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SCHOOL SOCIAL WORKERS' ATTITUDES TOWARDS STUDENTS WITH HIV/AIDS

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SCHOOL SOCIAL WORKERS' ATTITUDES TOWARDS STUDENTS WITH HIV/AIDS

By

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ABSTRACT

SCHOOL SOCIAL WORKERS' ATTITUDES TOWARDS CHILDREN WITH HIV/AIDS

By

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This study investigated the attitudes of school social workers toward children with HIV/AIDS. The literature suggests that attendance at professional workshops on HIV/AIDS, and exposure to people with HIV/AIDS is positively related to attitude. The sample consisted of 24 school social workers from a large urban school district in the state of New York.

Attitude was measured by the sum of the attitude score of the school social workers on the School Professionals Attitude Towards AIDS (SPATA) instrument, a self report questionnaire. Attendance at professional workshops and exposure to persons with HIV/AIDS was measured by the participants' self-report responses on the SPATA. The independent sample t test and multiple regression were used to test the hypotheses.

The first hypotheses predicted that school social workers attendance at professional workshops on HIV/AIDS will be positively related to attitude as measured by the School Professionals' Attitude Towards AIDS Instrument. This hypothesis was not supported by the study findings. Attendance at professional workshops was not found to account for any significant variance in the attitude score of the school social workers as measured by the SPATA.

The second hypotheses predicted that exposure to persons with HIV/AIDS will be positively related to attitude as measured by the SPATA. This Hypothesis was supported by the results. Significant differences in the attitude score of the school social workers

who have and have not had exposure to people with HIV/AIDS were found. Those with exposure had a significantly higher mean attitude score than those school social workers without exposure to persons with HIV/AIDS.

Implications for social work practice, policy, and education were discovered through this study. Social workers have a vital role in providing social services and other services to people with HIV/AIDS. The literature suggested that professional workshops and trainings support the need for continued education, as social workers that had greater knowledge reported higher levels of comfort in providing services to people with HIV/AIDS. Professional workshops and trainings should not only address factual information, but include knowledge of the disease, the identification of prejudices, biases and attitudes with emphasis of prevention and transmission is recommended. The literature also suggest that exposure to people with HIV/AIDS significantly impacts attitude and can result in a reduction of negative attitudes and an increase in more positive attitudes. The information gleaned from this study can contribute to the development and implementation of future educational opportunities for social workers related to HIV/AIDS by making them more aware of their own beliefs and attitudes. It is hoped that as a result of this study social workers will continue to advocate for public policy that encourages AIDS education, policies that do not perpetuate prejudice and policies and programs that meet the special needs of clients with HIV/AIDS.

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BACKGROUND OF THE STUDY

Organization of the Study

This study consists of five chapters. Chapter I includes the introduction, background of the study, problem statement, significance of the study, overview of the methodology, limitations/delimitations of the study, definitions of key terms and the organization of the study. Chapter II addresses the literature review related to the theoretical literature, components of attitude, and the effect of trainings and workshops and exposure to persons with HIV/AIDS. Chapter III reviews the methodology and procedures that were used to conduct the study, which includes a discussion of the research site, the study's participants, instrumentation, procedures followed, and statistical analyses. Chapter IV consists of the data analysis and discussion of pertinent results. Chapter V includes the discussion of the results, the summary, conclusion, and recommendations for further study.

Introduction

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome are pandemic. According to the World Health Organization/UNAIDS (2005, December) an estimated 40.3 million people are living with HIV and, of that number, 2.3 million are children under 15 years of age. In the United States of America, it is estimated that the number of people living with HIV (as of the end of 2003) is in excess of one million. The total number of children under the age of 13 living with HIV in the United States is 1,683, and 1,942 are living with AIDS (HIV/AIDS Surveillance Report Vol. 15, CDC, 2003).

The Centers for Disease Control and Prevention (2004) estimates, that there are a cumulative total of 9,443 children under the age of 13 who have been diagnosed with AIDS. In 2005, there were close to five million new infections of HIV, and an estimated 2.6 million adults and 570, 000 children under the age of 15 died as a result of AIDS-related diseases (WHO/UNAIDS, 2005). The facts are clear that as more people become infected with HIV, more people will die from AIDS-related diseases. HIV/AIDS affects not only isolated people, but everyone is directly or indirectly living with HIV/AIDS (Fan, Conner, & Villarreal, 2004).

Children with HIV/AIDS are living longer and entering schools. School districts, parents, teachers, students and the community have rejected these children and their families: children with HIV/AIDS have been barred from school, ostracized and villainized. Many of these children have experienced rejection because of the stigma associated with having HIV/AIDS; this has resulted in strong emotional reactions, and negative attitudes. These factors also help to fuel discriminatory behavior. These children have been stigmatized and discriminated against because of their HIV+ status, and, if this cycle of discrimination toward students with HIV/AIDS is going to end, it is imperative to examine the variables that affect behavior and attitudes toward school-aged children with HIV/AIDS.

This study examines the relationship between workshops and trainings on HIV/AIDS and exposure to persons with HIV/AIDS and the attitude of school social workers toward children with HIV/AIDS. The study used Cognitive Dissonance Theory as the theoretical framework and survey research as the methodology. The purpose

served by this investigation is to aid in the development of programs and policies that meet the needs of children with HIV/AIDS.

Schools, the School Social Worker, and Children with HIV/AIDS

Schools have the ability to reach 95% of the nation's youth (Kerr, Allensworty, & Gayle, 1989; Kerr, 1989; Keough & Seaton, 1988; Kirby & DiClemente, as cited in DiClemente & Peterson, 1994). Historically, schools have been viewed as one of the most effective means of reaching the young and, through them, their parents. As the incidence of school-aged children with HIV/AIDS increases (Beverly & Thomas, 1997), schools must provide mandated educational programs and services. School-aged children with HIV/AIDS are living longer and require adequate education and supplemental services to meet their needs. Evidence suggests that these children have physical, social, psychological, and emotional needs that are unique to their sero-positive status (Bor, Miller, & Goldman, 1992). Many of these children have experienced rejection and social ostracism because of the stigma associated with having HIV/AIDS.

The social work profession has a history of providing services to people who are underprivileged and socially ostracized. Social workers have taken a major role in providing social services, counseling, and other services to individuals with HIV infection (Diaz & Kelly, 1991). School social workers are no exception, as they have a role in providing services to children with HIV/AIDS. Children with HIV/AIDS may experience a myriad of problems, including social ostracism that is uniquely related to their HIV status.

School districts have many professionals from various disciplines to meet the needs of the students. Beyond the school administrator and the school nurse, the school

social worker is a source of social support available to meet the needs of the children with HIV/AIDS. HIV/AIDS is not only a medical issue, but also requires extensive psychosocial interventions as well as social services. School social workers work with students and their families, oftentimes discussing some of the most intimate and personal aspects of their life. School social workers have a vital role in the schools, and they are the ones who are frequently called upon when a student is experiencing social, emotional, or behavioral problems (School Social Workers Publications, 2004).

A number of studies have explored AIDS-related attitudes of target groups (Riley & Greene, 1993; Colomb, 1995; Greenland, Masser & Prentice, 2001). Those target groups most notably include nurses and other health care professionals. Studies conducted about urban school social workers are scarce. This study will add to the body of literature on AIDS-related attitudes and to the body of literature that is needed in the social sciences and in education. In addition, attitudes toward children will be examined and, according to UNAIDS/WHO (2004), a greater investment (of resources) is required to address the needs of children.

The Study

The study was conducted using a questionnaire/survey instrument. Survey research was utilized as Fan, Conner & Villarreal (2004) found that we need accurate survey research on HIV/AIDS-related knowledge, attitudes, and practices among different segments of the populations. We need to assess changes in knowledge, attitudes, and practices related to HIV/AIDS. There is a need to improve survey research in an effort to develop effective HIV programs.

Research Questions

The study addressed the following research questions:

1. Does New York Department of Education have an HIV/AIDS policy in effect?
2. Does New York Department of Education have an established HIV/AIDS education program?
3. Have school social workers taken part in any professional workshops on HIV/AIDS?
4. Have school social workers encountered persons with HIV/AIDS-related conditions in their respective schools?

Children with HIV/AIDS

In 1982, at a San Francisco Hospital, children began to present with symptoms of HIV/AIDS. For example, a 17-month-old infant presented with infection after infection. The infant had candidiasis, severe hepatitis, a swollen spleen, and a bizarre opportunistic infection (Mycobacterium avium intracellular) rarely seen in the United States. Doctors concluded that the baby had AIDS (Shilts, 1987, 1988). Additional reports of infants with AIDS were reported by the Centers for Disease Control when, for the second consecutive week, the Morbidity and Mortality Weekly Report contained a report titled, "Unexplained Immunodeficiency and Opportunistic Infections in Infants New York, New Jersey, and California" (December 17, 1982). According to the Centers for Disease Control (CDC), a total of 3,635 children are currently living in the United States with HIV/AIDS. Vertical transmission from mother to child accounts for 95% of all new infections in children (Essex, Mboup, Kanki, Marlink, Tlou, & Holme, 2002).

The major exposure categories for pediatric HIV/AIDS include: 1) hemophilia/ coagulation disorders, 2) mother with/at risk for HIV infection, 3) receipt of blood

transfusion, blood components, or tissue, or 4) undetermined (CDC as found in Cohen & Durham, 1993). Hemophilia is a medical stigma because of its close association with AIDS. HIV entered the lives of persons with hemophilia through tainted blood products in the 1980s. Initially persons with hemophilia were greatly affected by HIV with as many as 89% of hemophiliacs infected with HIV (Shilts, 1987, 1988). Many of these children have experienced rejection and social ostracism because of the stigma associated with having HIV/AIDS. For example, Ryan White is a well-known person who experienced such rejection and ostracism. "He was a hemophiliac, he had AIDS. His fight to become socially acceptable, to attend school and to have the freedom to leave his home for a walk without ridicule made Ryan a national hero" (Stine, 2003, p. 448). Ryan suffered most from the indignities, lies, and meanness of his classmates and his classmates' parents. Ryan White died on April 8, 1990, at 18 years of age. Ryan contracted HIV as a result of receiving blood and/or blood products. Children are infected with HIV by other routes of transmission.

Children who are vertically infected with HIV/AIDS are born to mothers who are HIV+ and who are themselves already stigmatized. These children are born to mothers who inject drugs or who are sex partners of injecting drug users or of men who have sex with men. Other children are born to mothers who are sex partners of transfusion recipients or are partners of people with hemophilia.

A small proportion of these children are born to mothers who are the recipient of blood products or of unknown risk. Additional routes of HIV transmission for mothers include heterosexual transmission, artificial insemination, and female to female

transmission. Most cases (58%) of perinatal transmission have a tie to persons who inject drugs (CDC, as found in Campbell, 1999).

The Role of Race, Class, Gender, and Culture

Many of these children may bear the burden of the stigma and the risk of contracting HIV/AIDS from a mother who is already stigmatized. The mother oftentimes is poor and lives in the inner city, with a disproportionately high concentration of HIV/AIDS among women who are African American and Hispanic/Latino (Campbell, 1999). Many of these children are born to poor women of color, who are already stigmatized, and affected by race and class oppression.

The majority of these children also suffer the multiple impacts of race and class oppression in the form of inadequate health care and support services. These children may be placed in an overburdened and underfinanced foster care system. They may lack Medicaid coverage for home or community-based health care, and they may experience a lack of support from their nuclear and extended families with the option of very few group homes (Schneider as found in Ulack & Skinner, 1991).

An overwhelming majority of children under the age of 13 with HIV/AIDS have parents who inject drugs. Children who test positive for drugs at birth may be separated from their parents. These children who may be drug addicted and HIV+ are difficult to place because of their special needs. For those children taken in by their family members, friends, or the foster care system, they may eventually join the ranks of homeless children (Campbell, 1999). For example, in June 1983 a baby girl named Diana was brought to the pediatric immunology clinic in New York with all the classic symptoms of infant AIDS. Diana had experienced growth delays during the first weeks

of life and wasting syndrome which she and her brother both experienced. The parental profile was familiar with both parents being intravenous drug users. The mother had swollen lymph nodes. The disease had taken root among the junkies of the ghettos, where sharing hypodermic needles was considered common. This helped to create a new class of victims among the children of women who were infected either through their own drug use or through sexual contact with the baby's drug-addicted father. Diana and her older brother were both eventually abandoned at the hospital (Shilts, 1987, 1988). The children with HIV/AIDS are at a distinct disadvantage.

Women (and their children) with HIV also have been at a disadvantage because they are often poor minorities. Basic survival needs (food and shelter) may take precedence over health care needs. Women oftentimes find out about their HIV+ status during pregnancy or after a male partner tests positive (Patton as found in Campbell, 1999). A woman's knowledge of her HIV status is often tied to pregnancy or to the testing of her male partner.

Children who are born to women who are HIV+ are likely to be the inadvertent victims of gender inequality, as gender plays a role in the transmission of HIV/AIDS. The unequal status of women and girls places them at greater risk for HIV infection. The characteristics of women, (i.e., submissive, passive, docile, and dependent) may undermine women's intentions and their attempts to adopt safer sex practices. Widespread inequalities including social, cultural, and human security factors place women and girls at greater risk for HIV infection, and, as a result of the unequal social statuses of men and women, negotiations between them for safer sex practices are more complex (Campbell, 1999). Sexual abuse and other forms of abuse against women and

girls increase their risk of HIV infection. Societal norms encourage men to engage in behaviors that put their health at risk, as well as placing their intimate partner and their unborn child's health at risk also (UNAIDS/WHO, 2005).

Culture may also have an influence on gender roles. For example, the power balance in male-female relationships in Hispanic/Latino culture influences sexual behavior. In traditional Latino cultures, husbands sometimes have the right to make decisions about contraception, and, if a woman requests that her partner use a condom, she may be stigmatized as morally loose. Research has shown that being assertive about condom use may place women at risk of verbal and physical abuse, as women are frequently victims of domestic violence and domestic sexual abuse. In another example, Campbell (1999) asserts that in African-American culture, eligible men may be viewed as being in short supply, because of high rates of homicide, incarceration, heart disease, and AIDS. Drug use and unemployment further compound this shortage of marriageable African-American men. Therefore, women may be willing to tolerate their partners' infidelity, which places them at greater risk of HIV infection.

Women who are infected are often disenfranchised and dispossessed, and a higher proportion of them are from traditionally underserved and disadvantaged populations. In addition, many of these women with HIV are injecting drug users who may barter sex for drugs; this places them at greater risk for HIV infection (Campbell, 1999). Prostitutes, drug users, poor people (social class), and people of color (race) are already stigmatized. A child born to someone with these characteristics may indeed bear the burden of the stigma of HIV. Research does demonstrate that arbitrary and even non-conscious links to

personal culpability associated with an illness can serve to stigmatize (Green & Sobl, 2000).

Disease management is also unique for women, as women have historically experienced a double standard of treatment. Women have not been allowed to take greater risks in the hope of obtaining effective treatments. Men have been allowed to participate in clinical trials, while women have been excluded from doing so. This double standard has hindered the development of effective management for women.

African Americans and Hispanics/Latinos have not shared the same access as non-Hispanic whites to clinical trials. For example, white men have the highest rates of receiving AZT therapy and PCP prophylaxis, and African-American women have the lowest, even when their immune status is the same (Kurth as found in Campbell, 1999). HIV/AIDS predominately affects the inner city poor, with a disproportionately high concentration among African-American and Latino women (Campbell, 1999).

Poverty is at the center of the intersection of gender, race, and class. The stress and problems encountered by the poor may actually contribute to their HIV risk (Campbell, 1999). For example, to poor people HIV disease may seem like a distant threat that ranks below their immediate survival needs on a list of concerns. To the poor person who is on drugs, the need for the drug may supersede the need to find a clean needle, or to sterilize a previously used needle. This behavior may place the poor person at greater risk for HIV infection.

Barriers to Support and Treatment

Stigma and discrimination are two of the greatest barriers to preventing adequate support and treatment for persons with HIV/AIDS (UNAIDS/WHO, 2003). The

integrative social psychological theory of how people react to HIV/AIDS explains how the stigma of HIV/AIDS influences the thoughts, feelings, and attitudes of individuals (Fralble, Blackstone, Scherbaun 1990, as cited in Pryor & Reeder, 1993). The stigma of HIV/AIDS may remind people of their own vulnerability (fear of contagion and of death), and people may fear acquiring a courtesy stigma (i.e., stigma shared by those closely associated with the person with HIV/AIDS) in the minds of others (Pryor & Reeder 1993). Historically, there is a frequent occurrence of identifying certain sufferers of a disease as moral infidels and others as innocent victims. Part of the negative effect evoked by a child who has HIV/AIDS is related to the stigmatized feelings people may have about homosexuality (Rogers & Ginzberg, 1989) and minorities (Pryor & Reeder, 1993) that the child brings to mind. In the United States today, society condemns homosexuals, minorities, and injecting drug users who suffer from AIDS. The stigma associated with HIV may be so severe because it is linked to other stigma, such as prejudice against homosexuals, intolerance of drug use, hostility toward minorities, and fear of death (Green & Sobl, 2000; Keough & Seaton, 1988; Crandall 1991 as cited in Pryor & Reeder, 1993). HIV/AIDS stigma is described as a social contaminant that spoils the identity of the bearer and labels the person as inferior or bad (Pryor & Reeder, 1993).

Social contamination is an integral property of HIV-related stigma. Transmission beliefs and attitudes are important in predicting the reaction to people with HIV/AIDS. People's emotional response to stigma may reflect disgust, and other emotional reactions may be evoked in the form of prejudice. HIV-related stigma may parallel how people have responded historically. People may choose to respond in a moralistic manner that is

to condemn those who are infected with a sexually-transmitted disease and to quarantine them. While, on the other hand, people may choose a more pragmatic approach. They choose to treat the sexually transmittable disease (HIV) as a public health problem and try to reduce incidence and to treat those who are infected (Pryor, Reeder, & Landau, 1999).

Pryor, Reeder, & Landau (1999) found that stigma is a socially constructed deviance label which emerges as a result of social reactions to attributes (deviant acts). Stigma is a mark of shame (Pryor, Reeder, & Landau, 1999), and HIV stigma stems from fear. The stigma of HIV is associated with sex, disease, and death. It is also associated with sex work and behaviors that may be forbidden, taboo, and illegal. Stigma taps into prejudices against those who are living on the fringes of societal norms and those who are excluded from mainstream society. HIV stigma further marginalizes those who are vulnerable to HIV infection (UNAIDS/WHO, 2005).

Stigma implies an undesirable "differentness" (Jones et al., 1984 as cited in Pryor and Reder, 1993). Seropositivity is one of the most stigmatizing health conditions known. Illnesses that are contagious and associated with peril are associated with negative societal reactions. HIV/AIDS is perceived as contagious and is associated with an unaesthetic and undesirable death. HIV/AIDS is a source of stigma because it is both an incurable and life-threatening disease (Greenland, Masser, and Prentice, 2001). Research suggests that contact with people who are HIV+ is associated with strong emotional reactions (Herek and Capitanio, 1998). The existence of such anxiety is likely to contribute to a negative attitude about HIV/AIDS and an unwillingness to interact with people who have HIV/AIDS.

Parents who do not tell school administrators about a child's HIV+ status can deny the child special educational services that may be needed (Bor, Miller, & Goldman, 1992). According to Green & Sobo (2000), the child could experience stigma, either felt or enacted. Felt stigma relates to feelings of shame and oppressive fear enacted by stigma. Enacted stigma refers to a situation in which sanctions are applied to a person with a condition. Parents may fear that the school, community, and other students will reject their child(ren) and expose the child(ren) to discriminatory and hostile behavior. On the other hand, parents of children who are not HIV infected may fear possible transmission to their own children, and, with the connection of the disease to stigmatized individuals, this combination of factors (fear and stigma) contribute to attitudes toward children who are HIV+. A study by Morton and McManus (1986, as cited in Pryor & Reeder, 1993) found that prejudicial attitudes (manifested by medical students) were not related to knowledge about HIV/AIDS but to stigma (related to homosexuals). Stigma and a lack of knowledge are often accompanied by negative attitudes toward persons living with HIV; these factors help to fuel discrimination.

Discrimination is a threat to progress against the HIV/AIDS epidemic. Discrimination involves exhibiting prejudice and bias, not based on individual merit in favor of or against a person or group: it is any behavior toward an individual based on the individual's membership in a particular group (Fan, Ross, and Villarrea, 2004). When a group of individuals is easily identifiable, isolated, and highly stigmatized, prejudice and discrimination are usually open and clear (Fan et al., 2004). Unreasonable alarm and fear about casual contact with individuals perceived as HIV+ has resulted in many instances of discrimination (Institute of Medicine National Academy of Sciences, 1986). For

example, in 1988, in DeSoto County Schools (Arcadia, Florida) three brothers were barred from classes because they had AIDS. They contracted HIV through transfusions to treat their hemophilia. The boys did not exhibit any of the symptoms of HIV/AIDS. The family received death threats, there was a boycott of classes, and rallies were held to prevent the enrollment of these three boys (Reed, 1988). Congress has enacted laws to protect against discrimination and to protect the rights of children and individuals with HIV/AIDS.

The Law

The Americans with Disability Act (1990) and the Rehabilitation Act of 1973, both act to protect the rights of children with HIV/AIDS. Under the Rehabilitation Act of 1973, AIDS is considered a handicap/disability, and the Americans with Disability Act of 1990 extended the definition of disability to cover persons with HIV (Pryor & Reeder, 1993).

Section 504 of the Rehabilitation Act of 1973 prohibits institutions that receive federal funds—this includes most public schools—from denying services or discriminating because of a disabling condition. School officials must not tolerate harassment of a student with HIV infection on school grounds. It also includes anyone who is "regarded as having an impairment." This means that individuals who are merely perceived to have HIV infection, or treated as having the infection, are also protected from discrimination. The regulations drawn up under Section 504, the federal civil rights protection law, mandate that every student with a disability—including every student with HIV infection—be provided a "free, appropriate public education that meets his or her educational needs to the same extent as other students." The law's regulations

generally require that a student with a disability remain in the regular educational environment. They receive the assistance of supplementary aids or services if needed, unless someone can demonstrate that the child cannot be appropriately educated there (DPS Student Health Handbook).

Section 504 defines a student with a disability as any student who 1) has a physical or mental impairment which substantially limits one or more major life activity, which may include caring for oneself, performing manual tasks, walking, hearing, speaking, learning, and working in comparison to the average person in the population, 2) has a record of such impairment, or 3) is regarded as having such an impairment. The school staff shall consider the existence of a handicap under Section 504 when a communicable disease exists (i.e., HIV/AIDS).

If a child meets these criteria, then a 504 plan should be completed by a group of persons knowledgeable about the student, and the parents should have the opportunity to participate and to be represented by counsel. The 504 plan is a means to address the student's unmet needs, to determine modifications, and to address reasonable and appropriate accommodations. Section 504 is a civil rights law that is a general education responsibility. Section 504 seeks to ensure that students with disabilities have an equal opportunity to benefit from educational programs. Students who are 504-eligible should not be excluded from programs and services simply because of their disability.

A thorough review of the literature revealed children with HIV/AIDS have a right to attend school. The American Academy of Pediatrics and the Centers for Disease Control agree that school-aged children with HIV/AIDS should be allowed to attend school (Price, 1986) with only three exceptions. The exceptions are aggressive children

who bite, children who cannot control their bodily excretions, and children with open skin lesions (Kappa Special Report, 1988). A child with HIV infection should be separated from his or her school mates when he or she has an infectious disease (i.e., chicken pox), although caution must be used to ensure the child with HIV infection is not unnecessarily separated from his or her peers. The rare student who bites viciously and repeatedly, drawing blood, has a behavior problem, and their behavior cannot be permitted. Their education program should be altered because of their behavior problem, and not simply because of their HIV status (National Association of State Board of Education, as cited in Detroit Public Schools, Student Health Handbook, 1989). Children with HIV/AIDS have a right to an education, fair non-discriminatory treatment, and supplemental services (i.e., speech, occupational and physical therapy, and school social work services, etc.).

Hypotheses & Theory

The following hypotheses were tested in the research:

H1: School social workers' attendance at professional workshops on HIV/AIDS will be positively related to attitude as measured by the School Professionals' Attitudes Toward AIDS (SPATA) Instrument.

H2: Exposure to persons with HIV/AIDS will be related positively to attitude as measured by the School Professionals' Attitudes Toward AIDS (SPATA) Instrument.

Children with HIV/AIDS must deal with the negative stigma of having HIV/ AIDS. They must deal with entering school, discriminatory treatment, and negative attitudes. Attitudes serve to provide cognitive structure and to facilitate the processing of information (Suedfeld, 1971). According to Cognitive Dissonance Theory, when there is

an inconsistency between attitudes or behaviors, something must change in order to eliminate the dissonance. Dissonance may occur if an individual must choose between two incompatible beliefs or actions (Adams, 1961). For example, a school social worker may hold negative attitudes about persons with HIV/AIDS, and the idea of having to work with a child with HIV/AIDS could present an internal conflict between beliefs and actions. Two elements are dissonant if, for one reason or another, they do not fit together. According to Festinger (1957), dissonance can be reduced by adding a new cognition or by increasing the importance of consonant cognitions.

Social workers' attendance at professional workshops and trainings on HIV/AIDS may add new cognitions and could reduce the dissonance a worker may be experiencing regarding working with individuals who have HIV/AIDS. The new cognition may involve new knowledge that was obtained as a result of attendance at professional workshops or trainings. Some individuals/workers may already hold negative attitudes toward persons with HIV/AIDS as a result of the stigma that is attached to the virus. Exposure to new cognitions may occur as a result of attending workshops, as social workers may receive new information on the virus and factual information on transmission, contagiousness, treatment, prevention, and life expectancy. The worker may begin to examine their own attitudes, prejudices, and their behavior. The social worker may realize that they have stigmatized other individuals, and as a result of receiving new factual information and examining there own attitudes, they may logically begin to decrease some of the stigma and negative attitudes and replace that information with more positive information, knowledge and improved attitudes. The new information and knowledge (cognitions) may decrease the dissonance the person is experiencing and,

logically, could increase the consonant cognitions (holding an attitude that one thinks is correct).

Exposure to new cognitions may also occur as a result of exposure to persons with HIV/AIDS. For example, a social worker may have preconceived ideas about a person with HIV/AIDS. The social worker who has never been around a person with HIV/AIDS may believe that by simply being around the person with HIV/AIDS, they will get the virus. People also have preconceived ideas that everyone who has HIV/AIDS looks terribly ill, is always in pain, and has oozing wounds. Exposure to individuals who are non-symptomatic may change the worker's opinion, as they may experience new information (cognition), and the new cognition may decrease the dissonance and may explain why the individual's attitude would improve.

Dissonance is resistant to change, but cognitions are responsive to elements in reality. It is possible to reduce the magnitude of dissonance by adding a new cognition (Festinger, 1957). Exposure to persons with HIV/AIDS is a realistic experience (i.e., having a student with HIV/AIDS as a client), and this experience could logically change a cognitive belief or private opinion about people with HIV/AIDS. Attendance at professional workshops or trainings involves exposure to factual information and may involve the examination of attitudes and beliefs about people with HIV/AIDS. This experience could result in more positive attitudes toward persons with HIV/AIDS and could logically change a cognitive belief or private opinion about people with HIV/AIDS. Therefore, these experiences could logically reduce the importance of the dissonance and add new consonant cognitions.

Purpose of the Study

The advent of antiretroviral medications has made it possible for children with HIV/AIDS to survive longer and to enter school. These children face a myriad of medical and psycho-social problems. They must deal with countless doctors' appointments, hospital visits, and the stigma of having HIV/AIDS. These children are entering school, and they must deal with discriminatory treatment. Laws have been enacted to protect children with HIV/AIDS, but negative attitudes continue to exist. This study will address the factors that influence the attitudes of school social workers toward children with HIV/AIDS. The limitations and delimitations of the study will be addressed.

Limitations

The limitations of the study include that the school social workers' level of resistance/dissonance was not assessed prior to attendance at professional workshops and prior to exposure to persons with HIV/AIDS. The impact of classroom learning in undergraduate and graduate school was not included in the study. Persons in the social work profession may be attracted to the profession because these individuals already have a compassion for others, and the profession may attract individuals who are already sympathetic, empathetic, and have a positive attitude toward people with HIV/AIDS.

Although, several studies have been done involving subjects in the health care profession, noticeably absent in the literature are studies involving school social workers. School social workers are a small population of individuals, but their role in the school population is crucial to the functioning of students who experience social, emotional and behavioral problems.

The population consisted of school social workers in New York City. Since only school social workers from New York City were used, the study was limited in generalizability of any findings that might be the result of particular characteristics of New York City. In addition, the measurement of attitude toward children with HIV/AIDS was delimited to the responses on the School Social Workers' Attitudes Toward HIV/AIDS instrument. In spite of the limitations of generalizing the findings of the study, and the presence of alternative explanations of improved attitudes, there clearly is a need for additional research on identifying variables that effect change ~~regarding attitudes~~ and behavior toward children with HIV/AIDS.

Definition of Key Terms

For the purpose of this study, the key terms are defined below.

AIDS—Acquired Immune Deficiency Syndrome: A disease that attacks the immune system leaving it unable to defend the body against infections.

AIDS-defining conditions: Among the conditions the CDC considers as AIDS-defining are the following:

1. Candidiasis of bronchi, trachea, or lungs
2. Candidiasis, esophageal
3. Cervical cancer, invasive*
4. Coccidioidomycosis, disseminated or extrapulmonary
5. Cryptococcosis, extrapulmonary
6. Cryptosporidiosis, chronic intestinal (greater than 1 month's duration)
7. Cytomegalovirus disease (other than liver, spleen or nodes)
8. Cytomegalovirus retinitis (with loss of vision)
9. Encephalopathy, HIV-related
10. Herpes simplex: chronic ulcer(s) (greater than one month's duration) or bronchitis, pneumonitis, or esophagitis
11. Histoplasmosis, disseminated or extrapulmonary
12. Isosporiasis, chronic intestinal (greater than one month's duration)
13. Kaposi's sarcoma
14. Lymphoma, Burkitt's (or equivalent term)

15. Lymphoma, immunoblastic (or equivalent term)
16. Lymphoma, primary, of brain
17. Mycobacterium avium complex or M. kansasii, disseminated or extrapulmonary
18. Mycobacterium tuberculosis, any site (pulmonary* or extrapulmonary)
19. Mycobacterium, other species or unidentified species, disseminated or extrapulmonary
20. Pneumocystis carinii pneumonia
21. Pneumonia, recurrent*
22. Progressive multifocal leukoencephalopathy
23. Salmonella septicemia, recurrent
24. Toxoplasmosis of brain
25. Wasting Syndrome due to HIV

The CDC has also expanded the AIDS surveillance case definition to include all HIV+ infected persons who have less than 200CD4+ lymphocytes, or a CD4+ lymphocyte percentage of total lymphocytes of less than 14. The expansion retains the 23 clinical conditions in the AIDS surveillance case definition in 1987, and includes the addition of three clinical conditions: pulmonary tuberculosis, recurrent pneumonia, and invasive cervical cancer (CDC, MMWR 18 Dec 1992/ 41 9RR-17). In 1993 the expanded case definition did give more attention to conditions that affect children such as multiple or recurrent bacterial infections (Campbell, 199).

Attitude: 1) A relatively enduring organization of beliefs predisposing one toward some preferential response (Ross & Mico, in Colomb, 1995). 2) It is essentially comprised of two components: affective and cognitive. The affective component consists of positive and negative feelings, and the cognitive component is comprised of knowledge, opinion and belief. Attitude is an emotional perception of an idea. Attitude can be influenced by behavior related to a given attitude (Stoler 1991). 3) Attitudes are considered to be behavioral predispositions that describe a person's tendency to perform certain classes of responses (McGuire as cited in Hollander & Hunt, 1976).

Affective: Having to do with feelings or emotions.

Antiretroviral therapies: A combination of therapies/medication.

Cognition: Any knowledge, opinion, or belief about the environment, about oneself, or about one's behavior (Festinger, 1957).

Discrimination: Any behavior toward an individual based only on the individual's membership in a particular group (Fan, Conner, & Villarrreal, 2004).

Dissonance: Psychological tension when a person experiences inconsistent items of information or feelings about the environment or himself (Zadong as cited in Suedfeld, 1971).

HIV—Human Immunodeficiency Virus: The virus that causes AIDS.

HIV/AIDS: All people with HIV, regardless of their AIDS status (UNAIDS, 2004).

Pediatric HIV/AIDS: Cases of HIV/AIDS involving children under the age of 13 (CDC, 2000a, as cited in Coleman & Toledo, 2002).

Prejudice: A biased attitude toward a group of people. Stereotypes form the cognitive basis for prejudice (Fan, Ross, & Villarreal, 2004).

Sero-conversion: The presence of detectable HIV antibody in the serum (Stine, 2003).

Sero-negativity: No HIV antibody in the serum (Stine, 2003).

Stigma: A socially constructed reaction to a lethal illness Gabay & Morrison, 1985, as cited in Herek, in press (Herek, 1988).

CHAPTER II

LITERATURE REVIEW

The review of the literature is presented in a two-part format. Part I is a general/overview review of the related literature, which includes the following:

1) History and Overview of HIV/AIDS
2) Modes of Transmission
3) Diagnosing Pediatric HIV/AIDS and Prevention
4) Developmental Functioning
5) Health Problems of School-ages Children with HIV/AIDS
6) CDC Recommendations
7) Psychosocial Effects of HIV/AIDS
8) Policy and Programs.

Part II focuses on the specific variables of the study which include the following:

1) Attitude and Cognitive Dissonance Theory
2) Impact of Workshops and Trainings
3) Exposure to Persons with HIV/AIDS.

In the 25 years since HIV/AIDS was first recognized (1981), research has examined the medical aspects of HIV/AIDS. There is a substantial base of literature on the identification of the origin of HIV/AIDS (Stine, 2003; Hooper, 1999), the bio-medical cause of HIV/AIDS (Ulack & Skinner, 1990), treatment of HIV/AIDS, and pursuit of a cure. In recent years, a number of studies have explored AIDS-related attitudes of target groups (Riley and Greene, 1993; Colomb, 1995; Greenland, Masser and Prentice, 2001). Those target groups most notably include nurses, doctors, and other health care professionals. Studies conducted among school social workers are noticeably scarce. This study provides additional research that is needed in the social sciences and in education.

Part I

History and Overview

Origin of the Virus

"AIDS is defined primarily by severe immune deficiency that has no constant or specific symptoms. Once the immune system malfunctions, a broad spectrum of health complications can set in. AIDS is a term for any or all of the identified diseases and symptoms that the Centers for Disease Control and Prevention considers as AIDS defining (see Chapter I, key terms). When a person has any of these diseases or has a CD4 or T4 lymphocyte count of less than 200 microliter of blood and also tests positive for antibodies to HIV, an AIDS diagnosis is given" (Stine, 2003 pp. 12).

The origin of HIV has been attributed to HIV-contaminated polio, small pox, hepatitis, and tetanus vaccines; the African green monkey (Stine, 2003); insect vectors, such as mosquitoes, monkey bites, and the consumption of monkey meat (Ulack and Skinner, 1991). Others attribute the origin of HIV to the African people, their cattle, pigs, and sheep, the United States Central Intelligence Agency, bestiality, germ warfare, and some kind of recombinant biological research accident (Ulack & Skinner, 1990). The prevailing theory is that humans were first infected with the virus through direct contact with HIV-infected primates, and the oldest specimen of HIV was taken in 1959 from an unknown man who lived in the Congo, Africa.

In 1983, Luc Montagnier and his colleagues at the Pasteur Institute in Paris isolated the virus that causes AIDS. They published the first report on the virus, and the French scientists named the virus lymphadenopathy associated virus (LAV). Meanwhile, in San Francisco, Jay Levy and his colleagues isolated a virus that they called the AIDS-

related virus. Later Robert Gallo of the Institute of Virology named the virus HTLV III (Third Human T Cell Lymphotropic Virus). Montagnier, Levy, and Gallo all isolated the same retrovirus, but Montagnier and Levy correctly identified it as a lenti-virus (slow pathogenic course in the body) and they are both credited with co-discovery of the virus. Later the Human Retrovirus Subcommittee reduced all the names to one the Human Immunodeficiency Virus, or HIV. HIV causes AIDS (Stine, 2003). AIDS is a syndrome and not a single disease. Persons with AIDS may have many diseases, and, collectively, the diseases are referred to as a syndrome.

It is theorized that the key disseminator of the virus in North America was Gaeten Dugas (date of death March 1984), a Canadian air steward. He is posthumously known as patient zero (Hooper, 1999). He is known as patient zero because a statistician from the Centers for Disease Control calculated that 40 of the first 248 gay men to get GRID (an earlier name for AIDS identified as Gay-Related Immunodeficiency Disease), might all have had sex either with Dugas or with men sexually linked to him. The statistician figured that the chance of this being a coincidence was zero (Shilts, 1987, 1988, p. 147). Whether Gaetan Dugas actually was the person who brought AIDS to North America remains a debatable and unanswerable question. The fact that the first cases in New York and Los Angeles could be linked to Dugas gives weight to that theory (Shilts, 1987, 1988).

The Early Years

During the months of October 1980 through April 1981, five young men appeared at different hospitals in Los Angeles, California. All of them were gravely ill with a variety of unusual symptoms. In each case, the symptoms included pneumocystis carinii

pneumonia (PCP), a rare pneumonia. By May 1981, two of the five men were dead. Two doctors in Los Angeles (Michael Gottlieb and Wayne Shandera) approached the CDC and submitted a brief to the CDC's Morbidity and Mortality Weekly Report (MMWR) (Hooper, 1999). The brief was simply titled, "Pneumocystis Pneumonia—Los Angeles." The final editorial comment includes the following: "the fact that these parties were all homosexuals suggests an association between some aspects of a homosexual lifestyle or disease acquired by sexual contact and Pneumocystis Pneumonia in this population" (MMWR, June 5, 1981). The brief further suggested the possibility of a cellular immune dysfunction related to a common exposure that predisposes individuals to opportunistic infections.

On June 5, 1981, the AIDS epidemic officially began, as it was on this date that information about the newly recognized condition was first released to the medical profession and the general public. June 5, 1981, is construed as year zero, and all events prior to that date are said to have occurred prior to the epidemic (Hooper, 1999).

The Centers for Disease Control first recognized the AIDS epidemic in the United States of America in June and July 1981. An unusual cluster of pneumocystis carinii pneumonia and of Kaposi's sarcoma occurred among homosexual men, and an infectious form of immune deficiency was on the increase. This immune deficiency disease was initially called GRID (Gay-Related Immune Deficiency Syndrome) (Stine, 2003). By 1982 and 1983, the disease was reported in adult heterosexuals, children, hemophiliacs who were treated with the blood clotting agent Factor VIII, and recipients of blood transfusions. Later the disease was recognized in male and female injecting drug users (Hooper, 1999), suggesting the causative agent could be acquired through the

bloodstream and by either sex. A cellular deficiency of the human immune system was found in every patient with AIDS, along with an assortment of other signs and symptoms of the disease, and, because the infection was acquired from the action of some environmental agent, it was named Acquired Immune Deficiency Syndrome, or AIDS (Stine, 2003). Hooper (1999) further explained, "Acquired" indicates that the unknown causative agent is transmitted to human beings from external sources in the course of their natural life span; "Immune deficiency" indicates that symptoms result from a fault in the immune system. And, "syndrome" indicates that there is a range of symptoms associated with the infection, rather than a single disease presentation (Hooper, 1999, p. 8).

In 1982 the MMWR also documented what doctors confirmed in New York City and Miami, that this disease was all over the Haitian refugee communities in their city (Shilts, 1987, 1988). People began referring to the four Hs—homosexuals, heroin users, hemophiliacs, and Haitians—when indeed one of the Hs that had been omitted from this equation was homo-sapiens (Hooper, 1999). Everyone who has ever had sex, received blood products, or was jabbed with an un-sterile needle is at risk.

In September 1982, the first published use of the term "acquired immune deficiency syndrome" occurred, and the CDC stated that it had received 583 reported cases of AIDS (Rosenberg, Tolsma, Kolbe, Droger, Cynamon & Bower, as cited in Sepulveda, Fineberg, & Mann, 1992). According to the World Health Organization, as of December 2004, there are approximately 38 million people living with HIV/AIDS and, included in that number, there are 2.1 million children under age 15 living with HIV/AIDS world wide (UNAIDS/WHO, 2004). While, in the United States,

approximately 1,000,000 people are living with HIV/AIDS and, of that number, 3,635 are children under 13 years of age.

In 1982, it was realized that women and children could also get AIDS. The first cases of children suspected to have AIDS were recorded by the CDC (MMWR 17, December 1982). The CDC had received reports of four infants (under two years of age) with unexplained cellular immunodeficiency and opportunistic infections. All four of these infants died before they reached one year of age. All four of the infants had PCP (an AIDS-defining illness). In the editorial note, it states, "it is possible that these infants had the acquired immune deficiency syndrome."

In a retrospective study of children with AIDS in New York City, the city's Department of Public Health identified six children who were born in 1977, who were presumably infected parentally by their mothers' intravenous drug use. Additional evidence comes from San Francisco where an HIV+ child was born in 1977, from a female prostitute who was drug addicted. In 1977, seven children were born in the United States who later proved to be HIV+, with no known risk factors, other than their parentage. By the end of 1978, an additional 44 children who later proved to be HIV+ were born to women who were drug using and HIV+ (Hooper, 1999).

According to the Centers for Disease Control, the number of persons infected with HIV/AIDS is on the increase, as HIV/AIDS is one of the fastest growing health concerns in the United States. More frightening is the number of cases found in women who are of childbearing age, and the number of cases found in children under the age of 13. According to the Centers for Disease Control, the total number of children under the

age of 13 living with HIV in the continental United States is 2,634, and 1,645 are living with AIDS (HIV/AIDS Surveillance Report Vol. 16, 2004, CDC).

The estimated number of people living with HIV in the United States of America exceeds one million people, at the end of 2003 (WHO/UNAIDS, 2005), with an estimated 3,635 children under the age of 13 living with HIV/AIDS. The prevalence rate of AIDS among children in the United States was estimated at 3.7 per 100,000 at the end of 2003, and the state of New York has the highest reported number of cumulative cases of HIV infection (1,868), and AIDS (2,337) among children under the age of 13, by area of residence (HIV/AIDS Surveillance Report, 2003, Vol. 15). In addition, New York City, an urban metropolis, has a pediatric AIDS case rate of 150 per 100,000 (NYDOH, 6/99 Office of AIDS Surveillance, 1999, Vol. 3), and it has the highest cumulative annual rate of AIDS (2,092), by metropolitan area, among children under the age of 13 (HIV/AIDS Surveillance Report, 2003, Vol.15).

Modes of Transmission

Maternally Acquired HIV

The primary mode of transmission of HIV/AIDS in children occurs from mother to child during pregnancy, labor, and delivery or through breastfeeding. Peri-natal (vertical) transmission of HIV accounts for virtually all new HIV infections in children (CDC, MMWR, November 21, 1997). The process of diagnosing pediatric HIV infection should begin with identifying maternal HIV infection before or during pregnancy, so that antiretroviral treatment may begin to blunt the impact of HIV/AIDS (Essex et al., 2002; WHO/UNAIDS, 2004) and decrease the risk of transmission from mother to child (Stine,

2003). Perinatal transmission of HIV has been associated with 95% of pediatric HIV infections (Essex, Mbout, Kanki, Markink, Tlou, and Holme, 2002).

Early maternal risk factors associated with vertical transmission include advanced maternal disease, a low CD4+ cell count, a low CD4+; CD8+ cell ratio, and the presence of the virus and viral-associated proteins in the blood (Andiman, 1995, p. 35). Additional factors that have been associated with an increased risk of perinatal transmission include:

1) If a woman becomes infected during pregnancy or near the time when her child is to be born, the risk of transmission may be increased. More HIV virus is present in the mother just after infection occurs and before she produces antibodies. 2) The risk may also be greater if the infant is not carried to full term, particularly if the birth occurs before 34 to 37 weeks of gestation. 3) Prematurity in an infant may indicate that an infection has occurred. 4) There is the potential for exposure to maternal blood if the mother is given a C-section (Mitchell, as found in Campbell, 1999). Diagnosing HIV in young children is no easy task. The presence of antibodies in the body is presumptive evidence of infection with HIV. Antibody positivity means a person is infected with HIV.

An HIV+ woman cannot know during her pregnancy and for at least several months following the birth of her baby whether the child is infected (Andiman, as found in Geballe, Gruendel, and Andiman, 1995). Using the CDC classification system, infants under 15 months are classified as indeterminate until their infection status can be definitively determined (Burr as found in Cohen & Durham, 1993). In children born to a mother who is HIV+, maternally acquired HIV antibodies persist in the child for up to 15 to 18 months after birth (Essex, Mboup et al., 2002). Those children may test positive

during the first 18 months of life, and later the child's HIV status may sero convert to uninfected (Stine, 2003).

The progression of HIV in children can be much more rapid than it is in adults (Beverly and Thomas, 1987, and Essex et al., 2002). Perinatally infected infants have a high HIV (RNA) level (viral load), which declines slowly during the first two years of life. Infants whose viral load remains high in the first few months of life are at increased risk for progression of the disease (Campbell, 1999). Perinatally infected children have the potential to develop symptoms related to the HIV, and long-term survival with non-progression of HIV is unusual among perinatally infected children.

Other Modes of Transmission

Another risk factor associated with HIV in younger children involves receiving blood or blood products (Price, 1986). Children have contracted HIV/AIDS through blood transfusions and as a result of receiving treatment for hemophilia. Hemophilia is hereditary and is passed in the genetic code from the mother to the son. Before blood was being screened scrupulously, many hemophiliacs contracted HIV as a result of receiving blood and or blood products. Persons with hemophilia lack the ability to clot their own blood. Factor VIII is a clotting factor concentrated from thousands of blood donors, and it provides the necessary components that allow the hemophiliac's blood to clot normally (Shilts, 1987, 1988). In early 1984, rumors were spreading that Factor VIII was exposing people to HIV (Shilts, 1987, 1988).

The CDC reports of hemophilia associated AIDS were first published in July 1982, and the editorial note that indicates the possibility of blood or blood products being vehicles of AIDS transmission in persons with hemophilia has been supported. The

mainstays of therapy for persons with hemophilia are fresh frozen plasma, and plasma factor preparations, which have been associated with the transmission of AIDS (CDC MMWR, October 26, 1984; 33: 589-91). In another report, the CDC (MMWR, December 10, 1982:v.31/No. 48) first reported possible transfusion-associated AIDS in a 20-month-old infant from the San Francisco area who developed immunodeficiency and opportunistic infections after multiple transfusions, including a transfusion obtained from the blood of a male who was later found to have AIDS. In an update on AIDS among patients with hemophilia A dated December 10, 1982, the CDC (in MMWR) reported that three patients with hemophilia who were heterosexuals had developed pneumocystis carinii pneumonia and other opportunistic infections. All of these patients had received Factor VIII concentrates, and one of the patient's was a 10-year-old from Pennsylvania who had hemophilia. Since that time, many advances have been made in the prevention and treatment of HIV/AIDS. One of the successes in the prevention of the transmission of HIV/AIDS, has been the almost total elimination of HIV cases acquired among those with hemophilia disorder or recipients of blood transfusions or blood products (Chitwood as found in McElraath, 2002).

Perinatal transmission of HIV accounts for 95% of all pediatric HIV/AIDS cases. Early diagnosis of children who are HIV+ helps to facilitate monitoring of the infection and clinical intervention (Essex et al., 2002; Pryor, Reeder, and Price, 1986). The literature review will focus primarily on perinatally-acquired pediatric HIV/AIDS.

Diagnosing Pediatric HIV/AIDS and Prevention of Pediatric HIV/AIDS

Among pediatric cases of AIDS that are perinatally acquired, the median age in which there is a diagnosis of AIDS is at approximately 12 months of age. Approximately,

1-2% of pediatric patients are not diagnosed with AIDS until they are 10 years of age or older. It is suggested that there is a bimodal pattern of expression of the disease and in the survival of children. Models describing survival in children suggest that approximately 10-15% of the children are likely to die before four years of age, with a median age at death of five months to 11 months, while among those surviving beyond four years, the median age at death is more than five years (Andiman as found in Geballe, Gruendel, and Andiman, 1995).

Children who are infected with HIV through vertical transmission commonly had symptoms before age one, and became increasingly ill by the second year of life (Bor et al., 1992). In 1997, it was estimated that 60% of the children who are HIV+ would reach age four without developing AIDS. Historically, many children with HIV/AIDS were dying before they reached school age: as when a child is infected in utero, during delivery or through breastfeeding the prognosis was very poor. However, with the advent of antiretroviral therapies, these children are living longer, and they enter school with HIV/AIDS (Pryor and Reeder, 1993; Greenland et al., 2001). Not only do these children enter school, but vertically infected teenagers can be expected to appear in the population (Burger et al., 1990). Statistical analysis predicts that a fraction of HIV- infected individuals will live for more than 10 years without an AIDS-defining illness, and vertically infected teenagers may be capable of sexually transmitting HIV themselves (Burger et al., 1990).

Children with HIV/AIDS have always differed significantly from their adult counterparts. For young children, the incubation period, the period of time between infection and symptomatic status, is shorter than for adults, and the clinical latency and

interval period between AIDS and death are shorter for HIV-infected children than for adults (Andiman, 1995). Children with HIV appear to follow a more severe course of the disease, although a small proportion of children may remain asymptomatic for prolonged periods. According to the World Health Organization, the case definition for Pediatric AIDS is:

Major signs:
Weight loss or failure to thrive
Chronic diarrhea lasting longer than one month
Prolonged fever lasting longer than one month
Minor Signs:
Generalized lymphadenopathy
Oropharyngeal candidiasis
Repeated common infections
Generalized dermatitis
Confirmed maternal HIV infection

Pediatric AIDS is suspected in a child presenting with at least two major signs and two minor signs in the absence of known causes of immuno-suppression (Essex et al., 2002).

HIV in Children Who Are Less than 13 Years of Age

The Centers for Disease Control classification system for diagnosing HIV in children includes the following: Any child who meets the criteria for AIDS in the 1987 case definition should be considered HIV infected. According to the Centers for Disease Control and Prevention (MMWR September 30, 1994/vol.43/no. rr-12 Recommendations and Reports), the diagnosis of HIV infection in children is determined by the following diagnosis criteria:

a) A child less than 18 months of age who is known to be HIV seropositive or born to an HIV-infected and:

- Has positive results on two separate determinations (excluding cord blood) from one or more of the following HIV detection tests:

-HIV culture

-HIV polymerase chain reaction,

-HIV antigen (p24),

Or

- Meets criteria for AIDS diagnosis based on the 1987 AIDS surveillance case definition

b) A child greater than or equal to 18 months of age born to an HIV-infected mother or any child infected by blood, blood products, or other known modes of transmission (e.g., sexual contact) who:

- Is HIV antibody positive by repeatedly reactive enzyme immunoassay (EIA), and confirmatory test (e.g., Western blot or IFA) and is less than 18 months of age at the time of the test

Or

- Meets any of the criteria in a) above.

Diagnosis: Perinatally Exposed

A child who does not meet the criteria above who:

- Is HIV seropositive by EIA and confirmatory test (e.g., Western blot or IFA) and is less than 18 months of age at the time of the test

Or

- Has unknown antibody status, but was born to a mother known to be infected with HIV.

Diagnosis: Seroreverter

A child who is born to an HIV infected mother and who;

- Has been documented as HIV antibody negative (i.e., two or more negative EIA tests performed at six to 18 months of age or one negative EIA test after 18 months of age);

And

- Has had no other laboratory evidence of infection (has not had two positive viral detection tests, if performed)

And

- Has not had an AIDS-defining condition.

The clinical categories for children with HIV are listed below:

Category N: Not Symptomatic

Children who have no signs or symptoms considered to be the result of HIV infection or who have only one of the conditions listed in Category A.

Category A: Mildly Symptomatic

Children with two or more of the conditions listed below but none of the conditions listed in Categories B and C.

- Lymphadenopathy (≥0.5 cm at more than two sites; bilateral = one site)
- Hepatomegaly
- Splonomegaly
- Dermatitis
- Parotitis
- Recurrent or persistent upper respiratory infection, sinusitis, or otitis media.

Category B: Moderately Symptomatic

Children who have symptomatic conditions other than those listed for Category A or C that are attributed to HIV infection. Examples of conditions in clinical Category B include but are not limited to:

- Anemia, neutropenia, or thrombocytopenia persisting ≥ 30 days
- Bacterial meningitis, pneumonia , or sepsis (single episode)
- Candidiasis, oropharyngeal (thrush), persisting (›2 months) in children ›6 months of age
- Cardiomyopathy
- Cytomegalovirus infection, with onset before 1 month of age
- Diarrhea, recurrent or chronic
- Hepatitis
- Herpes simplex virus (HSV) stomatitis, recurrent (more than two episodes within 1 year)
- HS bronchitis, pneumonitis, or esophagitis with onset before 1 month of age
- Herpes zoster (shingles) involving at least two distinct episodes or more than one dermatome
- Leiomyosarcoma
- Lmyphoid interstitial pneumonia LIP) or pulmonary Lymphoid hyperplasia complex

- Nephropathy
- Nocardiosis
- Persistent fever (lasting ›1 month)
- Toxoplasmosis, onset before 1 month of age
- Varicella, disseminated (complicated chickenpox)

Category C: Severely Symptomatic

Children who have any condition listed in the 1987 surveillance case definition for acquired immunodeficiency syndrome, with the exception of LIP.

Category C further defines and specifies symptoms that would place a child in this

category as the following:

- Serious bacterial infections or recurrent (i.e., any combination of at least two culture confirmed infections within a two-year-period) of the following types: septicemia, pneumonia, meningitis, bone or joint infection, or abscess of an internal organ or body cavity (excluding otitis media, superficial skin or mucosal abscesses, and indwelling catheter-related infections)
- Cryptosporidiosis or isosporiasis with diarrhea persisting ›1 month
- Cytomegalovirus disease with onset of symptoms at age ›1 month
- Encephalopathy (at least one of the following progressive findings present for at least two` months in the absence of a concurrent illness other than HIV infection that could explain the findings): a) failure to attain or loss of developmental milestones or loss of intellectual ability, verified by standard developmental scale or neuropsychological tests; b) impaired brain growth or acquired microcephaly demonstrated by head circumference measurements or brain atrophy demonstrated by computerized tomography or magnetic resonance imaging (serial imaging is required for children ‹2 years of age); c) acquired symmetric motor deficit manifested by two or more of the following: paresis, pathologic reflexes, ataxia, or gait disturbance
- Herpes simplex virus infection causing a mucocutaneous ulcer that persists for ›1 month; or bronchitis, pneumonitis, or esophagitis for any duration affecting a child ›1 month of age
- Histoplasmosis, disseminated (at a site other than or in addition to lungs or cervical or hilar lymph nodes)
- Lymphoma, small noncleaved cell (Burkitt's), or immunoblastic or large cell lymphoma of B-cell or unknown immunologic phenotype
- Toxoplasmosis of the brain with onset at ›1 month of age
- Wasting syndrome in the absence of a concurrent illness other than HIV infection that could explain the following findings: a) persistent weight loss ›10% of baseline OR b) downward crossing of at least two of the following percentile lines on the weight for age chart (e.g., 95^{th}, 75^{th}, 50^{th},

25^{th}, 5^{th}) in a child ≥1 year of age OR c) 5^{th} percentile on weight-for height chart on two consecutive measurements, ≥30 days apart PLUS a) chronic diarrhea (i.e., at least two loose stools per day for ≥days) OR b) documented fever (for ≥ 30 days, intermittent or constant)

Preventative Measures

The key to protecting children is preventing HIV infection in their parents. Prevention of mother to child transmission is a crucial entry point for primary prevention. Ensuring the availability of treatment, care, and family planning methods are important elements in prevention. Antiretroviral medications, safe delivery options, infant feeding counseling and support are also important in the prevention of the vertical transmission of HIV (WHO/UNAIDS, 2005).

Additional preventative measures may include immunizing the mother with a vaccine before she becomes pregnant, as this may prevent infections that occur early in the pregnancy. Providing the baby with a specific blood product (hyper-immune globulin product), as well as protective vaccinations within 24 hours of delivery, may also prevent the transmission of the HIV virus to the newborn baby.

Approaches to risk reduction of transmission from the mother to the child include the following:

* Avoidance of breastfeeding
* Antiretroviral therapy (for the mother during pregnancy and delivery and for the infant after birth)
* Zidovudine (AZT, etc.)
* Other antiretroviral agents-treatment of sexually transmitted diseases
* Immunotherapy for the mother or infant (or both)
* Passive therapy
* Active immunization
* C-section
* Avoidance of intrapartum invasive procedures, i.e., fetal scalp electrodes, scalp clips, and episiotomy, amniocentesis etc.,

* Vaginal disinfection (vaginal antiseptic or virucidal agent) (Peckhan & Gibb as found in Campbell, 1999).

Developmental Functioning

Children with HIV/AIDS may experience a multitude of health and developmental problems in the school environment. These children may enter the school environment, and the child may experience developmental peaks, as well as a lack of developmental progress or setbacks, and an onset of health problems. Students with HIV/AIDS who appeared normal may show a loss of cognitive and developmental functioning gradually or rapidly. The student's level of functioning may plateau or decline in a step-wise fashion, with relatively stable periods. Sharp declines may be followed by slow recovery for a few months then plateau below the student's original level of functioning. Generally, cognitive and motor deficits are progressive and likely reflect an increase in brain infection. HIV-related disabilities are the greatest infectious cause of pediatric mental retardation in the United States (Seidel, 1992, as cited in Beverly and Thomas, 1997). Developmental abnormalities are reported in 75-90% of children with HIV (Batshaw and Perret, as cited in Beverly and Thomas, 1997).

The degree of developmental risk may vary depending on the community into which the sero-positive child is born, with inner-city minority children being at greatest risk (Diamond and Cohen as cited in Crocker, Cohen, and Kastner, 1992). Although, the majority of cases of children with HIV/AIDS live in major urban areas, HIV/AIDS does not discriminate. The developmental and neurological outcome of HIV/AIDS may be influenced by several factors: 1) Utero exposure of the fetus to drugs, i.e., heroin, methadone, cocaine, and alcohol 2) other in utero or postnatal medical factors, and 3)

psychosocial factors (i.e., an unstable family structure and an absence of consistent patterns of nurturing by caregivers) (Diamond as cited in Crocker et al., 1992). HIV/AIDS is an equal opportunity disease. It does not discriminate among its victims. No area of the world and no population is unaffected by HIV/AIDS. We must address the problems that these children face.

Health Problems of School-aged Children with HIV/AIDS

Children with HIV experience a myriad of health problems. In the United States, many schools require immunizations before a child may enter school. These children may not receive certain vaccines, as the vaccine may produce serious adverse effects in children with HIV/AIDS. For example, if these children are given the oral polio vaccine, they have a higher risk of developing vaccine-associated polio, than normal individuals (CDC, MMWR, September 26, 1986). Additional health problems may include AIDS encephalopathy which is frequently manifested by one or a combination of these features:

- Loss of previously acquired milestones or failure to attain them at the expected age
- Intellectual deficits
- Impaired brain growth
- Spasticity (change in muscle tone) or rigidity
- Weakness
- Seizures and tremors (Diamond and Cohen, 1992)

Health issues may include numerous hospitalizations, multiple medications, and a high susceptibility to colds, virus, and influenza. Additional, medical concerns may include an inability to tolerate certain medications, and complications caused by medication and medical treatment (Sileo, 1998). Over 90% experience failure to thrive, and 50-90% experience encephalopathy. This is in addition to the common infections associated with HIV, which are pneumonia, skin infections, meningitis, sinusitis, sepsis,

thrush, brain abscesses, stomach problems, TB, hepatitis, and vericella (Crocker et al., 1992). Other aspects of HIV infection (congenital) include presumed AIDS embryopathy, comprised of growth failure, microcephaly, prominent box-like forehead, and flattened nasal bridge (Diamond and Cohen, 1992). Neurological and developmental problems may include growth delays, and speech, motor, and cognitive deficits (Seidel, 1995; Woodruff, 1994, as cited in Beverly and Thomas, 1997).

Centers for Disease Control and Prevention Recommendations

Children infected with HIV should be cared for in an educational setting that minimizes exposure of other children to blood or body fluids. The CDC (MMWR, August 30, 1985) recommends that children who have uncoverable, oozing lesions may need to be placed in a more restricted environment, and that care should be taken by those aware of the child's HIV status regarding exposure to the infected child's body fluids and excrement. Good handwashing after exposure to blood and body fluids and before caring for another child should be observed, and gloves should be worn if open lesions are present on the educational care provider's hands. All schools should adopt routine procedures for handling blood or body fluids. Theoretically, there is a potential risk of transmission from a child infected with HIV/AIDS to a care provider, and any transmission would likely involve exposure of mucous membranes or open skin lesions to blood or body fluids of an infected person. Universal precautions should be used to prevent contact with blood or potentially infectious materials. Universal precautions are a strategy by which all blood or potentially infectious materials are considered to be infectious regardless of the source. Disposable gloves should be worn, and handwashing is essential. Direct skin contact with body fluids should be avoided whenever possible.

Schools are encouraged to inform parents, children, and educators regarding the transmission of HIV, as such education would assist efforts to provide the best care for children infected with HIV/AIDS, while minimizing the risk of transmission to others.

In order to decrease the risk of transmission, soiled surfaces should be promptly cleaned with disinfectants, and disposable cleaning equipment should be used whenever possible. Those who are cleaning should avoid exposure of open skin lesions or mucous membranes to the blood or body fluids. There is a risk of person-to-person contact among school-aged children, although among younger children and neurologically impaired children, the potential risk of transmission would be greatest.

The hygienic practices of children with HIV may improve as the child matures, but if the hygienic practices do not improve and, instead, deteriorate, an evaluation may be needed for consideration of a more restricted school environment. These children need to be monitored closely for growth and development and given prompt aggressive therapy for infections and exposure to potentially lethal infections, such as chicken pox. Live virus vaccination of children infected with HIV, such as the measles-mumps-rubella vaccine may be hazardous.

Psychosocial Effects of HIV/AIDS in School-aged Children

Children with HIV/AIDS will likely need a variety of services, including special education, medical, and psychosocial services. These children and their families face a multitude of problems. Those problems include whether to tell the child of the HIV/AIDS diagnosis, and, if they are told, whether to allow the child to tell others.

Psychosocial interventions are needed for children with HIV/AIDS. Perhaps one of the most compelling reasons to address the psychosocial effects of HIV is in order to provide comprehensive and coordinated services, as those who have a strong intact support system live longer and experience a more gradual rate of progression of the virus (Beverly, 1997). The psychosocial stages connected with the illness involve 1) the diagnostic phase, or finding out, 2) the chronic phase which is associated with adaptation to the long-term nature of the disease, and 3) the final stage which deals with ending the illness either through remission or death. Denial and acceptance may alternate during any of the phases (Ryan, 1988).

The diagnostic phase is when the family is concerned with coping with the uncertainty of not knowing, the fantasies, fears, guilt, and the stress of the tests and procedures that are foreign and painful. In the next phase, the chronic phase, the family may be trying to make sense of this uncontrollable health situation, while experiencing many different emotions. During the final phase, the family may integrate the information and may have difficulty coping.

The child with HIV/AIDS may experience isolation, as sick children may arouse anxiety in others, and children with HIV may oftentimes be avoided (Andiman as found in Geballe, Gruendel, and Andiman, 1995). They may also experience fear, depression, grief, anger, and guilt (Beverly and Thomas, 1997). Children infected with the virus may also face loss, shame, abandonment, and anxiety (Costin, Pietrzak, Kerr, and Symons, 2002). The child may also perceive his/her illness as a form of punishment with depression and withdrawn behavior (Bor et al., 1992), and mood swings may be exhibited (Beverly and Thomas, 1997).

Other environmental and psychosocial factors may include an unstable family structure and an absence of consistent nurturing patterns. Children with HIV/AIDS may have to accept why they have HIV/AIDS while their sibling may not be infected (Sileo, 1998). These children may also experience their lives in various degrees of chaos with a web of complex medical and social interventions. The child may experience repeated hospitalizations and environmental deprivation (Beverly and Thomas, 1997), which may be affected by the death or illness of a parent with HIV/AIDS. The child with HIV may experience any or all of the following in their home: poverty, homelessness, illicit drug use, incarceration, physical and emotional abuse, domestic violence, and absentee parents (Andiman as found in Geballe, Gruendel, and Andiman, 1995).

Parents may look to their child's school for both support and information to help address the psychosocial effects of HIV (Beverly and Thomas, 1997). Educators must recognize that they may be serving students in their schools who are identified as being HIV+ and students who are HIV+ but whose sero-positive status is unknown to the educators. They may also be serving students who have family members infected by the virus. These children and their families will need the support of the school environment to help them deal with the psychosocial affects of HIV/AIDS.

Students with HIV/AIDS may need early and frequent assessment to determine changes in or loss of developmental milestones. Such changes may trigger alarm in the child, and the family and requires support to help them to deal with the various changes and health challenges that occur because of HIV/AIDS. Interdisciplinary management includes cooperation and information sharing among nurses, psychologists, and social

workers (Beverly, 1997). The time to address the psychosocial affects of the HIV on the school-aged population is now (Beverly & Thomas, 1997).

Policy & Programs

The literature suggests that all school districts must make a priority of developing written policies for handling a diagnosis of HIV/AIDS in an effective and human fashion, as written policy should be developed before HIV/AIDS is diagnosed in the school population (Strouse, 1990). Policy development is imperative in the fight for fair treatment for all students including students with HIV/AIDS. Effective school policies should 1) deal specifically with HIV/AIDS, 2) take into account all that is known about HIV/AIDS, and 3) be committed to allow the individual with HIV/AIDS to remain in the school setting and to protect the privacy of the individual (Strouse, 1990)

Confidentiality is one of the areas of greatest need for affected staff and students (Kerr et al., 1989). Disclosure of a diagnosis of HIV exposes individuals to discriminatory and hostile behavior (Blendon and Donelan, as cited in Rogers and Ginzberg, 1989). School personnel may not share the student's diagnosis of HIV/AIDS without parental consent, as any breach of confidentiality could leave the staff and the school open to legal recourse (Rosen and Granger, as cited in Crocker et al., 1992). Confidentiality laws give parents the right not to disclose that their child has HIV/AIDS or to disclose only to persons of their choosing. To guarantee confidentiality, policies must be developed and adhered to in order to ensure the privacy of the diagnosis in any program that serves children with HIV infection (Rosen and Granger as cited in Crocker et al., 1992). All information about the child's diagnosis should be kept in a locked file, as schools have a responsibility to protect the privacy of student records.

The Family Educational Rights and Privacy Act (FERPA) of 1974 delineates even further and specifies privacy rights particularly to children. Although FERPA was enacted prior to the HIV/AIDS epidemic, it identifies confidentiality practices that should be in place for children with HIV/AIDS. FERPA requires that information about a student's medical status must be kept confidential and should include any medical prescriptions, documentation of discussions, telephone conversations, proceedings, and meetings. Schools should avoid placing the name of a person in written documents. Written permission to access a file should specify the person's name, and not the person's position, so that a later person in the same position does not automatically have access to records. School employees need to know that they cannot share private medical information with anyone else without signed parental/legal guardian consent (National Association of State Boards of Education, as cited in DPS Student Health Handbook, 1998).

Policy without appropriate non-discriminatory actions serves to no avail for children with HIV/AIDS. If the policy is implemented in a discriminatory manner, then it is a threat to progress against the HIV/AIDS virus. If the cycle of discrimination toward students with HIV/AIDS is going to end, we must examine the factors that may influence the attitude of those who work with the children.

Part II

The Variables

Attitude

The literature suggests various factors affect the attitude of human service providers who work with people who have HIV/AIDS. Affective measures (i.e., fear of

contagion) impact attitude, and cognitive measures (i.e., knowledge of transmission and positive beliefs) may also impact attitude (Katz & Stotland, 1959; Kimble & Garmezy, 1963 as cited in Stoler, 1991). Additional studies by Pryor, Reeder, and Laundau (1999), suggest that instrumental and symbolic factors contribute independently to attitudes toward interacting with children with HIV/AIDS. Instrumental considerations include parents' fear of their own child contracting HIV, and symbolic considerations include connection of the disease to stigmatized groups. Attitudes serve some function, and that is to provide cognitive structure or to facilitate the processing of information (Suedfeld, 1971).

Suedfeld (1971) indicates that human beings require their attitudinal systems to be internally consistent, and that a state of inconsistency is non-homeostatic. Attitude change then follows as a way to restore their stable state. The Consistency Theory Approach to attitude change is that each person tends to maintain a considerable amount of connectedness and coherence among his beliefs, feelings, and actions. The person is viewed as striving for a solution among all of these contending forces. Festinger's cognitive dissonance theory has been the most fertile of all theories in the consistency family (McGuire as cited in Hollander & Hunt, 1976). After making a choice, people seek evidence to confirm their decision and to reduce the dissonance. Dissonance deals with exposure to information, and individuals will seek out information to reduce dissonance and avoid information that increases the dissonance.

Attitude and Cognitive Dissonance Theory

Many theories have sought to explain the relationship between attitude and behavior, and one of the most influential theories in social psychology is Leon Festinger's theory of Cognitive dissonance (Harmon-Jones and Mills, 1999).

The basic hypothesis of Festinger's theory is:

1) The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance.
2) When dissonance is present, in addition to trying to reduce it, the person will actively avoid situations and information, which would likely increase the dissonance (Festinger, 1957).

Cognitive dissonance is a theoretical construct used to explain how people respond to information that does not coincide with their current understanding or beliefs (McFalls and Roberts, 2001). Cognitive dissonance theory explains the relationship between inconsistent attitudes or behavior. It is concerned with the relationship among cognitions. People experience psychological tension or dissonance when a person experiences inconsistent items of information or feelings about the environment or himself. Cognition refers to any knowledge, opinion, or belief about the environment, about oneself, or about one's behavior (Festinger, 1957). Dissonance is psychologically uncomfortable (Festinger, 1957). Dissonance will motivate the individual to try to reduce the tension, and to actively avoid situations and information that would likely increase the tension or dissonance (Zajonc as cited in Suedfeld, 1971). Dissonance gives rise to pressures to reduce the dissonance, and manifestations of this may include behavior changes, changes in cognitions, and exposure to new information or opinions (Festinger, 1957).

Removing dissonant cognitions, adding new consonant cognitions, reducing the importance of dissonant cognitions, or increasing the importance of consonant cognitions can reduce dissonance. A person can have cognitions about behavior, perceptions, attitudes, beliefs or feelings (Harmon-Jones and Mills, 1999). Cognitive dissonance is an antecedent condition, which leads to activity toward dissonance reduction. If dissonance exists between two elements, the dissonance can be eliminated by changing one of the elements (Festinger, 1957).

According to Festinger (1957), dissonance may occur if a new event happens (a student with HIV/AIDS) or new information becomes known to a person, creating at least a momentary dissonance with existing knowledge (AIDS is deadly), opinion, or cognition concerning behavior. The person may encounter difficulties in trying to change either his behavior (having to work with the child) or knowledge (HIV/AIDS is associated with injection drug users and homosexual males), and this is the reason for dissonance. Dissonance could arise because of cultural mores (homophobia), and it may arise because of past experience (negative experience with minorities). According to Festinger (1957), dissonance can be eliminated by changing one of the elements (i.e., not having to work with persons who have HIV/AIDS), or by changing one's attitude toward these individuals.

The experience of having a student with HIV/AIDS in school can influence the attitudes of school personnel. The school social worker could experience dissonance, as they ought to be committed to provide appropriate services to all children, yet they may not be in agreement with the possibility of including a child with HIV/AIDS in their caseload. For example, to reduce dissonance, the school social worker may do the

following: Change the cognition to make it consistent with the pre-existing cognition, (i.e., deny children with HIV/AIDS are in school). Add new cognitions to bridge the gap between the opposing cognitions (i.e., find additional information that supports the idea that children with HIV/AIDS should remain in school), or change his or her behavior (i.e., begin working with/servicing children with HIV/AIDS (McFall and Roberts, 2001). The theory of cognitive dissonance indicates with experience or knowledge (i.e., exposure to new information), the school social worker should view this concept as a positive step (i.e., resulting in a reduction in dissonance) while actively trying to avoid information or situations that would likely increase the dissonance.

Workshops and Trainings

Children are not only exposed to HIV/AIDS, but also they are infected with the disease. The incidence of school-aged persons both infected with and affected by HIV continues to increase. Children who are and are not HIV+ must attend school together and develop a tolerance for one another (Beverly, 1997). The National Association of State Boards of Education recommends educational programs regarding the transmission of HIV should take place before there is an infected student at the school.

Research by Price (1986) indicates that school personnel should be trained in dealing with AIDS, as training for counselors in HIV/AIDS can facilitate positive changes in students (Britton, Rak, Cimini, and Shephers, 1999). While other studies (Ramafedi, 1993) suggest that not only counselors, but also other school professionals benefit from training, as training to increase staff knowledge and understanding of HIV infection and its implications will enable service providers to better meet the needs of

children with HIV and their families (Rosen and Granger, as cited in Crocker et al., 1992).

Shi, Samuels, Richter et al. (1993) found that continuing education is necessary to provide social workers with the knowledge needed to respond positively to the increasing presence of HIV in society. The challenge to improve attitude can begin to be met only by updating and improving the knowledge and skill level of social workers. Social service agencies need to provide workshops and training to increase knowledge and provide a baseline to measure post-training attitudes to better meet the needs of their clients.

Possession of the appropriate knowledge, attitudes, and skills, program content and the length of the program may play a role in affecting perceived attitude change. In addition, knowledge has an influence on the attitude of human service providers, and knowledge is critical to effective intervention. Knowledge about the disease, the occupational risk of HIV exposure, and factors such as prevention, clinical presentation, transmission, and client lifestyle related to HIV/AIDS are important; the influence that this knowledge has on the attitude of the worker is critical to effective intervention.

Social workers need continued education (i.e., trainings and workshops) to provide them with the knowledge and skills necessary to respond positively to the increased presence of HIV infection (Shui, Ricyhter, Stotskopff and Sy, 1993). According to Weiner and Siegel (1990), social workers who had greater knowledge of the disease reported significantly higher levels of comfort in providing services to persons with HIV/AIDS. In addition, training programs that include knowledge of the disease (Britton et al., 1999), mode of transmission, infection control, sensitivity to lifestyle, and

the identification of personal prejudices, attitudes and biases help to increase comfort levels in providing services to persons with HIV/AIDS.

Research by Riley and Green (1993) found that factors such as education and training appear to have a positive effect on attitudes toward clients with HIV/AIDS. Specialty training with emphasis on knowledge of prevention, lifestyles, clinical presentation, and transmission is also recommended. In addition, training exercises that involve role-playing have been effective in increasing professional comfort and competence in dealing with the special needs of persons with HIV/AIDS.

In studies done involving medical professionals, Roger and Ginzberg (1989), found that nurses' knowledge levels and attitudes improved with education. Marshall (1997) found that occupational therapist and physical therapy students' knowledge of AIDS, attitude about AIDS, and their willingness to work with persons with HIV/AIDS improved after receiving education on AIDS-related issues. Educational programs may offer some hope for altering HIV/AIDS stigma (Pryor and Reeder, 1993). Therefore, it is reasonable to assume that as the amount of knowledge increases, there will be a shift in attitudes (Gee, as cited in Rogers and Ginzberg, 1989).

Education of various types, in various forms, and increased knowledge of how HIV is spread, and how it is medically treated, helps to lesson the fear of HIV/AIDS (Fan, Conner et al., 2004). According to Gee (as cited in Rogers and Ginzberg, 1989) the increased availability of information through education will decrease fear. Education may also help to dispel myths and stereotyped attitudes about persons with HIV/AIDS (Weiner and Siegel, 1990). According to the Institute of Medicine (1986), a goal of education is to replace hysteria and irrational fears with rational information. Such

information may result in a level-headed attitude about HIV/AIDS and one's risk of being infected with the virus. AIDS education programs must also reduce the stigma attached to HIV/AIDS and present factual information that reduces fear and anxiety (Herel and Glunt, 1988). Sensitivity training is also a critical component of an AIDS education/training program (Costin, Pietrzak, Kerr, Symons, 2002).

In addition, it is important that educational programs address negative attitudes (Britton, Rak, Cimini, and Shepherd, 1999), beliefs, and feelings about working with persons with HIV/AIDS (Riley and Green, 1993). The results of a study by Remafedi (1993) found that constructive behavioral outcomes were associated with training. Ramafedi (1993) also suggests that school professionals benefited from specific training on adolescent homosexuality in the context of HIV prevention, and a lack of information, misinformation, and homophobia (Ramafedi, 1993), are common problems that have a negative effect on school-based HIV prevention programs.

Exposure to Persons with HIV/AIDS

Increased contact with people who have HIV is a suggested intervention that affects attitude (Greenland, Masser, and Prentice, 2001) and reduces prejudice (Miller et al., 1991, in Pryor and Reeder, 1993). In a stratified random sampling of social workers in South Carolina, higher levels of contact with persons with HIV/AIDS are positively associated with more desirable attitudes and behavior (Shui et al., 1993). Anderson, Vojier, and Johnson (1997) found that factors outside of training may be important, as the number of HIV-infected persons people know personally appears to influence attitude. According to Schwarz (as cited in Rogers and Ginzberg, 1989), it is reasonable to assume that fear influences opinions. The level of knowledge about HIV/AIDS and a person's

experience with people with HIV/AIDS influences opinions (Gee, as cited in Rogers and Ginzberg, 1989). Anderson (1997) surveyed medical students in three United States universities (University of Colorado, University of New Mexico, and the University of South Dakota) and concluded that students' improved knowledge and attitudes were related to the number of persons with HIV that the students personally knew. When people have the opportunity to interact with particular individuals, they can begin to develop individually-based schemas that may begin with the stereotype but are changed to the specific individual. Pryor and Reeder (1993) suggest a contact hypothesis which suggests that positive one-on-one interaction with persons who are part of an out-group (persons with HIV/AIDS) can reduce prejudice. While Greenland et al. (2001) also suggest that the solution to discrimination is not just more factual information, but also increased contact with people who are HIV+ may be an intervention/solution to discrimination against people who are HIV+.

Summary of the Previous Research

The Centers for Disease Control first recognized the AIDS epidemic in the United States in 1981. It was initially associated with homosexual men, and later it was associated with persons with hemophilia. Children were perceived as the innocent victims of the HIV virus. The stigma of HIV/AIDS is so overwhelming that people began to villainize children who are HIV+, and many of these children also experienced prejudice and discrimination at home, at school, and in the community. The stigma, prejudicial attitudes, and discriminatory behaviors were so severe that laws were enacted to protect the rights of children with HIV/AIDS at school. Creating and enforcing anti-discrimination legislation and policy is needed, but it needs to be accompanied by other

measures, i.e., in-service trainings (WHO/UNAIDS, 2004). Teachers, parents, the community, administrators, and other students have rejected these children and their families. Many of these children have been rejected and barred from attending schools.

Many children with HIV/AIDS have developmental, neurological, cognitive, physical, and psychosocial problems. These children's problems are so severe that they may require special education services to meet their needs in the school. Many studies have been done which examine the attitudes of persons in the medical profession (doctors, nurses, and occupational therapists), but very few studies have been done examining the attitudes of school social workers toward children with HIV/AIDS.

Children with HIV/AIDS have the right to be served by professionals who are knowledgeable about children with disabilities and chronic illnesses. It is crucial for schools to address the educational, psychosocial and developmental needs of children with HIV/AIDS and their families. The needs of children with HIV/AIDS are quite diverse and the professionals who work with them must be able to meet the needs of these children.

Many studies have found that specific types of trainings and workshops have a positive impact on attitude (Riley and Green, 1993; Shui et al., 1993; Weiner and Siegel, 1990). Additional studies suggest exposure to persons with HIV/AIDS is positively associated with more positive attitudes (Shui et al., 1993; Anderson, Vojier et al., 1997). A suggested intervention in the battle to fight discrimination is improved knowledge. The World Health Organization reports a lack of knowledge about the virus is one factor that fuels discrimination (WHO/UNAIDS, 2002). Studies suggest improved knowledge of HIV/AIDS improves attitude (Riley and Green, 1993; Fan et al., 2004), but Pryor and

Reeder (1993) found that improved knowledge does not necessarily mitigate discriminatory attitudes. Similar studies (Greenland et al., 2001) suggest the solution to discrimination against people who are HIV+ may not be increased education; instead increased contact with people with HIV is a suggested intervention. This study examines the relationship between workshops on HIV/AIDS and the attitudes of school social workers toward children with HIV/AIDS. This study also examines the relationship between exposure to persons with HIV/AIDS and the attitudes of school social workers toward children with HIV/AIDS. The theoretical foundation used for this study is Leon Festinger's Theory of Cognitive Dissonance. The methodology for the study is survey research that was distributed to school social workers in the New York Department of Education. Twenty-four of 65 school social workers completed the survey instrument titled, "Urban School Social Workers' Attitudes toward Children with HIV/AIDS."

The number of children with HIV/AIDS continues to increase. Children often exhibit a myriad of developmental delays and some neurological impairments. Psychosocial development is also affected by HIV/AIDS. The advent of antiretroviral medications has helped to increase the life span of children with HIV/AIDS, and many of these children are living longer and entering school. All school professionals must be educated on HIV/AIDS.

Professionals in education should have knowledge of modes of transmission, universal precautions, and general knowledge of HIV/AIDS. Workshops and trainings should focus not only on factual information, but also on people's anxieties and attitudes that may affect their interaction with children with HIV/AIDS. Awareness of laws and appropriate protocol of working with children in the educational environment is essential.

Research has focused primarily on medical professionals' attitudes toward people with HIV/AIDS. It has focused on the need for additional workshops and trainings in graduate school and the work environment. This chapter examined literature on pediatric HIV/AIDS and attitudes. A thorough review of pediatric HIV/AIDS was provided, and Cognitive Dissonance Theory was discussed in relationship to attitudes. The literature supported the need for further research on human service workers'/educators' attitudes toward children with HIV/AIDS.

CHAPTER III

METHODOLOGY & PROCEDURE

Overview

The focus of the study is on attitude and the factors (workshops and trainings and exposure to persons with HIV/AIDS) that may influence attitudes. This study involves the use of a survey instrument to compare the attitudes of school social workers who did and did not attend workshops on HIV/AIDS. The study also involves comparing the attitudes of school social workers who have and have not been exposed to persons who have HIV/AIDS.

The research methodology utilized was descriptive in nature and tested two hypotheses and four research questions related to school social workers' attitudes toward children with HIV/AIDS in the New York Department of Education. For the purpose of this study, attitude (dependent variable) is defined as a relatively enduring organization of beliefs predisposing one toward some preferential response (Ross and Mico as cited in Colomb, 1995). Attendance at professional workshops and exposure to persons with HIV/AIDS (dependent variables) are measured by specific questions on the survey instrument (i.e., Have you attended any professional workshops on HIV/AIDS? Do you have students on your caseload with HIV/AIDS? etc.). Data was obtained through the distribution of a survey at a staff meeting. The population for this study consisted of school social workers who attended a staff meeting held by the New York Department of Education in New York. All responses were confidential.

Hypotheses Tested

The following hypotheses were tested in the research:

H1: School social workers' attendance at professional workshops on HIV/AIDS will be positively related to attitude as measured by the School Professionals' Attitudes Toward AIDS (SPATA) Instrument.

H2: Exposure to persons with HIV/AIDS will be positively related to attitude as measured by the School Professionals' Attitudes Toward AIDS Instrument.

Research Questions

The research questions this study sought to answer were as follows:

1. Does the New York Department of Education have an HIV/AIDS policy in effect?
2. Does the New York Department of Education have an established HIV/AIDS education program?
3. Have school social workers taken part in any professional workshops on HIV/AIDS?
4. Have school social workers encountered persons with HIV/AIDS related conditions in their respective schools?

Sampling Processes

The population for this study consisted of school social workers who attended the staff meeting that was held by a local region of the New York Department of Education. Data was collected at a staff meeting, and the study is a convenience sample. In attendance at the staff meeting were school social workers and school psychologists, but only the certified school social workers were asked to participate in the study. There were

approximately 65 school social workers at the staff meeting and 24 agreed to participate in the study. The response rate at the staff meeting was low (i.e., 37 percent of those who attended). There were 22 women and two men who participated in the study. The respondents were each paid $10 in cash for participating in the study, and one study respondent won $50 cash in a drawing. The study participants were of different races: there were eight Caucasians, four African Americans, six Latino/Hispanics, two Native Americans, and two individuals who identified themselves as African American and Latino/Hispanic. The age range for the participants was from age 31 to 60+ years. The mean age range was 46 to 50.

Instrumentation

The researcher conducted an extensive review of the literature related to attitude and of the factors that may influence attitudes toward persons with HIV/AIDS. The researcher has identified an instrument developed by James Neatens and Ton Yaw Nyein of the University of Tennessee. The survey was used to assess the attitudes of school social workers toward children with HIV/AIDS. Dr. Nyein (1989) utilized the instrument they developed for his doctoral dissertation, "Tennessee Superintendents' Attitudes toward Persons with AIDS in the Public School Setting." The instrument utilizes 33 Likert-type items with response categories that range from *strongly agree* to *agree*, *don't know*, and *disagree* to *strongly disagree*. Thirty-two of the 33 Likert-type items were used for this study. Four statements were recoded in the reverse order. Those statements were in part II of the survey instrument and they are identified below:

- Children who live with a person who has AIDS should not be allowed to attend public schools (q. 3).

- Children who have AIDS should not be allowed to attend school (q. 4).
- Teachers who have AIDS should not be allowed to remain in the classroom (q. 10).
- A classified non-teacher school employee who has AIDS should not be allowed to work in public schools (q. 26).

The instrument Dr. Nyein utilized was titled the School Professionals' Attitudes Toward AIDS (SPATA) Instrument. A letter was sent to Dr. Nyein requesting permission to use the instrument for the purpose of research. The instrument is identified as SPATA throughout this research paper. Although on the actual instrument, the researcher titled Part I as School Social Workers Attitudes Toward Children with HIV/AIDS, and Part II was titled SPATA.

The research instrument was also used by another researcher, Dr. Mark Colomb (1995) of Jackson State University. The instrument was used for his doctoral dissertation titled, "A Comparative Analysis of the Attitudes of Superintendents Toward Persons with AIDS in Mississippi's Public School Districts," and the reliability of the instrument was determined using Spearman-Brown reliability coefficients and Cronbach's alpha. Spearman-Brown correlation coefficients were .86 and .89, and Cronbach's alpha values were .88 and .91, respectively, for the pilot and study populations used. The test instrument was utilized for this study, as a measurement of attitude toward persons with HIV/AIDS. A few of the questions were minimally modified to address school social worker attitudes toward children with HIV/AIDS. The Statistical Package for the Social

Sciences (SPSS) and SAS was utilized to analyze the data. The sampling design is single stage in which the researcher was able to sample the respondents directly.

Procedure

Part I of the questionnaire elicited demographic information (i.e., school social workers' gender, age, ethnicity, educational level, geographic location of school, and years of experience). It contained 23 response categories for which the participants had to place a check mark or fill in an open-ended question. Part II of the questionnaire contained 32 attitudinal questions, and the school social workers were required to choose a numerical response on a five-point Likert-type scale (see appendix). Responses ranged from one *(strongly disagree)* to five *(strongly agree)*.

The school social workers were asked to read and complete Part I and Part II of the survey instrument, in addition to the consent form. The instructions stressed the voluntary and confidential nature of the survey. The school social workers were asked to detach the consent form from the survey instrument prior to submission to the researcher. After instructions were given, participants volunteered and the survey instrument was distributed.

Data Collection

Data for this study was collected using the questionnaire. The instrument was distributed at a staff meeting of school social workers on December 15, 2005. A cover letter/consent form explained the purpose of the survey and informed consent was obtained. The school social workers read and completed the questionnaire and consent form. Each participant was paid $10 for their time and participation, and one participant

won $50 in a drawing. One participant refused financial compensation. The data that was collected was confidential in nature.

The total possible summary score on the instrument ranged from a minimum of 32 to a maximum of 160. Those respondents who remained neutral on all items could receive a score of 96. A cumulative score of 22 to 75 represented a negative attitude. A score of 76 to 118 represented a moderate attitude, and a score of 119 to 160 represented a positive attitude. For the purpose of this study, attitude was measured by participants' rating on the attitudinal scale. Exposure to persons with HIV/AIDS and participation in workshops and training were measured by responses to various questions in the demographic section of the questionnaire.

Materials

Information was also collected from telephone interviews and a review of textual materials on the HIV/AIDS policy of the New York City Department of Education. Three telephone interviews were conducted between the primary researcher and the state and local department of education. The participants were selected as a result of the researcher speaking with a contact person in the New York State Department of Vocational and Educational Services for Individuals with Disabilities.

The researcher was referred at the state level to the New York HIV Program Coordinator of Student Support Services, and to the local director of the Office of Health Education and Family Living. During the interview, the researcher introduced herself. Participants were then informed that the researcher had collected data in a local borough and, as a follow-up, was requesting an interview to obtain additional information on state and local policies and programs on HIV/AIDS.

Open-ended questions were used to facilitate participants' recall. Participants were asked about the state and/or local policies and programs for students with HIV/AIDS. They were then asked how the program and policy is implemented in the school. Participants were given the choice to continue or to end the interview at that time. The only participant who voluntarily chose to end the interview referred the researcher to information on HIV/AIDS on the New York City Department of Education Health Education web site. For the participants who agreed to continue the interview, a follow-up telephone call was placed the next day. During the follow-up interview, the participant was asked about professional development for staff and community support for HIV/AIDS education in the school.

The interviews were semi-structured, wherein open-ended questions were asked, but the participant was encouraged to follow up on important ideas outside the realm of the question. The participants were informed the interviewer was taking notes. After the initial interviews, the researcher did a follow-up interview with one of the participants. The time between the initial interviews and the follow-up interview gave the interviewer a chance to review the initial interview notes, to reflect on the initial interviews, and to think of areas that required additional probing. After the follow-up interview, the participants were sent a thank you note for participation in the interview process.

After the interviews, the researcher transcribed the original notes of all three interviews. Each interview was individually read and transcribed from the original notes to detailed descriptions. The core ideas presented in the interview were defined clearly. Some overlap was evident in the interview analysis. The researcher then went through

the original notes again to investigate whether any important information was overlooked.

The data was collected in an initial 45-minute interview with the state department of education. A 15-minute interview was conducted with the local department of education, and a final 30-minute follow-up interview was conducted with the state department of education. The researcher kept the participants engaged as long as their time permitted for the interview process. The researcher was able to establish credibility with one participant resulting in a prolonged engagement of the interview.

The principal investigator conducted the interviews. The primary investigator has extensive experience conducting interviews. The investigator has more than 15 years of experience conducting interviews. The researcher generated the interview questions from the research questions. The quantitative data was then analyzed, and the interview and the textual material were reviewed and discussed in the analysis and the findings of the research project.

CHAPTER IV

PRESENTATION AND ANANLYSES OF DATA

Introduction

This chapter analyzes the New York Department of Education school social workers' attitudes toward persons with HIV/AIDS. Data for this study was collected from 24 of 65 school social workers who work for the New York Department of Education. The study measured the attitudes of school social workers toward children with HIV/AIDS in the New York Department of Education relative to whether they have participated in professional workshops, and whether they have had exposure to persons with HIV/AIDS. Statistical analysis was done by computer using the SPSS and SAS statistical programs. SAS was used to analyze the data for the two hypotheses. SPSS was used to analyze the data for the four research questions. The .05 level of confidence was used.

The survey instrument was distributed to the school social workers of the New York Department of Education, and 24 school social workers volunteered to complete the survey instrument. The return rate was 37%. The survey instrument was distributed at a staff meeting on December 15, 2005.

Instrument Reliability

In a pilot study done by Columb (1995), questions were raised about the generalizability of the instrument reliability across populations. Reliability coefficients were determined and found to be consistent. Spearmam-Brown correlation coefficients were .86 and .89, and Cronbach's alpha values were .88 and .91, respectively, for the pilot and study population of the study done by Columb. The same survey instrument

was used for this study, although additional questions were added to SPATA part I for purposes of clarity. Estimates of internal consistency were examined for SPATA part II. Cronbach's alpha coefficient was .691. These estimates suggest that SPATA has a low to moderate level of internal consistency. The original instrument was used with minimal changes made to address the study population.

Demographic Description of Respondents

A total of 24 questionnaires were returned and analyzed by the researcher. The demographics of the school social workers are shown in Table 1A-Table 1 F. There were 91.7% female and 8.3% male respondents. Respondents ranged in age from 31 to 60+ years, with a median age range of 46 to 50. There were 29.2% Catholic, 20.8% Jewish, 12.5% Protestant, 33.3% other, and 4.2% no religious affiliation. There were 42.9% white, 18.2% African American, 31.8% Latino/Hispanic, 4.5% Native American, and 4.5% African American and Latino. A total of 78.3% of the respondents had master's degrees, 13% had specialist's certification. A total of 4.3% had education beyond a master's degree. Four percent had a doctorate. Years of experience ranged from zero to 30 years, with 33.3% having 0 to five years, 16.7% having six-10 years, 8.3% having 11-15 years, 25% having 16-20 years, and 16.7% having 21-30 years of experience.

Table 1A – 1F

Gender of the Respondent – Table 1A

Gender	Frequency	Valid Percent
Female	22	91.7%
Male	2	8.3
Total	24	100.0%

Age of the Respondent – Table 1B

Age	Frequency	Valid Percent
31-35	1	4.2%
36-40	2	8.3
41-45	3	12.5
46-50	9	37.5
51-55	4	16.7
56-60	4	16.7
60+	1	4.2
Total	24	100.0%

Religious Affiliation – Table 1 C

Religion	Frequency	Valid Percent
Catholic	7	29.2%
Jewish	5	20.8
Protestant	3	12.5
Other	8	33.3
None	1	4.2
Total	24	100.0%

Ethnicity – Table 1 D

Race	Frequency	Valid Percent
White	9	42.9
African American	4	19
Latino/Hispanic	7	31.8
Native American	1	4.5
African American & Latino/Hispanic	1	4.5
Total	22	100.0%

Highest Degree Held – Table 1 E

Education	Frequency	Valid Percent
Master's	18	78.3%
Specialist	3	13
Master's+	1	4.3
Doctorate	1	4.3
Total	23	100.0%

Years Employed as a School Social Worker – Table 1 F

Years of Experience	Frequency	Valid Percent
0 to 5	8	33.3%
6 to 10	4	16.7
11 to 15	2	8.3
16 to 20	10	41.7
Total	24	100.0%

Analysis of Data

The following discussion will address the two hypotheses. The 0.05 level of confidence was used for rejecting the hypotheses. Independent sample *t* test was used to test the hypotheses.

H1 stated school social workers' attendance at professional workshops on HIV/AIDS will be positively related to attitude as measured by the School Professionals' Attitudes Toward AIDS Instrument (SPATA). There was no significant difference when comparing the mean score of the attitudes of school social workers who have and have not attended professional workshops on HIV/AIDS. The *t* test was used to compare the mean differences between the sum of the attitude score of the school social workers who have and have not attended professional workshops on HIV/AIDS. The *t* test showed no difference regardless of whether they answered yes or no to attendance at professional workshops on HIV/AIDS (see Table 2).

Mean No = 110.25

Mean Yes = 113.5

Attendance at Professional Workshops – Table 2

Workshop Attendance	N	M	SD
No	8	110.25	8.57
Yes	16	113.5	6.145

t (22) = -.075, p=.4622, p>.05

The confidence interval for those who answered no was from 99.416 to 121.08 95% confidence interval. The confidence interval for those who answered yes was from 109.07 to 117.93. The statistical test shows the variance for the two groups is equal. On the equality of variances test, the high p value means we cannot reject the null hypotheses. The p value for the *t* test is .4622, which means there is no difference. The p value is greater than .05, therefore, we cannot reject the null hypothesis.

H2 stated exposure to persons with HIV/AIDS will be positively related to attitude as measured by the School Professionals' Attitudes Toward AIDS (SPATA) Instrument. The *t* test was used to compare the mean differences between the sum of the attitude score of the school social workers who have and have not had exposure to people with HIV/AIDS. Exposure to persons with HIV/AIDS is a composite variable that was measured by a yes or no answer to the following questions on the survey instrument.

- Are you aware of persons in your school with HIV/AIDS?
- Have you encountered a student with HIV/AIDS in your school?
- Do you have a student on your caseload with HIV/AIDS?

If a school social worker answered yes to any of these questions, then their answer was yes, they have had exposure to persons with HIV/AIDS. If a school social worker answered no to all of these questions, then their answer was no, they have not had

exposure to persons with HIV/AIDS. The *t* test results showed there is a significant difference if the respondent answered yes or no to whether they have had exposure to persons with HIV/AIDS. If they answered yes, they have a higher score (see Table 3).

Mean No = 106

Mean Yes = 117

Exposure to People with HIV/AIDS – Table 3

Exposure	N	M	SD
No	10	106	11.94
Yes	14	117	4.66

$t(11) = -.277$, $p = .0183$, $p < .05$

The confidence interval for those who answered no was from 97.462 to 114.54 95% confidence interval. The confidence interval for those who answered yes was from 114.31 to 119.69. The *t* test results showed the p value is less than .05, p = .0183. The p value was less than .05, therefore, we can reject the null hypotheses.

Pearson's r was performed to examine the relationship between attitude and attendance at professional workshops on HIV/AIDS. The relationship between attitude and professional workshops on AIDS is a moderate relationship. The correlation coefficient equals .158 ($p = .462$, $p > .05$, not significant).

Multiple Regression

A multiple regression analysis was performed using dummy variables to test the difference between mean attitude scores of the groups of school social workers who have and have not encountered a student with HIV/AIDS in their school, school social workers

who have and do not have students on their caseload with HIV/AIDS, and school social workers who are and are not aware of people in their school with HIV/AIDS.

The dependent variable attitude was determined by the sum score obtained on the SPATA survey instrument. The independent variable encounter to persons with HIV/AIDS was determined by whether the school social worker has encountered a student with HIV/AIDS in their school (variable name encounter), whether the school social worker has a student with HIV/AIDS on their caseload (variable name caseload), and whether a school social worker is aware of people in her/his school with HIV/AIDS (variable name aware).

Multiple Regression Model

The predictor dummy variables AWARE, ENCOUNTER, and CASELOAD were entered into the regression model predicting the attitudes of school social workers. The results, shown in Table 4, indicate that the dummy variable AWARE was significant, with a beta of .449 ($p < .05$). Awareness of people in the school with HIV/AIDS emerged as the most important predictor of the mean of the attitude score of school social workers. The variable ENCOUNTER (i.e., encountering a student with HIV/AIDS in the school), although not significant, was associated with a higher mean attitude score. The variable that correlated highly with the dependent variable is AWARE, and it shows a significant relationship. Thirty percent of the variance is accounted for in the model ($R^2 = .307$).

Multiple Regression Model – Table 4

Multiple Regression					
Model 2	B	Beta	t	p	Tolerance
AWARE of persons with HIV/AIDS	11.753	.449	2.204	.041	.929
ENCOUNTER a student with HIV/AIDS	7.740	.381	1.821	.085	.878
Students on CASELOAD with HIV/AIDS	-5.658	-.161	-.742	.467	.819

$R = .554$, $R^2 = .307$, $N = 22$, $F(3, 18) = 2.658$

Pearson's r

Pearson's r was performed to examine the relationship between the attitude score and the dummy variable aware of people in school with HIV/AIDS. The results indicate a statistically significant association between the sum attitude score and school social workers being aware of people in the school with HIV/AIDS, $r = .406$ $p = .049$, suggesting that school social workers who are aware of people in the school with HIV/AIDS demonstrated a significantly higher attitude score when compared to those school social workers who are not aware of people in the school with HIV/AIDS. These findings are consistent with previous findings in the regression equation model (i.e., $B = 11.75$, $t = 2.20$, $p = .041$).

ENCOUNTER has the next highest correlation ($r = .313$, $p = .136$) but it is not significant. There is a weak relationship between the attitude score and encountering a student with HIV/AIDS in the school.

CASELOAD has a weak or no relationship with ATTITUDE, and it is not significant ($r = .054$, $p = .812$). A weak relationship—and possibly no relationship—

exists between the attitude sum score and school social workers having a student in their caseload who has HIV/AIDS.

School social workers being AWARE ($p = .041$) of people in the school with HIV/AIDS predicts attitude, and ENCOUNTERing ($p = .085$) a student with HIV/AIDS-related condition in the school contributes to the multiple regression model. Among the predictor variables, the collinearity statistic tolerance level indicates that multicollinearity is not present in the model. The results of the multiple regression analyses show that being aware of people in your school with HIV/AIDS is a predictor of attitude score. Those school social workers who are aware of people in the school with HIV/AIDS are more likely to have a higher sum attitude score.

Four research questions were addressed in the study. They are presented in their respective orders. The first research question asked does New York Department of Education have an HIV/AIDS policy in effect. Thirteen, or 56.5%, of the respondents answered yes. Ten, or 43.5%, of the respondents answered no. Responses to this research question are described in Table 5.

Table 5

Does the NYDOE Have an HIV/AIDS Policy in Effect?

HIV/AIDS Policy	Frequency	Valid Percent
Yes	13	56.5%
No	10	43.5
Total	23	100.0%

The second research question asked does New York Department of Education have an established HIV/AIDS education program. One, or 4.2%, answered yes. Twenty-three, or 95.8%, of the respondents answered no. Most respondents answered no, they did not have an AIDS education program in their school. Responses to this research question are described in Table 6.

Table 6

Does the NYDOE Have an Established AIDS Education Program in Your School?

AIDS education program	Frequency	Valid Percent
Yes	1	4.2%
No	23	95.8
Total	24	100.0%

The third research question asked have school social workers taken part in any professional workshops on HIV/AIDS. Seventeen, or 70.8%, of the respondents answered yes. Seven, or 29.2%, of the respondents answered no. Responses to this research question are in Table 7.

Table 7

Have You Taken Part in Any Professional Workshops on AIDS?

Workshops	Frequency	Valid Percent
Yes	17	70.8%
No	7	29.2
Total	24	100.0%

The fourth research question asked have school social workers encountered persons with HIV/AIDS-related conditions in their respective schools. The responses to this question were based on a yes or no answer to three questions on the survey instrument (see Table 8). If the respondent answered no to all three questions, then their answer was recorded as no. If the respondent answered yes to any of the three questions, then their answer was recorded as yes. Fourteen, or 56.5%, of the respondents answered yes. Ten, or 43.5%, of the respondents answered no to all three questions. Responses to each of these research questions are in Table 8A – Table 8C.

Table 8A – Question 1

Have You Encountered a Student with HIV/AIDS-related Condition in Your Schools?

Encounter	Frequency	Valid Percent
Yes	11	45.8%
No	13	54.2
Total	24	100.0%

Table 8B – Question 2

Do You Have Students on Your Caseload Who Have HIV/AIDS?

Caseload	Frequency	Valid Percent
Yes	1	5.9%
No	16	94.1
Total	17	100.0%

Table 8C – Question 3

Are You Aware of People in Your School with HIV/AIDS?

Aware	Frequency	Valid Percent
Yes	4	16.7%
No	20	83.3
Total	24	100.0%

To further examine the attitudinal differences among the school social workers, the school social workers were compared based on gender, age, religion, race, years of experience, and education level.

Demographic Characteristics of Respondents

There was no significant difference when comparing the attitude of school social workers by gender, age, religion, race, years of experience and education level. In general, there was no significant difference in the sum of the attitude score (see Summary Table 9).

Characteristics of the Respondents and Findings, Summary Table – Table 9

Statistical test	Variable	p	findings	results
t test	Gender	p=.758	p > .05	Not significant
ANOVA	Age	p=.886	p > .05	Not significant
ANOVA	Religion	p=.641	p > .05	Not significant
ANOVA	Race	p=.792	p > .05	Not significant
ANOVA	Years of experience	p=.136	p > .05	Not significant
ANOVA	Education level	p = .074	p > .05	Not significant

A *t* test was used to compare the attitude of school social workers by gender. The females did not show a significantly higher mean score than the males when comparing the mean sum attitude score of school social workers by gender using the independent *t* test (see Table 10).

t test for gender – Table 10

Gender	N	M	SD
Female	22	112.91	10.08
Male	2	107	8.49

$t = .799$, $p = .758$

When comparing the mean sum score of school social workers relative to age, there was no significance when comparing the mean sum score of school social workers

by age using the ANOVA test (p = .886). The mean sum scores are relatively close, although there are some differences (see Table 11).

ANOVA for Age – Table 11

Age	N	M	SD
31-35	1	101	.
41-45	2	117	.707
46-50	3	113.5	6.245
51-55	9	109.75	9.60
56-60	4	110.75	14.93
60+	4	117	13.175
Total	24		

F (4, 17) = .373, p = .886

When comparing the mean sum score of school social workers relative to religion, as measured by the SPATA, there was no significance when comparing the mean sum score of school social workers by religion using the ANOVA test (p = .641) (see Table 12).

ANOVA for Religion – Table 12

Religion	N	M	SD
Catholic	7	109.71	13.89
Jewish	5	117.8	3.96
Protestant	3	113.67	8.5
Other	8	110.25	9.53
None	1	118	.
Total	24		

F (3, 19) = .640, p = .641

When comparing the mean sum score of school social workers relative to ethnicity, there was no significance when comparing the mean sum score of school social workers by ethnicity using the ANOVA test (p = .792) (see Table 13).

ANOVA for Ethnicity – Table 13

Ethnicity	N	M	SD
White	8	111	9.86
African American (AA)	4	107.25	10.81
Latino/Hispanic	6	114	13.52
Native American	1	113	.
AA & Latino/Hispanic	2	115.5	4.95
Other	1	124	.
Total	22	112.23	10.37

F(3, 16) = .472, p = .792

When comparing the mean sum score of school social workers relative to years of experience, there was no significance when comparing the mean sum score of school social workers by years of experience using the ANOVA test ($p = .136$) (see Table 14).

ANOVA for Years of Experience – Table 14

Years of Experience	N	M	SD
Zero to five	8	108.75	8.29
Six to 10	4	119.25	6.13
11 to 15	2	102.5	20.51
16 to 20	10	114.6	8.92
Total	24	112.42	9.93

$F(2, 22) = 2.074$, $p = .136$

When comparing the mean sum score of school social workers relative to education, there was no significance when comparing the mean sum score of school social workers by education using the ANOVA test ($p = .074$) (see table 15).

ANOVA for Education – Table 15

Education	N	M	SD
Master's	18	113.72	7.73
Specialist	3	96.6	2.12
Master's+	2	118	1.42
Doctorate	1	119	
Total	23	112.17	10.08

$F (3, 19) = 2.713$, $p = .074$

CHAPTER V

DISCUSSION

Overview

The purpose of this study was to analyze school social workers' attitudes toward persons with HIV/AIDS. The attitudes were tested for association with the variables of attendance at professional workshops and exposure to persons with HIV/AIDS. The population for this study consisted of 65 school social workers who attended a staff meeting held at a local region of the New York Department of Education. A convenience sample of 24 school social workers participated in the study. There was a 37% return rate on the instrument.

This study is important because HIV/AIDS is pandemic. Approximately 40.3 million people are living with HIV worldwide, and more than one million people are living with HIV in the United States (UNAIDS/WHO, 2005). Children are not exempt from that number, as 2.3 million children under the age of 15 are infected with HIV worldwide (UNAIDS/WHO), and more 3,000 children under the age of 13 are infected with HIV in the United States. The incidence of school-aged children infected and affected by HIV continues to increase.

Children with HIV/AIDS are living longer and they are entering schools, and many of these children have been rejected because of the stigma related to having HIV/AIDS. These children have experienced discrimination, social rejection and ostracism because of their HIV status. It is imperative to examine the variables that affect the attitudes of school professionals (in this case, school social workers) who work with this vulnerable population.

This chapter will discuss the implications of the findings presented in Chapter 4. First, the findings of the analysis will be discussed in reference to possible explanations of the findings and in reference to the previous literature. Next, the theoretical and research implications of the study will be addressed. Finally, the limitations of the study will be reviewed and suggestions for further research will be made.

Hypothesis

Two hypotheses and four research questions were posed and tested. These hypotheses were tested using the independent sample *t* tests. Results of the analyses are discussed for each hypotheses posed. Results of the analyses and findings are discussed for each research question posed.

Hypothesis 1 stated school social workers' attendance at professional workshops on HIV/AIDS will be positively related to attitude as measured by the School Professionals' Attitudes Toward AIDS (SPATA) Instrument. This hypothesis was not supported by the results of the study. Attendance at professional workshops was not found to account for any significant variance in the attitude score of the school social workers as measured by the SPATA. These findings indicate that professional workshops do not have a significant impact on attitudes. These findings are inconsistent with previous research that has indicated that education and trainings appear to have a positive effect on attitudes (Riley and Green, 1993; Roger and Ginzberg, 1989; Marshall, 1997).

In an effort to explain why the findings of this study differed from previous studies, several alternative explanations are provided. Any one or a combination of some or all of the explanations may contribute to the findings of this study.

(1) The workshops that the participants attended may not have presented the right kind of information that would significantly affect attitude. The workshops may not have addressed attitudes, sensitivity to lifestyle, and the identification of personal prejudices, etc.

(2) The school social workers may not have had a sufficient amount of time at the workshops to discuss attitudes and opinions and to examine personal beliefs—or perhaps these topics were not presented.

(3) The workshops may have been too short in length, and the school social workers may not have had enough time to process the information and to consider developing effective interventions for working with people with HIV/AIDS.

(4) The workshops may not have provided the participants with the appropriate amount of knowledge needed in order to respond positively to persons with HIV/AIDS.

(5) The workshops may not have provided the appropriate information to promote critical thinking. If information on attitude and dissonance reduction were included in the workshops and trainings, it seems reasonable to assume that creating awareness of cognitive dissonance might help to reduce resistance, prevent the selective processing of information, encourage critical thinking, and promote workers who are more conducive to working with people who are HIV+ (McFalls and Roberts, 2001). For example, if school social workers are aware of their dissonance—that is, reactions when hearing and/or reading

information that is inconsistent with their current beliefs, opinions, or experiences—as a result of their awareness, they may become less resistant to inconsistent information, thus preventing the initial rejection of this information and encouraging critical thinking. It is conceivable that cognitive dissonance instructional techniques may be applied in workshops and trainings. It may be beneficial to increase participant awareness of internal discomfort because of discrepant information. The identification of internal discomfort may lower the level of resistance and allow for deeper processing of the new information that is presented (McFalls and Roberts, 2001). Perhaps information on cognitive dissonance was not covered in the workshops.

Hypothesis 2 stated that exposure to persons with HIV/AIDS will be positively related to attitude as measured by the SPATA. This hypothesis was supported by the results. Significant differences in the attitude score of the school social workers who have and have not had exposure to people with HIV/AIDS were found. The school social workers who had exposure to persons with HIV/AIDS had a significantly higher mean attitude score than those school social workers without exposure to persons with HIV/AIDS. This finding is consistent with other studies, as the importance of exposure to persons with HIV/AIDS is positively associated with more desirable attitudes (Shui et al., 1993; Anderson, 1997). An additional study also found that increased contact with people with HIV/AIDS can reduce prejudice (Pryor and Reeder, 1993); increased contact

with people with HIV/AIDS is also suggested as a solution to discrimination (Greenland et al., 2001). This finding is encouraging and has been soundly established in prior studies. The results of this study indicate that exposure to persons with HIV/AIDS is positively related to attitude.

Research Questions

Question 1 asked does the NYDOE have an HIV/AIDS policy in effect. Fifty-seven percent of the respondents answered yes, and 44 percent of the respondents answered no. The policy does exist although nearly half of the respondents are unaware of it. NYDOE does have an HIV/AIDS policy in effect. The local NYDOE Health and Family Living Office confirmed that the NYDOE policy is that children with HIV/AIDS are entitled to a public education and confidentiality. The NYDOE web site further describes its policy, as students diagnosed with HIV/AIDS have a right to privacy and a free appropriate public education, and are entitled by law to confidentiality about their HIV/AIDS status, HIV/AIDS-related illness, or information that can be reasonably used to identify an individual as having HIV/AIDS. According to the HIV program coordinator with the New York State Education Department, each school district sets its own policy, but the school district must follow public health law regarding confidentiality. The New York State Department of Education does not dictate policy to the local school district. The local school board level determines its own policy.

A sample HIV/AIDS policy was retrieved from the New York Department of Education web site:

Sample of Policy

The Board of Education of the District is committed to taking all reasonable steps to eliminate and reduce the spread of HIV infection and AIDS through the provision of

sound instructional programs to all its students in a manner consistent with law and regulation.

This policy is adopted by the _____Board of Education in recognition of the privacy rights of students diagnosed with HIV infection or AIDS and their right to free appropriate public education; the rights of HIV infected employees to privacy and reasonable accommodations; the rights of all non-infected individuals to a safe environment free of any significant risks to their health; and instruction regarding the nature transmission prevention and treatment of HIV infection, pursuant to ....

Policy Statement

It is the policy of the _____Board of Education that no individual shall be denied access to any program or activity sponsored by or conducted on the grounds of the _____ Public Schools, solely on the basis of his/her status as an HIV infected individual.

Students

It is the policy of the Board of Education that:

1) A student's education shall not be interrupted or curtailed solely on the basis of his/her HIV status. HIV-infected students shall be afforded the same rights, privileges, and services available to every other student.
2) No student shall be referred to the Committee on Special Education solely on the basis of his/her HIV status. A student who is infected with HIV shall be referred to the Committee on Special Education only when the student's disability interferes with his/her ability to benefit from instruction. Such referral shall be made in accordance with Part 200 of Commissioner's Regulations.
3) If a student who is HIV infected requires special accommodations to enable him/her to continue to attend school; the student shall be referred to the appropriate multi-disciplinary team as required by Section 504 of the Rehabilitation Act.
4) No disclosure of HIV-related information involving a student shall be made without first obtaining the informed consent of the parent, guardian or student on the Department of Health (DOH) approved form....

Employees

It is the policy of the Board of Education that:

No employee shall be prevented from continuing in his/her employment solely on the basis of his/her HIV status; such employees are entitled to all rights privileges, and services accorded to other employees....

Question 2 asked does the NYDOE have an established HIV/AIDS education program in your school. Ninety-six percent of the respondents answered no, and four percent answered yes. According to the local department of education in New York, each

school has an HIV/AIDS program that is taught every year in every grade level in the school. Although school social workers are in the school building, perhaps they are unaware of the HIV/AIDS program being taught. The school social workers may spend the majority of their time in parent meetings, doing special education evaluations, and involved in individual and group counseling. Perhaps there is minimal opportunity to be exposed to the content of the educational curriculum. The HIV/AIDS programs may be being taught in the school, but they are not necessarily identified as HIV/AIDS programs, and perhaps a euphemistic name is used to identify the program. On the other hand, it may be possible that some schools are not in compliance with the HIV/AIDS education program.

The New York Department of Education web site provided additional information regarding the HIV/AIDS health curriculum in the schools. Principals are responsible for assuring that the HIV/AIDS health curriculum is in the school, and a minimum of five HIV/AIDS lessons are taught in every year of elementary school, and a minimum of six HIV/AIDS lessons are taught in every middle and high school grade. The HIV/AIDS program/curriculum is available on the NYDOE web site, and all schools have a copy of the updated HIV/AIDS curriculum.

The NYDOE health education curriculum was made available as an important component to providing students with information, knowledge and skills to help them make informed and responsible decisions. It is a requirement that the HIV/AIDS curriculum provide accurate information regarding methods of prevention. The curriculum emphasizes abstinence, and parents have the right to exempt their children from participation in the curriculum. The purpose of offering annual HIV/AIDS

instruction is to encourage students to make responsible decisions about behaviors that can lead to HIV/AIDS.

The curriculum for elementary schools is very specific. All elementary schools must provide appropriate instruction concerning HIV/AIDS as part of the health education program for students in grades kindergarten to sixth. In grades kindergarten through third grade, children contrast being healthy and being ill, they distinguish being healthy and making unhealthy choices, they identify how diseases are transmitted, how the immune system works, and they also learn that HIV/AIDS is an infectious disease that disables the immune system.

In grades four to 12, students gain a more in-depth understanding of how the immune system works and how HIV affects it. They learn how to protect themselves against HIV. Abstinence from sexual activity is emphasized, and students identify ways to support healthy choices and to reject pressures to make unhealthy choices. The instruction must be provided during an existing class period, and the appropriate training and curriculum materials will be provided to the regular classroom teacher.

The curriculum for students in secondary school is also specified, as all secondary schools will provide instruction on HIV/AIDS as part of the health education courses in grades seven to 12. The instruction in the junior and high school grades shall be taught in a separate half-year course by a teacher certified to teach health. The curriculum shall provide accurate information to the students concerning the nature of HIV/AIDS, methods of transmission, and methods of prevention. The instruction shall stress abstinence, and shall be age appropriate and consistent with the community values.

An example of topics covered in the HIV/AIDS prevention lessons/curriculum are in the chart below:

Grade and Lesson	Lesson Title
Grade K * Lesson 4	How do people get sick? What is HIV? What is AIDS?
Grade 1 * Lesson 3	What are viruses? How do they enter the body to cause disease?
Grade 2 * Lesson 3	What causes and prevents the spread of illness?
Grade 4 * Lesson 4	How can we help each other make healthy choices?
Grade 5 * Lesson 3	How can we reduce our risk behaviors?
Grade 6 * Lesson 5	How can we prevent HIV infection?
Grade 7 * Lesson 5	How can people express love and affection and still be abstinent?
Grade 8 * Lesson 3	How can abstaining from alcohol prevent HIV transmission?
Grade 9 * Lesson 6	How can sexual transmission of HIV be prevented?
Grade 10 * Lesson 4	What are the advantages of sexual abstinence?
Grade 11 * Lesson 4	How can we reduce our risk of getting HIV?
Grade 12 * Lesson 5	How can we reduce our risk of HIV infection?

The NYDOE emphasized that its health education curriculum should be skills-driven, standards-based, science-based, learner-centered, strength-based, authentic, integrated into the total education program, taught by qualified skilled teachers, part of a coordinated school health approach, and supported by the school and the community. In addition, school districts are permitted to set up programs to make condoms available to high school students who participate in the HIV/AIDS instructional program. Latex

condoms are made available in every high school by trained male and female volunteer staff members.

Question 3 asked have you taken part in any professional workshops on AIDS. Seventy-one percent of the respondents answered yes, and 29 percent answered no. According to the NYDOE, its office offers training for staff (school social workers included) one or two times per year. The NYDOE web site indicates that through a series of training programs, administrators and teachers are being introduced to the updated HIV/AIDS curriculum. According to the New York State Department of Education Health Education and Family Living Office, it provides instruction to the staff at a regional and statewide center. The trainings are optional, and they focus on skill development and include information on communication skills, advocacy skills and self-management.

Question 4 asked for responses to three specific questions pertaining to school social workers' exposure to children with HIV/AIDS. This question sought responses to the following questions: Have you encountered a student with HIV/AIDS-related condition in your school? Do you have students in your caseload who have HIV/AIDS? Are you aware of people in your school with HIV/AIDS? Ten, or 42%, of the respondents answered no, they did not have exposure to people with HIV/AIDS. Fourteen, or 58%, of the respondents answered yes they did have exposure to people with HIV/AIDS. School social workers who have had exposure to persons with HIV/AIDS have a more positive attitude (score) than people who have not had exposure to people with HIV/AIDS.

Implications

This study has implications for social work practice related to servicing people with HIV/AIDS. It is estimated that more than one million people are living with HIV/AIDS in the United States of America (WHO, 2005). HIV/AIDS is epidemic, and it is pandemic worldwide. HIV/AIDS is currently one of the most stigmatized illnesses. HIV/AIDS is a social disease, and it has joined the ranks of other diseases that are characterized by stigma, fear, avoidance, and panic (Centers for Disease Control, 2001a, 2001c, as cited in Coleman and Toledo, 2002).

Social workers have a history of servicing people who are underprivileged and socially ostracized. Social workers play a major role in providing social services, counseling, and other services to people with HIV/AIDS (Diaz and Kelly, 1991). Social workers are in a unique position to provide services to individuals who have been stigmatized and discriminated against. Social workers are in a position to advocate for those who may have difficulty advocating for themselves and for those who are at greater risk of HIV infection (i.e., those who live in poverty, are injecting drug users, and are socially marginalized). Social workers are also in a position to help individuals, by linking them to the necessary community services and organizations in order to meet their needs. Social workers can also help to fight discriminatory practices against persons with HIV/AIDS by advocating for policies and programs that promote fairness and justice. Fairness in the schools includes advocating for inclusion and helping to protect the rights of children with HIV/AIDS. Social workers can also promote fairness in legislation, by advocating for the rights of people with HIV/AIDS, and by promoting a stance of equality for all individuals regardless of their HIV status. Social workers can

advocate for public policy that encourages AIDS education, policies that do not perpetuate prejudice, and policies and programs that meet the special needs of minority communities. Social workers must take a stand and not remain silent when people with HIV/AIDS are discriminated against.

Although this study did not provide support for an association between training and research, prior research related to workshops and training supported the need for continued education as social workers who have greater knowledge reported higher levels of comfort in providing services to people with HIV/AIDS (Weiner and Siegel 1990). Training that includes knowledge of the disease, the identification of prejudices, biases and attitudes, with emphasis on prevention and transmission was recommended (Riley and Green, 1993). Education of various types, in various forms, and increased knowledge of how HIV/AIDS is transmitted was found to lessen the fear of HIV/AIDS (Fan, Conner et al., 2001). Remafedi (1993) suggested that constructive behavioral outcomes are associated with trainings on HIV/AIDS.

Another implication of the study is that it extends previous literature and theoretical understanding of HIV/AIDS, and the variables that affect attitudes toward people with HIV/AIDS. Previous studies have included school counselors (Price, 1986), medical students (Anderson, 1997), and other target groups (Riley and Greene, 1993; Colomb, 1995; Greenland, Masser, and Prentice, 2001), but few studies have included school social workers.

This study extends the current literature by incorporating and comparing the attitudes of school social workers toward children with HIV/AIDS. The variables of professional workshops and exposure to people with HIV/AIDS were examined. The

results found that exposure to people with HIV/AIDS significantly affects attitude. Although the variable professional workshops was found to be non-significant, research supports (Weiner and Siegel, 1990) that social workers who have greater knowledge reported higher levels of comfort in providing services to people with HIV/AIDS. Further research should continue to explore the variables that affect attitudes toward persons with HIV/AIDS.

The results of the study have theoretical implications for understanding the Consistency Theory approach to attitude change. According to Festinger (1957) and Cognitive Dissonance Theory, exposure to new information (people with HIV/AIDS) can reduce dissonance. A person can have cognitions about attitudes and beliefs that can be eliminated or changed by adding new cognitions. A school social worker may have pre-existing attitudes and beliefs about working with people with HIV/AIDS, but after exposure to these individuals, those attitudes and beliefs may positively change. The experience of working with persons who have HIV/AIDS can influence the attitudes of school social workers, resulting in a reduction in negative attitudes and an increase in positive attitudes.

Additional studies and future research on attitude may consider including in the exposure category, exposure to persons with HIV/AIDS outside of the school setting. It is also suggested that future research include not only professional workshops as a variable, but also exposure to educational materials on HIV/AIDS in graduate and undergraduate school.

This study also has methodological implications for social work research. The improvement in prediction afforded by the use of multiple variables iterates the need for

multiple measures to control for measurement error. In the study, the use of multiple variables likely results in better representation of the constructs of interest and more accurate estimates of the true relationships among these variables.

The results of this study extend the understanding of the results of research in this area. Further research and discussion are needed to address attitudes toward persons with HIV/AIDS. The broader implication of the research includes implications for more than just children with HIV/AIDS. It has implications regarding attitude and the variables that contribute to attitudes toward all persons with HIV/AIDS.

Strengths

First, participants appeared to complete the survey instrument with some enthusiasm. It was apparent that they took their time to methodically read and consider each question and to complete nearly all of the questions on the survey instrument. Although the participants were paid for their time and participation, many participants verbalized that they felt guilty accepting the $10 for their participation, and one participant even refused financial compensation for participation in the study.

Second, this study provided the school social work profession in New York with continued insight into the area of HIV/AIDS. A contribution from this research study is that the information could be used to enhance the current process of disseminating information on HIV/AIDS programs and policy in the NYDOE. This study could also be used to enhance the current HIV/AIDS curriculum, workshops, and professional trainings offered by the NYDOE.

Third, participants in this study held existing beliefs and attitudes regarding HIV/AIDS prior to participation in this study. It is hoped that the participants will further

examine their attitudes and beliefs toward children with HIV/AIDS. A goal of the study was to examine school social workers' attitudes toward children with HIV/AIDS. It is hoped that any dissonance created will result in positive outcomes with regard to people living with HIV/AIDS. Perhaps practitioners will begin to rethink their views about the disease. It is hoped that they will further accept students with HIV/AIDS, and that they will accept the challenge of self-examination of their attitudes and beliefs toward persons with HIV/AIDS. Hopefully, this examination will result in positive behavioral outcomes toward people with HIV/AIDS.

Limitations

As with all studies, this study has several limitations. First is the question of generalizability with regard to the selection of the participants. All of the school social workers at the staff meeting had an equal opportunity to participate, but some chose not to participate. Thus, this sample was a self-selected group. The question of generalizability to the larger population is raised because of the homogeneity of the sample. This research was only conducted within a school region in New York City. The cultural values of the individuals and the organization likely reflect "New York" values. Homogeneity exists despite the fact that participants were representative of the sample from which they were recruited. Because of the unequal representation in this study, the results may not be generalizable to all social workers, and the generalizability of the study should be approached with caution.

Secondly, school social workers are select groups of professionals in a school system, and obtaining a large enough sample size was a challenge. Although the

participants were paid for their participation, it was difficult to recruit a large enough sample size for the study. It is unknown why some of the school social workers chose not to participate in the study.

Finally, the self-reporting nature of the instrument is another limitation. Since the participants filled out the instrument on their own, the researcher cannot know how truthfully the respondents answered. HIV/AIDS is a highly sensitive issue. If the participants believed the manner in which they responded reflected negatively upon them, then they may have been reluctant to respond according to their true beliefs. Social desirability might affect the way participants answer the questions.

Summary and Conclusion

The purpose of this study was to analyze and compare school social workers' attitudes toward persons with HIV/AIDS. The attitudes were measured against the variables of attendance at professional workshops and exposure to persons with HIV/AIDS. The population for this study consisted of 65 school social workers who attended a staff meeting held by a local region of the New York Department of Education.

A convenience sample of 24 school social workers participated in the study. They responded to a survey instrument entitled, "School Professionals' Attitudes Toward Persons with HIV/AIDS." Part I of the survey requested demographic information and responses to the research questions included in the study. Part II consisted of 33 Likert-type attitudinal items. There was a 37% return rate on the instrument. SPSS and SAS statistical programs were used to analyze the data. Independent sample *t* tests were used to determine if a significant difference existed between the mean scores of school social

workers who have and have not attended professional workshops, and those who have and have not had exposure to persons with HIV/AIDS. The criterion for the rejection was set at the .05 level of significance.

Two hypotheses and four research questions were posed and tested. In relation to the research questions, slightly more than half of the respondents knew that the NYDOE has an HIV/AIDS policy in effect. Most respondents did not know the NYDOE has an established education program in the schools. Most respondents have taken part in professional workshops on AIDS, and most respondents have encountered a person with HIV/AIDS.

Hypotheses

Two hypotheses were developed for this study. These hypotheses were tested utilizing the independent *t* test. Results of the analysis are discussed for each hypothesis posed.

The first hypothesis stated school social workers attendance at professional workshops on HIV/AIDS will be positively related to attitude as measured by the SPATA. The null hypothesis was accepted. Whatever the reason for the difference in the findings for the study and prior research studies, it is hoped that the information gleaned from this study will prove to be useful, and that additional workshops and trainings are offered that are not simply fact based, but also examine attitudes, prejudices, and internal inconsistencies between the thoughts and behaviors of individuals toward people with HIV/AIDS. Previous studies (Gabay and Morrison, 1985, Lennon and McDevitt, 1987, as cited in Herek and Glunt, 1988) have found that people with negative attitudes are more likely to be poorly informed about HIV/AIDS and are more likely to

stigmatize people with HIV/AIDS. Therefore, in an effort to help reduce the stigma of HIV/AIDS, social workers need to be better educated about HIV/AIDS, and HIV/AIDS educational programs and workshops must be designed to examine attitudes in an effort to help reduce the stigma attached to HIV/AIDS (Herek and Glunt, 1988). It is believed that this information can contribute to the development of educational opportunities for social workers, as well as assist persons with HIV/AIDS to secure social workers who are compassionate, educated, and have the skills necessary to work with this population of individuals.

The second hypothesis stated exposure to persons with HIV/AIDS will be positively related to attitude as measured by the SPATA. The null hypothesis was rejected, and this hypothesis was supported by the findings of this study. Exposure to persons with HIV/AIDS may help to alleviate fear, and fear influences opinion (Gee, as cited in Rogers and Ginzberg, 1989). Increased contact with people who are HIV+ is a suggested intervention that affects attitude. It is also suggested that increased contact with people with HIV/AIDS is a potential solution to discrimination against people with HIV/AIDS. The World Health Organization has identified stigma and discrimination as two of the greatest barriers to HIV/AIDS prevention. Social workers are in a unique position to help fight stigmatized attitudes and discriminatory behaviors toward people with HIV/AIDS. It is the history of the social work profession to advocate for social change, fairness, and justice for all people.

APPENDICES

School Social Workers' Attitude Towards Children with HIV/AIDS

You are being invited to participate in a research study of Leona Mickles-Burns, M.S.W., the Principal Investigator, whose phone number is (248) 388-1221.

Purpose:
The purpose of this study is to examine School Social Workers' Attitude toward children with HIV/AIDS in which you are participating.

Duration:
The study will take place at New York City Public Schools. The study will take about 10 minutes of your time.

Risks:
Some of the questions are very personal, involving HIV/AIDS and may cause some discomfort in answering them.

Benefits:
The benefits from participating in this study is to assist with policy and program development to further meet the needs of children with HIV/AIDS. By completing this questionnaire, your name will be entered in a drawing for $50. You are not required to participate in the drawing and you may decline all winnings in the drawings.

Confidentiality:
Your name will be used for tracking purposes only, and other identifying information will not be directly associated with any information obtained from you. A master listing of persons participating in the study will be kept in a secure location under lock and key except when being used by the researcher. When results of this study are published, your name or other identifying information will not be used. Your privacy will be protected to the maximum extent allowable by law.

Voluntary Participation/Right to Withdraw
Your participation in this study is completely voluntary. You do not have to take part in this study, and your refusal to participate will involve no penalty. You may withdraw from the study at any time.

Signature
You have read this entire consent form. If you have any questions about this study, please contact the investigator Leona Mickles-Burns (248) 388-1221. If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish –Peter Vasilekko, Ph.D., Chair of the University Committee on Research Involving Human Subjects (UCRIHS) by phone: (517) 355-2180, fax (517) 432-4593, e-mail: ucrihs@msu.edu, or regular mail: 202 Olds Hall, East Lansing, MI 48824.

Please check one of the following:

_____ I agree to participate in the research study.

_____I refuse to participate in the research study.

_____ _____
Signature of Participant Date

_____ _____
Signature of Investigator Date

SCHOOL SOCIAL WORKERS'
ATTITUDES TOWARD PERSONS WITH
AIDS IN A LARGE URBAN SCHOOL DISTRICT

DIRECTIONS

This questionnaire is designed to ascertain your attitude regarding PERSONS WITH HIV/AIDS in a large urban school district. You are asked to place a check opposite your answer to each question in the space provided. DO NOT SIGN YOUR NAME to this page. ALL RESPONSES WILL BE KEPT CONFIDENTIAL.

PART I

1. Gender _____Male _____Female

2. Age
_____30 and less
_____31 to 35
_____36 to 40
_____41 to 45
_____46 to 50
_____51 to 55
_____56 to 60
_____60 and over

3. Religious Affiliation
_____Catholic
_____Jewish
_____Protestant
_____Muslim
_____Other (specify) _____
_____None

4. Ethnicity
_____White _____African-American _____Latino/Hispanic
_____Native American _____Asian American
_____Other (specify) _____

5. Highest degree held
_____Bachelors
_____Masters
_____Specialist
_____Doctorate
_____Other _____

6. How would you describe the area your school is located in?
_____Urban _____Suburban
_____Small city _____Rural

7. In what part of New York City DOE is your school located?
_____Manhattan
_____Bronx
_____Brooklyn
_____Queens
_____Staten Island

8. How long have you been a School Social Worker in the New York City DOE? _____years
9. Have you taken part in any professional workshop on AIDS?
_____Yes (if so, how many) _____
_____No (if no skip to question 12)

10. If yes, has your attitude changed?
_____Yes _____No

11. If yes, how has your attitude changed?
_____positive _____negative

12. Do New York City DOE have an established AIDS education program for students in your school?
_____Yes _____No (if not, skip to question no. 15)

13. Is AIDS education provided as a one time class or incorporated into the curriculum at (any of) your school?
_____one time class _____part of the curriculum

14. Is the curriculum or one time classes offered from K-12 or limited only to certain grade levels?
_____K-12 _____certain levels (specify _____) _____not applicable

15. Do you know if New York Public Schools has a school AIDS policy?
_____Yes _____No (skip to question no. 18)

16. If you checked "yes" for no. 15. Does your school policy differ from the school district's Guidelines/policy for infectious diseases?

_____Yes (in what way?) _____

_____No (why not?) _____
_____Don't Know

17. In your opinion, do you feel that New York City DOE AIDS policy is supported by the community?
_____Yes (if so, in what way are they carrying it out)_____
_____

_____No (if no, why not)_____

18. Have you encountered a student with HIV/AIDS related condition in your school(s)?
_____Yes (if so, how many) _____
_____No

19. Do you have students on your caseload who have HIV/AIDS?
_____Yes (if so, how many) _____
_____No

20. If you answered yes to question 18 or 19, has your attitude changed towards persons with HIV/AIDS as a result of having a student in your school with HIV/AIDS?
_____Yes (if so, how) _____positive _____negative
_____No

21. Are you aware of people in your school with HIV/AIDS?
_____Yes (if so, how many) _____
_____No

22. Are you aware of colleagues in New York City DOE who have someone in their school with HIV/AIDS?
_____Yes
_____No

23. What school level are your working with? (check all that apply)
_____Elementary
_____Middle School
_____High School
_____Other (please specify) _____

PART II

School Professionals' Attitudes Towards AIDS (SPATA)

Directions: Part II contains various statements regarding persons with AIDS in public school settings. Please respond to these statements by placing a circle around the response category which best characterizes your opinion or attitude. Thank you for your cooperation.

Terminology:
AIDS (Acquired Immune Deficiency Syndrome) A disease that attacks the immune system leaving it unable to defend the body against infections.
HIV (Human Immunodeficiency Virus) The virus that causes AIDS

High Risk Behaviors. Behaviors that put one at risk for contracting HIV, such as unprotected sex with someone who is infected with HIV

Key (1) SD = Strongly Disagree
(2) D = Disagree
(3) DN = Don't Know
(4) A = Agree
(5) SA = Strongly Agree

		SD	D	DN	A	SA
1	Children who live with an HIV positive person Should not be allowed to attend public school.	1	2	3	4	5
2	A child who is HIV positive should be allowed to attend school.	1	2	3	4	5
3	Children who live with a person who has AIDS SHOULD not be allowed to attend public school	1	2	3	4	5
4	Children who have AIDS should not be allowed To attend school	1	2	3	4	5
5	If it were up to me, I would allow a child with AIDS To remain in my school	1	2	3	4	5
6	Administrators should be told if there is a student Who has AIDS in their school	1	2	3	4	5
7	Teachers should be told if there is a student who has AIDS in their class	1	2	3	4	5
8	Children should be told if there is a student who has AIDS in their class	1	2	3	4	5
9	Parents should be told if there is a student Who has AIDS in their child's class	1	2	3	4	5
10	Teachers who have AIDS should NOT be allowed to Remain in the classroom	1	2	3	4	5
11	A teacher should be tested for AIDS	1	2	3	4	5
12	If I had a student/client who had AIDS in my school I would not treat him/her differently from other Students	1	2	3	4	5

Key	(1) SD = Strongly Disagree (2) D = Disagree (3) DN = Don't Know (4) A = Agree (5) SA = Strongly Agree	SD	D	DN	A	SA
13	If I had a student in my school who is at high risk I would treat that person like I treat all the other students	1	2	3	4	5
14	If there were a separate class for students with AIDS I would be willing to teach it	1	2	3	4	5
15	If there were a separate class for students with AIDS I would be willing to teach it on an Occassional basis	1	2	3	4	5
16	It would be my responsibility to alert parents to the Fact that a particular student has HIV	1	2	3	4	5
17	AIDS students should be segregated for certain Classroom activities	1	2	3	4	5
18	I feel that AIDS is a punishment for sin	1	2	3	4	5
19	If I contracted AIDS, I would leave the social work profession	1	2	3	4	5
20	I would be comfortable having a student with AIDS In the school I work in	1	2	3	4	5
21	I would be comfortable having a person who is HIV Positive In the school I work in	1	2	3	4	5
22	I would be comfortable having a person who is at High risk In my school	1	2	3	4	5
23	Schools should conduct AIDS education programs in Different grade levels from elementary through high school	1	2	3	4	5
24	AIDS education should begin at the elementary school	1	2	3	4	5
25	A discussion of condoms should be included in AIDS Education in school	1	2	3	4	5
26	A classified non-teacher school employee who has AIDS should NOT be allowed to work in public schools	1	2	3	4	5
27	A classified teacher school employee who is HIV Positive Should be allowed to work in public schools	1	2	3	4	5
28	Individuals at high risk for AIDS should be allowed To work in public schools	1	2	3	4	5

Key	(1) SD = Strongly Disagree (2) D = Disagree (3) DN = Don't Know (4) A = Agree (5) SA = Strongly Agree	SD	D	DN	A	SA
29	All people with AIDS should be quarantined	1	2	3	4	5
30	I would feel comfortable speaking in public about AIDS	1	2	3	4	5
31	I would feel comfortable advocating for teaching About the use of condoms in preventing AIDS	1	2	3	4	5
32	I would feel comfortable advocating for teaching About alternate lifestyles such as homosexuality as They relate to AIDS	1	2	3	4	5

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