to think of the name of the group. They came in and helped out a lot with sex ed that included communicable diseases. It was an outside organization that was coming in to do community...to do education. I do not know if that partnership was renewed this year. They might have lost their funding for whatever reason. But regardless, I know it's part of the curriculum."

Administrator

Decision-Making Units

The code "Decision-maker" was defined as anyone with the power to accept or reject an initiative, and was specifically characterized by a person's ability to give or withhold permission. For non-charter public schools, key decision-makers named in the interviews included the district administrator in charge of approving new health-related curricula, the school board, and the superintendent. However, decision-making power was explained differently with regards to the individual case school structure. All six participants from the case school, as well as all three organization employees, unanimously named the principal as the person they believed ultimately makes decisions of whether or not to adopt new initiatives or programs within individual charter schools.

"Well, with [our school], principals have autonomy, meaning they can make choices about the curriculum, they can make choices about the culture of the school, what they want it to look like, without much pushback because it's their school. Or it's seen as, you know, an autonomous decision."

Administrator

Interviewer: Does anyone at the school have the power to veto a program outright? *Participant*: Outright? Our principal.

School Representative

Interviewer: And does anyone have the power to approve the program outright without consulting anybody else?

Participant: Our principal.

School Representative

Interviewer: Does anyone in the school hierarchy of administration have the power to just veto a program?

Participant: Um, yeah, I mean people do. Like, I mean, I think [the principal] can choose to just ignore, like if someone reached out to [them], [they] could have just ignored your email.

Administrator

Similar to the decision-making process at the district level, the principal is sometimes required to consult with a supervisor before giving approval. However, for the case school, seeking approval from the executive director seemed to be related to logistics and following procedure rather than actually seeking permission.

"So I'd check with my executive director, who's my supervisor, just in terms of clearing...the last time, I said is there any red flags here, like anything I have to worry about, do I have to get consent. I'm just kind of covering my bases to make sure that, like, I don't need to send a permission slip or something like that. So just checking guidelines there for myself."

Administrator

Distribution of Influence

While individuals with isolated decision-making power were identified at both the district and case school level, participants indicated that successful adoption is often influenced by a number of individuals within the community or administrative hierarchy. In order to capture the different roles and individuals involved in adoption process for new initiatives, the interviews were coded for "Distribution of Influence". This code refers to individuals or groups outside the decision-making unit involved in the adoption process for new programming in schools. At both the district and case school level, a number of voices within the school structure were involved in the decision-making processes. At the district level, though final decision-making power lies with the school board, approval is obtained in stages and requires decisions to be made sequentially at each hierarchical level.

"It lies with the superintendent and the board, and so, once [the person in charge of health education curricula] approves the different curriculums, then [they] will bring that proposal to the assistant superintendent, who will then bring that up the chain of command to the chief academic officer, and then it will go up to the superintendent, and like I said, it rests with the superintendent and the board."

Administrator

Participants in the case school indicated that influence within the school community was often collaborative in nature, rather than hierarchical.

Interviewer: So, say you wanted to bring a new program or a new curriculum about HIV prevention to your school. Who at the school would you want to consult first? *Participant*: Um, definitely the principal and [their] leadership team because that's pretty much where you have to go. You'll need them before, in order to get it implemented anyways.

Interviewer: And who is part of that leadership team?

Participant: Um, it would be the principal, the operations manager - I think that's [their] title. Then they have an assistant principal and probably a couple of leaders, like an academic leader - I forgot their exact title. And then we have, like, a culture team, which is basically those that are responsible for connecting to the students and then deciding what school culture is, and kind of implementing those type of programs. So I think they all comprise the team.

School Representative

Interviewer: And who at the school would you need explicit permission from to do this? Participant: The principal...But you know, [they have] an administrative team, so [the principal] ultimately makes the decision, but, from my perception, [the principal] runs every decision by [the] administrative team, which consists of two assistant principals and a director of operations. And then of course, [the principal] has a boss. [The principal's] boss is the executive director. So, [the principal] confers with [the executive director] as well. And when I say the executive director, [they are] the executive director of [the regional charter school network].

School Representative

Interviewer: Ok, so if you wanted to bring a program or a new curriculum about HIV prevention to your school, who at the school would you consult first? Participant: The principal. The principal and the assistant principal. We have two assistant principals, one focuses on student culture, the other focuses on academics. And then you have the school leader, all of which, including myself, make up the administrative team. And so we kind of meet to come up with various academic decisions, so it would definitely be brought to our principal, as well as the admin team as a whole [to] make those type of decisions.

Administrator

Collaboration with organizations external to the school community was also mentioned as part of the decision-making process at the case school.

"I would look to an outside organization to kind of support the work that we would do, cause I know that like, for anyone on my team to try to build the capacity to learn and then teach is not effective. As opposed to, like, if you've got a group that is already established doing AIDS research, doing like, AIDS prevention, you know, work with students and that's all they do, like it's so much easier to partner with them."

Administrator

Sub-themes that emerged in relation to the distribution of influence include: how programs are introduced, who within the community served as a point of contact, and who within

the community served as a driving force for the program.

Program Introduction

Programs adopted by the district or case school in the past were introduced by individuals or organizations outside the school system.

"I recently attended a rotary club meeting, with the rotary club of [Atlanta neighborhood], and they have an HIV/AIDS awareness initiative, and so they're trying to get into the schools. And so the person from there, [they] came out to our staff meeting and did a presentation for us, and talked about HIV. And [they] also talked about the statistics in the county, and also brought someone from [their] circle that had been a victim of human trafficking. And so that person was able to talk to the staff as well. And so some of the schools were interested after [they] spoke. And just asking, some of the schools are interested in following up and having [them] come out to their schools to speak to the students and kind of plan some type of assembly."

Administrator

"So [an external organization] came to us our first year when I opened and they had already been working with the middle schools on, like, sex education, and so they came and said, "Hey, we'll come and teach the class for you." Like, you put a teacher in the room to kind of supervise the whole thing, but we're going to teach the class."

Administrator

At both the district and case school levels, initial connections with the external organizations were made by someone other than the individual making the final adoption decision. For the district, an administrator took notice of the rotary club initiative, and then brought the program to the attention of their superior.

"I'm actually the person that kind of spearheads some of those initiatives like the suicide, the child abuse, the LGBT, and so, I bring that initiative to my assistant superintendent, and if [they] approve it then I'm able to reach out to the schools to see if they would be interested in having a program at their school."

Administrator

Similarly, though school leadership was included in initial communications between the external organization and a school representative, it was only after the case school's counseling team expressed interest that a proposed health education curriculum was brought forward for serious review.

"So this actually came from our CEO and president from our national organization, um that, back in 2012, January 2012....I'm looking and I see this email? I don't see myself responding to it, so I was probably thinking about lots of things. But it looks like my counselor that made the connection, the counselor at the middle school made the connection and said "Hey we'd love to work with the high school", and so then [the counselor] put them in touch with me."

Administrator

In the case school, programs could also be introduced internally.

Interviewer: Ok, so if you were thinking about bringing a new program or curriculum about HIV prevention to your school, who would you consult first? Participant: I'd talk to my manager, who is also the assistant principal. And, um, I'm sure [they'd] say, "Put together a proposal and write all the details out."

School Representative

"[A teacher] is the one who is working with us in the special education department, and [they've] done this work for years over at the church that [they] attend. And [they] just came up with the idea, [they] put the proposal together, [they] shared it with me. So it's really going to be a collaboration between the counseling and social work department and the special education department. And we just shared this proposal with the assistant principal, who is in turn going to share it with the principal, [who] will either approve or deny the request."

School Representative

This pathway of internal introduction resembles the hierarchical approval process seen with the district-level program.

Point of Contact

Another emergent theme in the interviews was Point of Contact, which, for coding purposes, refers to a person that would serve as a touch-point during adoption of a program. Commonly referenced points of contact included the principal and other members of the principal's leadership team.

"My assistant principal that oversees the counseling team and other support services would kind of be probably the coordinator of the whole thing, and looking at like, you know, here's how it rolls out. [The assistant principal] would be the first point of contact."

Administrator

"I mean, you would want buy-in from all of the teachers too, but I think it has to start [with the principal and leadership team], like in order for it even to get rolled out. So you would, we would involve whoever would be the key players implementing it at the face of the program. Of course you would want to make sure that they, that you get their buyin...But I think it still falls on the, your first point of contact would be the principal and [the] leadership team."

School Representative

Driving Force

"Driving Force" refers to individuals or groups who provide momentum in the adoption process of an initiative. Similar to "Point of Contact", this theme emerged in conjunction with exploration of decision-making units, and serves to further deconstruct the complex process of decision-making in the school. One administrator from the case school mentioned that the counseling team would serve as a driving force.

"I would use my counseling team. I would probably have them do a lot of the driving of this anyway. Like it wouldn't be something that I would be driving at all...If we were going to roll out through a health class, that's my P.E. department. So the physical education department would be the ones that'd be saying, "Hey guys, you gotta get behind this"."

Administrator

Other participants from the case school identified the principal and the school leadership team as a driving force in the initial stages of program adoption.

Participant: If [the administration doesn't] support it, it won't happen. Or even if they superficially, you know, like on the surface say "Oh yeah, we'll support it", but not genuinely support it, the program just won't be a success". *Interviewer:* So, you would consider the administration a driving force?

Participant: Absolutely.

School Representative

However, while the principal and his leadership team were identified as a necessary part of moving a program forward, participants also indicated that responsibility for a program would largely lie upon the shoulders of a sponsoring department.

"I think that [the leadership] would probably designate representatives from different departments. So that, these folks will come in, and [the principal], or the assistant principal might say, "Well, I can't do it, but you know, we're going to put the department chair from counseling, the department chair from physical sciences to be kind of be a part of that team." I don't think they themselves would sit for it."

School Representative

"The department that's sponsoring the activity. You know? They would be a driving force as well."

School Representative

Another iteration of a driving force is a "champion", or an individual who takes up a cause and advocates for the promotion of a program or initiative.

"You have that champion. That champion does not necessarily have to be within the school system or a member or a part of the school system. But usually it'll be at least one person who will take on that responsibility. And then what happens is, there'll be a number of teachers around, or within the school systems, there'll be another teacher within the school systems. They'll be what we call, and we've established a program called "peer-mentorship". In other words, they're teachers that will mentor their peers, other teachers, so they're...in other words, these peer-mentors are the cream of the crop so to speak. Whereas they are not only very good at teaching the curriculum, knowledgeable of the curriculum, but they're also people that are vocal in their support of the need for comprehensive sex ed."

Organization Employee

Research Question 2: What factors impact whether or not HIV prevention programs are successfully introduced and adopted in APS?

Of the factors that could possibly impact HIV prevention program adoption, two were derived from the theoretical framework: Felt Need and Leadership Readiness. Felt need, a construct of the Theory of Diffusion of Innovations, was determined by assessing a how concerned participants were about HIV and HIV prevention, and how they would prioritize HIV prevention for students. Leadership Readiness, a tenant of the Community Readiness Model, was used to assess how ready community or school leaders were to provide passive, active, or financial support for new HIV prevention programming in their school(s). Additional barriers and facilitators mentioned pertaining to successful program adoption included: availability of resources, ease of program implementation, training, staff workload, community buy-in (and personal resonance), and logistics.

Felt Need

All 10 participants indicated that they personally felt that HIV prevention education was important for adolescents, and that there is a pressing need for HIV prevention in schools. However, when asked about how others in the school community perceived the need for HIV prevention, administrators, school representatives, and organization employees all indicated that felt need among the community was low. When asked about how the case school community

viewed the need for HIV prevention, one administrator made a distinction between concern and perceived threat.

"Um, so I mean, a concern, I think, you know, there's two things. I think there's concern and perceived threat. I think a level of concern, if I would say, if I said on a scale from one to ten how concerned are you about kids knowing how to prevent HIV, they would all say nine or ten. Like it's ultimately, it's hugely important. Now if I said how much of a threat is HIV or AIDS to our students, they would probably assume it to be a two or three."

Administrator

The administrator attributed the lack of perceived threat to a lack of awareness in general about the risks and prevalence of adolescent HIV.

"I think AIDS has probably fallen out of the public eye a little bit. Probably because treatment's gotten so [much better] it's no longer like a death sentence. And I think there's a lot of other perception issues that are different about it. And so, my gut is that most of use who grew up and or had parents that grew up in the time where it was a really scary disease, that's not who our kids are. And so they're not worried. I mean, teenagers think they're invincible already."

Administrator

Other participants also emphasized that there is a lack of awareness within the school community as well.

"I don't think it's a huge concern holistically. I mean it may be of concern if you have a relative, or if you had a former student that was diagnosed with HIV. But I don't think people are as aware as they should be about the issue."

When school representatives and organization employees were asked about how school leadership figures viewed and prioritized HIV prevention, participants indicated that levels of concern among leadership were high. However, participants also indicated that HIV prevention may not be a top priority among the school leadership.

Interviewer: Ok, so how much of a priority is addressing HIV prevention to the leadership?

Participant: There's never really been a discussion before, so I can't honestly say "Oh, this is number one, this is number two." Um, you know, the priorities we discuss do not align with initiatives for HIV prevention and awareness.

Administrator

School representatives spoke of the differences in prioritization for the people developing and approving programs.

"We submitted the proposal, and we, our budget is \$1500. And so, what was shared with me was that, um, "Well, we might not be able to do it this year because you know, the budget may not accommodate what you're asking but we can consider it for next year." You know? And, us, who submitted the proposal were feeling, you know, this is urgent. We need to deliver this information, like, this semester. And um, so I'm sure there'll be some resistance when it comes to money."

School Representative

"And so sometimes, what we as staff members want to see, and what we feel the need for, they don't, the administrative doesn't always see and feel the need for."

Leadership Readiness

All participants, including administrators, school representatives, and organization employees indicated that the majority of school leaders would be willing to passively support HIV prevention efforts. However, participants also indicated that active support for efforts, such as taking an active role in the planning, implementation, or maintenance of a program, fell outside of the capabilities or responsibilities of school leadership.

"They'll be very supportive. They'll be willing to help when needed. But to be a part of a board, and to be part of a committee, to be part of this, and part of that, with so many other things they have going on? That number, that percentage would probably drop drastically."

Organization Employee

However several participants also emphasized that a lack of willingness to take an active role on the part of leadership figures was due to workload rather than ambivalence or reluctance.

"And I don't' think that like, I don't think that people are like mean or malicious, or just like, screw those kids. I just think that it's, people are overwhelmed, you know, with their daily responsibilities."

School Representative

Participants also indicated that while leadership may want to allocate funding to HIV prevention they may be unable to due to budgeting restrictions or prioritization of more pressing issues in the school. "My experiences have shown usually it's a person in that position who does have a sense of, that there's a need there. But they just don't have the resources to do what they need to do."

Organization Employee

Other Barriers and Facilitators

Several potential barriers or facilitators for program adoption emerged inductively from the data, including: availability of resources, ease of implementation, training, staff workload, community buy-in (and personal resonance), and logistics. All 10 participants indicated that a lack of resources would be a significant barrier to the adoption of new HIV prevention programming in schools.

"I think they would support it, but I don't necessarily know that the funds are there. It just really depends."

School Representative

"If that means taking away from their content that they're responsible for, then they would probably be against it."

School Representative

All of the school representatives from the case school indicated that potential programs would either need to be fully developed and easily facilitated, or run by an outside organization.

"I think that if the curriculum is not kind of like, scripted and handed over with all the materials, I think we would probably need an additional outside research, whether it be volunteers or it be an organization that comes in for a period of time."

School Representative

This was largely due to the heavy workload already borne by staff at the school. All of the school representatives repeatedly mentioned the importance of making sure that staff workload remains manageable.

"I think they'd be interested in developing one, or putting one together. I just, I also know that folks are very busy, and really overwhelmed. So, sometimes the day to day operational stuff just consumes them, that they're not, they don't always have the time to be as creative and put together other programs as they'd like."

School Representative

"I just keep thinking about already there's kind of, this workload, so there would probably be somebody but maybe they would have to co-lead. Or would probably have to be a part because I can't see the one person that may necessarily just commit to it alone. I mean, it may be...it would have to be a committee of folks. I think that would be the best thing in the end. A co, some kind of co-leadership in the end."

School Representative

For programs that would require active involvement from teachers or school staff, an important factor that could support or weaken a program's chances of success is the provision of adequate training. Participants mentioned concerns about teachers feeling comfortable talking about HIV with students, and subsequently, their being able to provide appropriate support to students who may be HIV positive or at risk for HIV.

"Maybe they don't feel like, you know, our teachers would be equipped to handle situations like that. Or if a student actually is, you know, shares a story, a private story, they might not be able to handle it. If a student is HIV positive, how that will go. How would that student feel? You know, I think it would be a multitude of things."

School Representative

"I had trepidation when we first discussed, and you remember the questions I was asking your team that came, I was like, what support are you going to give to families, what support are you going to give to kids, what support are you going to give to staff? Because it's the kind of thing where I think people would be surprised by the level of threat, and then once they're doing that, they don't know what to feel about it."

Administrator

One important facilitating factor mentioned by several participants was the importance of buy-in from parents and students, as well as teachers and administrators at the school. Parents have played significant roles in the school in the past, and would potentially be a source of financial support.

"Because of the nature of the school, it started, and it's fairly new, parents were heavily involved, especially in the beginning. Because for anything extra that we needed, the parents had to pretty much be responsible for it. So I think the school is open to parent support [? 7:39] and they really understand the, how involved we want to be."

School Representative

Two participants indicated that student buy-in could improve the program, but could also potentially determine whether or not a program was successful.

"I think at the time, the barrier was the investment from the students...I think a lot of students just don't take this content seriously. Or they are probably uncomfortable with the content and get the giggles, or you know, just being very immature, and missing the importance of what's being shared. So they're not investing, you've got to figure out a way to kind of get them interested, but still sharing the content."

Administrator

"But uh, students, you know, and I think that in any program we should have some type of student, uh, involvement. Like on the planning team, because it's important to get their perspective. And if we get their buy in, then we know it's a go."

School Representative

Several participants mentioned that personal resonance with an issue could impact buy-in, felt need, or willingness to provide support for new HIV prevention programming.

"I think active support would come from those who, who are either touched by it personally, or work with students who are dealing with those issues, or they just have some type of more personal investment. And so that , that can be across, that can be in all departments."

School Representative

Logistics of program development and implementation are also important considerations. At the case school, another potential facilitator mentioned was the existence of scheduling blocks during which a program could take place.

"There's places you could insert it into a health curriculum for all ninth graders. That's one way you could do it. You could do after school programs. We have an advisory program, so you could do it through an advisory block. Um so that might be more logistical, trying to figure out, like once we say, "Here's what the program is, this is what we need". Where does it fit in the schedule is just the next logical step for us."

Administrator

Finally, when dealing with potentially sensitive subject matter, it may be important to consider where in the building the program is conducted.

"Just logistically speaking, like finding a location to meet in a, I guess, more secluded area. Like the gym class and our PE class are held in the gym. It's probably not conducive for a health class that talks about sex ed. So we had to find a location in the building for them to be."

This section of Chapter 4 concludes the summary of findings for this study. The following chapter provides a discussion of the results in the context of the research questions.

CHAPTER 5: DISCUSSION

Following the summary of findings provided in Chapter 4, Chapter 5 consists of a discussion of those findings in the context of the research questions that frame this study, as well as a reflection upon the strengths and limitations of the research. Finally, this chapter will include recommendations based on the findings, as well as suggestions for future research.

This study was initially undertaken in an attempt to answer two main research questions: *Research Question 1:* Who has the power to decide whether or not HIV prevention programs are adopted into Atlanta Public Schools, and

Research Question 2: What factors impact whether or not HIV prevention programs are successfully introduced and adopted into Atlanta Public Schools.

Research Question 2 was supplemented by additional, specific inquiries framed in part by the Theory of Diffusion of Innovations. These questions address the following specific factors:

- a. What is the perceived need for HIV prevention programs among individuals or groups who influence the adoptions decision?
- b. How ready to adopt a new HIV prevention program are the individuals or groups who influence the adoption decision?

c. What are barriers and facilitators to program adoption in the public schools?

The third factor, regarding barriers and facilitators, was intentionally left broad, in order to capture new or unexpected factors related to successful adoption of programming in schools.

Research Question 1 and the Theory of Diffusion of Innovations

In order to determine who has the power to decide whether or not HIV prevention programs are adopted in Atlanta Public Schools, it is first necessary to understand the process through which programs are adopted, as well as the individuals involved in each step of the process. The innovation-decision model, as outlined by the Theory of Diffusion of Innovations, provides a framework upon which to organize the results from Chapter 4. Based on the findings of this study, the conclusion can be drawn that the innovation adoption process differs between charter and non-charter schools because of several fundamental differences between the types of schools. First, charter and non-charter schools differ in system of governance. While charter schools are largely self-governed, non-charter schools fall under the jurisdiction of the school board and superintendent. Additionally, charter schools are equipped with different staff than non-charter schools. These unique staff positions allow individuals within the charter system to fill rolls in the innovation-adoption process that might otherwise be filled by an administrator. Finally, charter and non-charter schools receive different types of funding. One participant indicated that, because the case charter school lacked resources and "man-power" during its inception, parents were often more involved in the workings of the school than might be the case otherwise. Because of these differences between charter and non-charter schools, the innovationadoption process necessarily involves different individuals, and therefore, looks different in its entirety. These differences are further illustrated through the following three examples of program adoption pathways mentioned during the interviews.

Example 1: District-Level Adoption

The first example of program adoption takes place at the district level. An external organization presented an HIV prevention initiative to a district administrator at APS, who vetted and then proposed the initiative to their supervisor. The school board and superintendent made the decision to adopt the program based on the administrator's recommendation. After the decision was made to adopt the program, the external organization reached out to individual

schools in the district in order to begin implementing the program. However, while the program ran successfully for several years, changes in leadership at the board and superintendent levels resulted in a termination of funding and district support for the program.

Example 2: Externally Developed School-Level Adoption

The second program pathway involves the adoption of a health education curriculum by the case school. An external organization approached the case school's executive leadership, who passed knowledge of the curriculum to the case school's leadership and counseling teams. Though both the leadership and counseling teams were included in initial communications, the counselors were responsible for initiating and driving discussions of how to integrate the curriculum into the school. After the logistics of adopting the new program were settled, the principal was consulted for final approval. The program was adopted, and implementation responsibilities fell to the outside organization and the school's health education department (which had not been involved in initial phases of adoption). The curriculum is still in use today, though the organization is no longer facilitating its use.

Example 3: Internally Developed School-Level Adoption

The third example of program adoption in this study involves an internally-developed initiative centered on improving healthy relationships and empowering students in health-related areas of their lives. The program was developed as a collaborative, interdepartmental effort in the case school, and was passed up the administrative hierarchy for approval. Once the proposal reached the principal for a final adoption decision, the program was affirmed. However, the leadership was unable to allocate any substantial resources for the program's implementation, and so, while the program was approved, it was not fully adopted.

The Innovation-Decision Process for organizations includes two phases, "initiation", and "implementation", the latter of which hinges on a decision to adopt or reject an the innovation in question. By mapping the three examples onto the theoretical framework, it becomes clear that, even when a decision-maker is clearly identified, successful adoption of a program depends on different individuals throughout the adoption process. Though a program must receive approval from the decision-maker, the other steps are equally important for successful advancement of the sequential process. Additionally, in the case of Example 3, the importance of resource allocation and other factors on the success of the program becomes apparent.

Research Question 2 and the Theory of Diffusion of Innovations

The theory of DOI in organizations outlines the relationship between different constructs and innovativeness in an organization. These constructs are grouped into three categories: 1) Individual (Leader) Characteristics, 2) Internal Characteristics of Organizational Structure, and 3) External Characteristics of Organizational Structure. The results of Research Question 2 can be organized by DOI construct in order to present a coherent picture of the factors that impact HIV program adoption in the case school.

Individual (leader) characteristics

In considering the individual characteristics of leaders that can impact an organization's innovativeness, it is helpful to refer to the findings from Research Question 1. Without an understanding of who the individual leaders are, it is not possible to discern their individual characteristics. Studies in the past have relied on recognized leaders, or testimony from a few

individuals in token leadership positions, to provide information about these characteristics (Rogers, 1983c). However, based on the findings in Research Question 1, we see that is important to delineate individual involvement throughout the adoption process in order to identify individuals filling non-traditional roles. Additionally, in delineating the adoption process, overlooked leaders, or potential leaders, may be identified.

One of the characteristics outlined by DOI as related to organizational innovativeness is the attitude of the leaders towards change. For the purposes of this study, participants were asked about leadership readiness, using survey questions from the Community Readiness Scale. These questions included inquiries about how the leadership prioritizes HIV prevention, and how willing the leadership is to support the adoption of new HIV prevention initiatives in different capacities. In the case of both the charter school and non-charter schools, participants indicated that the majority of leaders considered HIV prevention a concern and a priority, and that they were willing to provide passive, if not active support. However, in discussing aspects of leadership readiness, most participants indicated that willingness of the leadership to engage was not an issue so much as lack of resources or more pressing concerns taking precedence.

Though it is not specifically outlined as a construct of the organizational model, another individual characteristic included in this study was felt need. All participants spoke of the need for HIV prevention education, and all participants indicated that leadership figures, either at the charter school or at the district level, felt a need for HIV prevention to varying degrees. However, again participants emphasized that the barrier was not lack of willingness on the part of the leadership, but rather lack of resources and time. Several participants also indicated that a lack of felt need may be related more to a lack of awareness, rather than a dismissal of the problem.

Internal Characteristics of Organizational Structure

There are six organizational characteristics that impact innovativeness as outlined by the DOI organizational model, including: 1) centralization, 2) complexity, 3) formalization, 4) interconnectedness, 5) organizational slack, and 6) size. All the constructs except for complexity are represented in the findings of this study, though the interview did not contain any explicit inquiries into these constructs.

Centralization. According to DOI, centralization, a measure of the concentration of power in a system, is negatively associated with innovativeness in organizations, due to an inability of top leaders to recognize community needs or to propose useful or feasible solutions (Rogers, 1983c). In the case of the charter school, the principal was unanimously named as the key decision-maker regarding program adoption. However, the adoption process also involved other members of the school leadership team, as well as input from those who would drive program implementation. For these reasons, the case charter school can be considered a decentralized organization, whereas non-charter public schools might be considered centralized organizations because of the concentration of decision-making power with the school board and superintendent. However, it is important to note that centralization, while detrimental to initiation, is positively associated with implementation, as can be seen in the widespread implementation of the non-charter school HIV education initiative.

Formalization. Formalization is "the degree to which an organization emphasizes following rules and procedures in the role performance of its members" (Rogers, 1983a), and is negatively associated with the introduction and initiation of innovations in an organization. The low level of formalization in the charter school is apparent from the adaptability of the teachers and parents in the roles that they fill for the school. However, one of the barriers to program

adoption mentioned by participants was the rapid turnover and promotion of staff within the school. Frequent changes in the roles fulfilled by school staff inhibit successful or long-term implementation of innovations.

Interconnectedness. Interconnectedness is defined as "the degree to which the units in a social system are linked by interpersonal networks" (Rogers, 1983a), and facilitates organization innovation by opening pathways of communication. The charter school exhibited low levels of interconnectedness, with a lack of knowledge and internal communication about existing HIV prevention efforts in the school among participants. Individuals involved in the program adoption pathway for Examples 2 and 3 (see Discussion of Research Question 1) were unaware that anyone else at the school was working on initiatives related to HIV prevention. Additionally, though the principal was named by participants as the individual who should be most knowledgeable about what program is implemented in the school, they were unaware of the various initiatives occurring in the school at the time of the interview. The lack of interconnectedness in the school resulted in the loss of opportunities for collaboration, as well as a loss of potential community-wide support for concerted efforts to combat HIV.

Organizational Slack. Organizational slack refers to the availability of uncommitted resources that an organization may allocate to a new innovation. This factor was one of the most salient barriers to the successful adoption of new HIV prevention programming. All participants mentioned lack of resources in the form of funding, time, knowledge, and available staff. Lack of resources was mentioned as a significant barrier for both charter and non-charter schools. However, one participant suggested that resources provided by an external source, such as a non-profit or partnering organization, may be sufficient to overcome the resource barrier.

Size. Size of an organization is strongly associated with innovativeness of an organization, but was not directly mentioned in this study. However, size often serves as a standin measure for other characteristics such as resources and structure, which were mentioned frequently throughout the interviews.

Findings Beyond the Theory of Diffusion of Innovations

Another important finding encountered during the study involved variations in the conception of HIV prevention. HIV is a highly stigmatized topic, and was brought up mostly in conjunction with the topic of sexual health education in schools. However, HIV prevention education can and should extend beyond discussion of sexual health. Staff at the school were already putting this into practice by including discussions of sexually transmitted diseases in terms of healthy relationships or health empowerment. However, when asked about current HIV prevention programming, these participants did not recognize that what they were doing could be considered HIV prevention programming. A narrow understanding of what HIV prevention looks like, in combination with a lack of understanding of the need for HIV prevention, can impede naturally occurring opportunities for HIV prevention in schools. This lack of a concrete definition in this study stems, in part, from the lack of institutionalized and well-defined HIV prevention programming in the APS system. While responses to the interview questions may have changed in relation to discussion of different specific programming options, the nature of this study and the definitions used reflect a reality of HIV programming in Atlanta schools. There are very few schools with institutionalized HIV prevention programming initiatives, and this exploratory research may help with creating more useful definitions in the future.

Strengths and Limitations Strengths and Limitations

Theory

Though the findings of this study provide valuable insight into pathways for HIV prevention program adoption in schools, there are several important factors that must be taken into consideration when interpreting these findings. One is its basis in theory, which presents as a strength, although it did not address all the important constructs identified. Despite its limitation, the Theory of Diffusion of Innovations provided a suitable framework for exploring the adoption of HIV prevention education in schools. A combination of constructs from the individual and organization-level DOI models work cohesively to provide a clearer picture of what ultimately is an extremely complex and dynamic process.

The Community Readiness Model was developed as a survey and is meant to be used as a quantitative tool. However, since only the Leadership Readiness questions were used, the validity of the survey does not stand in this study. Additionally, while scores could have been calculated using only the Leadership Readiness questions, many participants did not understand the questions, or provided short answers that could not be elongated with probing. These misunderstandings were most likely due to the fact that this study sought to identify "leadership" figures both within and outside of traditional leadership structures. However, attempts to make that distinction within the Leadership Readiness questions proved to be cumbersome and confusing for participants. While the Community Readiness Model did not fit well with this study, it may be an effective tool for future research in which individuals involved in the adoption process are already clearly delineated.

Study Design

The extent of the contrast that can be drawn between levels of data in this study is limited by the lack of a non-charter school in the sample. However, a comparison of district and case school data, supplemented by data from the organizations can be used to identify potential

differences and similarities between charter and non-charter schools in the APS system. Additionally, the advantage of an in-depth case study is that it is still possible to conduct comparison studies at a later time.

Methods

This study only included qualitative data from a small sample size (n=10). While these qualitative interviews provided insight into a particularly complex or nuanced topic and a richness of detail, including quantitative data may have increased the reach of the findings. In particular, it may have been helpful to quantify constructs such as HIV knowledge, felt need, and organizational size.

Recommendations

Due to the exploratory nature of these findings and the theoretical focus of the discussion, the recommendations are largely related to use of the Theory of Diffusion of Innovations. In addition, the recommendations address suggestions for future research, and several suggestions related to important considerations for public health practitioners or schools hoping to incorporate HIV prevention into a school setting.

Theoretical

In the original DOI model, the innovation-decision process only involves one person, and therefore is relatively simple in terms of what intervention characteristics influence adoption. However, as we have seen in Research Question 1, organizational innovation adoption is more complex, and involves multiple individuals who serve in multiple roles. The organizational model includes constructs that address characteristics of the leadership, but does not include constructs that address the leadership's *perception of the innovation*, as with the individual model. This lack of consideration may be a result of several barriers to the theory's conception,

including the shift from correlational research to process research, or the difficulty of delineating individual involvement within the organizational adoption process. However, this study demonstrates that, despite the complexity involved, the organizational model should include perception of the innovation as a leadership characteristic construct. In the study, the individual-level constructs of complexity and compatibility were particularly evident. Unfamiliarity or discomfort among the staff with HIV prevention, or with appropriately caring for students with concerns about HIV contribute to the complexity of adoption, as well as a lack of communication within the school about current HIV prevention measures. Past successes with health-based initiatives or external organization partnerships contribute to the perceived compatibility of new HIV prevention programming. Flexible scheduling within the school and staff with autonomy to drive a project also contributed to compatibility.

Additionally, while the organizational innovation model takes into account external characteristics such as availability of resources and organization culture, there was no evidence of a construct that accounts for current circumstance. For example, changes in funding allocations, or external events unrelated to the current innovation, but that force the organization to re-evaluate all priorities, or to turn over multiple leadership positions, may also impact innovativeness of an organization, at least temporarily. Similarly, the important role of partnerships with external organizations demonstrated in this study indicates that an additional related construct may need to be included in the theory.

Researchers looking to use the Theory of Diffusion of Innovations to study the adoption of innovations in complex organizations should emphasize the delineation of individuals involved in the innovation process, in order to bolster their understanding of that process. Researchers should also include constructs that address both organizational characteristics and

individual-level characteristics. Finally, school culture and current events may impact adoption of an innovation, particularly an innovation related to a socially-charged topic such as HIV.

Future research

While it would be beneficial for future studies to maintain a small scale in order to examine, in-depth, the processes through which schools adopt programs, for the purpose of comparison it will be important to conduct case studies of diverse schools, e.g., non-charter schools or schools in varying socioeconomic settings. Due to the paucity of schools in Georgia that have adopted HIV-specific programming, it may be necessary to include schools from multiple districts in the metropolitan Atlanta area. While comparisons may be compromised by the numerous differences between districts, a cross-district comparison would also yield important insights into the differences and similarities in school adoption processes.

Additionally, due to confusion over the definition of HIV prevention programming and the hypothetical nature of the inquiries in this study, future research may benefit from examining the adoption process of one particular HIV prevention initiative. Alternatively, it may be important to provide a definition of the terminology at the beginning of the interview process.

Practical Applications

Based on the complex nature of program adoption in the case school, practitioners who hope to bring new HIV prevention measures to schools must engage with all individuals who will be involved in the entire process, from initiation to implementation. This will be important in order to determine potential obstacles or barriers encountered at different points along the way to adoption and maintenance. These results also suggest that there is a need to educate teachers and other school staff about the wide range of activities involved in HIV prevention. Such education might be offered in the form of continuing education or in-service training. Finally, creating opportunities for networking between personnel from schools and nongovernmental service organizations may help to advance the provision of HIV prevention activities within schools.

Conclusion

While there is still a considerable barriers to be overcome in providing HIV prevention and education for adolescents and young adults, this study is demonstrates that a cultural shift is in progress. HIV, as well as other sexually-related topics, have often been taboo, especially in southern, conservative states such as Georgia. Teachers and administrators all expressed a desire for new HIV prevention initiatives once informed of the potential risks facing their students. The results of this study indicate that the Atlanta Public School community is receptive to new proposals for prevention programming, and that with alterations to current program paradigms, schools may in fact serve as suitable platforms for the dissemination of HIV prevention initiatives.

APPENDIX A: INTERVIEW GUIDE (CASE SCHOOL)

- 1. What is your relationship to the school?
 - a. How are you connected to the school?
 - b. How long have you been connected to the school?
- 2. If you are, or were, a teacher, what courses have you taught?
 - a. How long did you teach those courses?
- 3. What are students typically taught about HIV in your school?
 - a. What topics?
 - b. Approximately how many hours do they spend learning about HIV?
 - c. Who teaches about HIV and HIV prevention?
- Do you think there is a need for an HIV prevention program in Atlanta Public Schools?
 a. What makes you think that?
- 5. If you wanted to implement a new HIV prevention program in the school, who would you consult first?
 - a. Who would you need permission from?
 - b. Who's support would you need?
 - c. Who's support would you want?
 - d. Does anyone have the power to veto the program outright?
 - e. Who could potentially make it difficult for a program to be established?
 - f. Does anyone have the power to approve the program outright?
- 6. Has anyone introduced any health programs or initiatives in the past?
 - a. Who?
 - b. Who helped make the decision to implement it?
- 7. Who do you think was involved in creating the current HIV curriculum in your school?
 - a. Who came up with it?
 - b. Who chose it?
- 8. Who do you think should be in charge of those decisions?
 - a. What do you think makes them qualified to be in charge of those decisions?

For the following questions, I'm going to ask you how the leadership at your school perceives HIV/AIDS prevention. By leadership, I am referring to those who could affect the outcome of

this issue and those who have influence in the community and/or lead the community in helping achieve its goal.

- 9. Who do you think of when you think about 'leadership' at your school?
- 10. Using a scale from 1-10, how much of a concern is HIV/AIDS prevention to this leadership, with 1 being "not a concern at all" and 10 being "a very great concern"?a. Can you tell me why you say it's a ?
- 11. How much of a priority is addressing HIV/AIDS prevention to the leadership?a. Can you explain why you say this?
- 12. I'm going to read a list of ways that leadership might show it's support or lack of support for efforts to address HIV/AIDS prevention. Can you please tell me whether none, a few, some, many, or most leaders would or do show support in these ways? Also, feel free to explain your responses as we move through the list. How many leaders...
 - At least passively support the efforts without necessarily being active in that support?
 - Participate in developing, improving, or implementing efforts, for example, by being a member of a group that is working towards these efforts?
 - Support allocating resources to fund community efforts?
 - Play a key role as a leader or driving force in planning, developing, or implementing efforts? (How do they do that?)
 - Play a key role in ensuring the long-term viability of community efforts, for example by allocating long-term funding?
- 13. Does the leadership support expanded efforts in the community to address HIV/AIDS prevention?
 - a. How do they show this support? For example, by passively supporting, by being involved in developing efforts, or by being a driving force or key player in achieving these expanded efforts?
- 14. Do you think whoever is making decisions regarding HIV prevention education in schools in in touch with the desires of the school community?
 - a. In what ways?
 - b. How do they stay in touch?
- 15. Who else would you suggest I interview about this?

APPENDIX B: INTERVIEW GUIDE (DISTRICT)

- 1. Can you tell me your job title and briefly describe what you do?
 - a. How long have you been at that job?
 - b. Did you ever work at an Atlanta Public School?
- 2. Have you ever been a teacher?
 - a. What courses did you teach?
- 3. Is there a uniform curriculum for health and sex education among Atlanta Public Schools, or does it differ by school?
 - a. Is that the same for charter and non-charter schools?
- 4. Who determines the curricula for the schools?
 - a. Do the schools have any say in the curricula?
 - b. Do the parents have any say in the curricula?
 - c. How often are curricula re-evaluated?
- 5. What does the curricula regarding HIV prevention, testing, and treatment look like in Atlanta Public Schools?
 - a. What topics are covered?
 - b. Is it required to be taught at each school?
 - c. How many hours approximately?
 - d. Is this the same for charter schools?
- 6. If a school wanted to adopt a new HIV prevention program or curricula, who would they need to consult within the APS system?
 - a. Who would they need permission from?
 - b. Whose support would they need?
 - c. Whose support would help?
 - d. Does anyone have the right to say no outright to the school?
 - e. What could potentially make it difficult for a school to adopt a program?
 - f. Does anyone have the power to give permission to the school outright?
- 7. Have any of the APS schools adopted an HIV prevention program or new curriculum in the past?
 - a. Which school?
 - b. Did they work with an organization?
 - i. Which organization?
 - ii. How did that partnership come about (who reached out to who)?

- iii. Do they still do that?
- iv. If not, why did they stop?
- 8. If an organization wanted to work with a school to introduce new HIV prevention education or prevention programs to students, should the organization go directly to the school, or to the APS district?
 - a. Why or why not?
- 9. Do you think the APS district is open to working with organizations to bring new HIV prevention measures to Atlanta Public Schools?
 - a. How much of a concern do you think HIV/AIDS prevention is to APS leadership?
 - b. How much of a priority is addressing HIV/AIDS prevention to leadership?
 - c. How many leaders at APS would...
 - i. At least passively support the efforts without necessarily being active in that support?
 - ii. Participate in developing, improving, or implementing efforts, for example, by being a member of a group that is working towards these efforts?
 - iii. Support allocating resources to fund community efforts?
 - iv. Play a key role as a leader or driving force in planning, developing, or implementing efforts? (How do they do that?)
 - v. Play a key role in ensuring the long-term viability of community efforts, for example by allocating long-term funding?
 - d. Does the APS leadership support expanded efforts in the community to address HIV/AIDS prevention?
 - i. How do they show this support? For example, by passively supporting, being involved in developing efforts, or by being a drive force or key player in achieving these expanded efforts?
- 10. Do you think whoever is making decisions regarding HIV prevention efforts in schools is in touch with the desires of the community?
 - a. Do you think the decisions reflect those desires?
 - b. In what ways?
 - c. How do they stay in touch?
- 11. Who else would you suggest I interview about this?

APPENDIX C: INTERVIEW GUIDE (ORGANIZATION)

- 1. Can you tell me a little bit about your organization?
 - a. What is your organization's mission?
 - b. What type of organization are you?
 - c. How long have you existed?
- 2. Can you tell me your job title and briefly describe what you do?
 - a. How long have you been with this organization?
 - b. How long have you been at that job?
- 3. Has your organization ever done any work with Atlanta Public Schools?
 - a. Which ones?
 - b. What type of work?
 - c. How did that partnership arise?
 - i. Who reached out to who? (did you go through the individual school or the district?)
 - ii. What was the arrangement?
 - iii. How long did it last?
 - iv. If it ended, why?
- 4. Who was your point of contact at the schools?
- 5. If you created/taught a curriculum or program for an Atlanta Public School, what did that curriculum/program include?
 - a. Did the school help create the curriculum/program?
 - b. Did the parents help create the curriculum/program?
 - c. Who else was involved?
- 6. If you created a program for the school, what did that program involve?
- 7. What kind of obstacles did you face in:
 - a. Introducing the curriculum/program to the school?
 - b. Implementing the curriculum/program to the school?
 - c. Maintaining the curriculum/program or the partnership?
- 8. What helped facilitate the successes of the curriculum/program?
- 9. Who did you have to get permission from to work with the school?

- a. Who did they have to get permission from?
 - i. Why did you not go to that person first?
 - ii. Did you have any contact with the person in charge of giving final approval?
- 10. Who at the school was involved in implementing the program or curriculum from your organization?

For the following questions, I'm going to ask you how the leadership at the schools you've worked with perceive HIV/AIDS prevention. By leadership, I am referring to those who could affect the outcome of this issue and those who have influence in the community and/or lead the community in helping achieve its goals.

- 11. Who do you think of when you think about 'leadership' of public schools?
- 12. Using a scale from 1-10, how much of a concern is HIV/AIDS prevention to this leadership, with 1 being 'nota concern at all' and 10 being 'a very great concern'?a. Can you tell me why you say that?
 - a. Can you tell me why you say that?
- 13. How much of a priority is addressing HIV/AIDS prevention to the leadership?a. Can you explain why you say that?
- 14. I'm going to read a list of ways that leadership might show it's support or lack of support for efforts to address HIV/AIDS prevention. Can you please tell me whether none, a few, some, many, or most leaders would or do show support in these ways? Also, feel free to explain your responses as we move through the list.

How many leaders...

- At least passively support the efforts without necessarily being active in that support?
- Participate in developing, improving, or implementing efforts, for example, by being a member of a group that is working towards these efforts?
- Support allocating resources to fund community efforts?
- Play a key role as a leader or driving force in planning, developing, or implementing efforts? (How do they do that?)
- Play a key role in ensuring the long-term viability of community efforts, for example by allocating long-term funding?
- 15. Does the leadership in APS or individual schools support expanded efforts in the community to address HIV/AIDS prevention?

- a. How do they show this support? For example, by passively supporting, by being involved in developing efforts, or by being a driving force or key player in achieving these expanded efforts?
- 16. Do you think whoever is making decisions regarding HIV prevention education in schools is in touch with the desires of the school community?
 - b. In what ways?
 - c. How do they stay in touch?
- 17. Who else would you suggest I interview about this?

APPENDIX D: INFORMED CONSENT

Emory University Consent to be a Research Subject

<u>**Title</u>**: Use of the Theory of Diffusion of Innovations to Explore Decision-Making Units for Adoption of HIV Prevention Programs in Atlanta Public Schools</u>

Principal Investigator: Zainab Nizam, MPH Candidate, Behavioral Science and Health Education, Emory University Rollins School of Public Health

Funding Source: None

Introduction

You are being asked to be in a research study. This form is designed to tell you everything you need to think about before you decide to consent (agree) to be in the study or not to be in the study. It is entirely your choice. If you decide to take part, you can change your mind later on and withdraw from the research study.

Before making your decision:

- Please carefully read this form or have it read to you
- Please ask questions about anything that is not clear

You can take a copy of this consent form, to keep. Feel free to take your time thinking about whether you would like to participate. By signing this form you will not give up any legal rights.

Study Overview

The purpose of this study is to provide insight into the decision-making process that facilitates the adoption of HIV prevention programs in high schools in the Atlanta Metro Area. The objective of this study is to discover who, within the structure of an Atlanta public school, has/have the power and authority to influence a decision about whether or not to adopt an HIV prevention program for students. This research will inform future public health practitioners who hope to work with Atlanta Public Schools.

Procedures

During this study, you will be asked to participate in one interview with the primary investigator (Zainab Nizam). The interview will last approximately 40 minutes, and will take place at a location of the participant's choosing. Participation in the study will be complete once the interview is concluded.

Risks and Discomforts

This study presents minimal risks to participants involved. Participants will face no risk of injury or bodily harm. Though the study presents minimal risks, the subject matter of HIV education in schools can be sensitive in many communities, and figures of authority may feel that their social standing within the community or in their place of work is threatened by having their name associated with the study and their stated opinions. In order to minimize this risk, participant names will not be used or published, and participants will not be informed of who referred them for the study, or of who the other participants

are. Questions in the interview guide do not ask for incriminating or expository information regarding the participants' place of employment or employer.

Benefits

This study is not designed to benefit you directly. This study is designed to learn more about who, within the Atlanta Public School community, influences and makes decisions about adopting new HIV prevention curricula. The study results may be used to help others in the future.

Compensation

You will not be offered payment for being in this study.

Confidentiality

Certain offices and people other than the researchers may look at study records. Government agencies and Emory employees overseeing proper study conduct may look at your study records. These offices include the Emory Institutional Review Board. Emory will keep any research records we create private to the extent we are required to do so by law. A study number rather than your name will be used on study records wherever possible. Your name and other facts that might point to you will not appear when we present this study or publish its results.

Study records can be opened by court order. They may also be produced in response to a subpoena or a request for production of documents.

Voluntary Participation and Withdrawal from the Study

You have the right to leave a study at any time without penalty. You may refuse to answer any questions that you do not wish to answer. If you choose to leave the study, you may request that some or all of the information recorded in your interview be withdrawn from the study.

Contact Information

Contact Zainab Nizam at 678-977-3918 or z.g.nizam@gmail.com:

- if you have any questions about this study or your part in it,
- if you have questions, concerns or complaints about the research

Contact the Emory Institutional Review Board at 404-712-0720 or 877-503-9797 or irb@emory.edu:

- if you have questions about your rights as a research participant.
- if you have questions, concerns or complaints about the research.
- You may also let the IRB know about your experience as a research participant through our Research Participant Survey at http://www.surveymonkey.com/s/6ZDMW75.

<u>Consent</u>

Please, print your name and sign below if you agree to be in this study. By signing this consent form, you will not give up any of your legal rights. We will give you a copy of the signed consent, to keep.

Name of Subject			
Signature of Subject	-	Date	Time
Signature of Person Conducting Informed Consent Discussion	-	Date	Time

APPENDIX E: CODEBOOK

Code Hierarchy

- Charter vs. Non-Charter Schools
- Provision of HIV Programming
- Decision-Making Units (DMU)
- Distribution of Influence
 - Point of Introduction
 - Point of Contact
 - Driving Force
- Felt Need
- Leadership Readiness
- Resources
- Ease of Implementation
- Training
- Staff Workload
- Community Buy-in
 - Personal Resonance
- Logistics

Codebook

Code	Definition	
Interview characteristics	Details about the individual being interviewed, including:	
	- relationship to school	
	- professional history	
	- personal stories	
Interview recommendations	Suggestions made during interview about other people that	
	should be included in the study	

School Characteristics	Includes:			
	- Description of schools or school system			
	- Goals/objectives/vision of a school or district			
	School history			
Who has the power to decide whether or not HIV prevention programs are adopted into Atlanta Public Schools?				
Charter vs. Non-Charter	Includes:			
Schools	- Differences between Charter and Non-Charter schools			
	- Qualities unique to either Charter or Non-Charter Schools			
Provision of HIV	Includes mention of previous, current or future HIV			
Programming	prevention programming			
Decision-Making Units	Who has the power to accept or reject an initiative at any point in the process of adoption or implementation			
	Characterized by someone explicitly giving or withholding permission			
Desired DMU	Who should have the power to make decisions (personal beliefs) regarding program adoption			
Distribution of Influence	Individuals or groups outside of the decision-making unit			
	involved during the adoption process			
	Includes:			
	- Members of the community			
	- Individuals/groups outside the community			
Program Introduction	Description of how previous, current or future programming was/will be introduced; includes:			
	- Who introduced the programming			
	- Why it was introduced			
	- Who it was introduced to			
Point of Contact	The person you would want to contact for each phase of			
	adoption of an initiative; includes people who have been			
	contacted in the past, or might be contacted in the future			
Driving Force	Individuals or groups who act as a driving force/provide			
	momentum for the adoption of an initiative			
	r or not HIV prevention programs are successfully introduced			
and adopted into Atlanta Pub				
Felt Need	Mention of:			
	- Need for HIV prevention programming			
	 Concern (or lack of concern) about HIV Prioritization of HIV within schools or school 			
	- Prioritization of HTV within schools of school systems			
Leadership Readiness	Encompasses all leadership readiness scale criteria			
	- who is included in the leadership			

	- how much of a concern is HIV		
	- how much of a priority is HIV prevention		
	- how many leaders would passively support efforts		
	- how many leaders would actively support efforts		
	- how many leaders would allocate short term/long		
	term resources		
	 how many leaders would drive efforts 		
	- how many leaders currently support efforts		
Barriers and Facilitators	Factors (previously encountered or anticipated) that inhibit		
	or facilitate adoption of new HIV prevention programming;		
	includes things that were "liked" or "disliked" in previous		
	programming		

REFERENCES

AIDS.gov. (2014). HIV/AIDS 101: Signs and Symptoms. from <u>https://www.aids.gov/hiv-aids-basics/hiv-aids-101/signs-and-symptoms/</u>

AIDSVu. from http://aidsvu.org/map/

Centers for Disease Control and Prevention. (2014a). HIV Surveillance Report, 2014 (D. o. H.

A. Prevention, Trans.) (Vol. 26).

- Centers for Disease Control and Prevention. (2014b). Youth Risk Behavior Surveillance System. from http://www.cdc.gov/HealthyYouth/yrbs/index.htm
- Centers for Disease Control and Prevention. (2015, September 29, 2015). HIV in the United States: *At a Glance*. from <u>http://www.cdc.gov/hiv/statistics/overview/ataglance.html</u>
- Centers for Disease Control and Prevention. (2016a, April 8, 2016). HIV Among Youth. from http://www.cdc.gov/hiv/group/age/youth/
- Centers for Disease Control and Prevention. (2016b, March 16, 2016). HIV/AIDS. Retrieved April 21, 2016, from http://www.cdc.gov/hiv/basics/statistics.html
- DiClemente, R. J., Salazar, L. F., & Crosby, R. A. (2007). A Review of STD/HIV Preventive Interventions for Adolescents: Sustaining Effects Using an Ecological Approach. *Journal* of Pediatric Psychology, 32(8), 888-906. doi: 10.1093/jpepsy/jsm056

Georgia Department of Public Health. (2013). HIV Surveillance Update.

Guttmacher Institute. (2015). State Policies in Brief: Sex and HIV Education.

Guttmacher Institute. (2016). State Policies in Brief: Sex and HIV Education.

Ito, K. E., Gizlice, Z., Owen-O'Dowd, J., Foust, E., Leone, P. A., & Miller, W. C. (2006). Parent Opinion of Sexuality Education in a State with Mandated Abstinence Education: DOes Policy Match Parental Preference? *Journal of Adolescent Health, 39*, 634-641. doi: 10.1016/j.jadohealth.2006.04.022

 Kohler, P. K., Manhart, L. E., & Lafferty, W. E. (2008). Abstinence-Only and Comprehensive Sex Education and the Initiation of Sexual Activity and Teen Pregnancy. *Journal of Adolescent Health, 42*(4), 344-351. doi:

http://dx.doi.org/10.1016/j.jadohealth.2007.08.026

Oberg, C., Hogan, M., Bertrand, J., & Juve, C. (2002). Health care access, sexually transmitted diseases, and adolescents: Identifying barriers and creating solutions. *Current Problems in Pediatric and Adolescent Health Care, 32*(9), 320-339. doi:

http://dx.doi.org/10.1067/mps.2002.128719

- Ogusky, J., & Tenner, A. (2010). Advocating for Schools to Provide Effective HIV and Sexuality Education: A Case Study in How Social Service Organizations Working in Coalition Can (and Should) Affect Sustained Policy Change. *Health Promotion Practice, 11*(1), 34s-41s. doi: doi: 10.1177/1524839910362314
- Ott, M. A., & Santelli, J. S. (2007). Abstinence and Abstinence-Only Education. *Current Opinion in Obstetrics and Gynecology*, 19(5), 446-452. doi:

10.1097/GCO.0b013e3282efdc0b

Public Policy Polling. DeKalb Count, Ga, Survey Results. GCAPP.

Rogers, E. M. (1983a). Diffusion of Innovations (3rd ed., pp. 190). New York: The Free Press.

Rogers, E. M. (1983b). Diffusion of Innovations (3rd ed., pp. 11). New York: The Free Press.

Rogers, E. M. (1983c). Diffusion of Innovations (3rd ed.). New York: The Free Press.

- Stranger-Hall, K. F., & Hall, D. W. (2011). Abstinence-Only Education and Teen Pregnancy Rates: Why We Need Comprehensive Sex Education in the U.S. *PLOS One*. doi: <u>http://dx.doi.org/10.1371/journal.pone.0024658</u>
- Tri-Ethnic Center for Prevention Research. (2014). Community Readiness for Community Change: Tri-Ethnic Center Community Readiness Handbook (2nd ed.): Tri-Ethnic Center for Prevention Research.
- US House of Representatives Committee on Government Reform Minority Staff. (2004). The Content of Federally Funded Abstinence-Only Education Programs.

Yin, R. K. Case Study Research: Design and Methods (Vol. 5): SAGE Publications.

Zanoni, B. C., & Mayer, K. H. (2014). The Adolescent and Young Adult HIV Cascade of Care in the United States: Exaggerated Health Disparities. *AIDS Patient Care and STDs*, 28(3), 128-135. doi: doi: 10.1089/apc.2013.0345