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**LA THÈSE A ÉTÉ
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**Formative Research Concerning Media Education About AIDS
(Acquired Immune Deficiency Syndrome)**

Louise Glegg

A Thesis - Equivalent

In

The Department

Of

Education

**Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montreal, Québec, Canada**

June 1987

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ABSTRACT

Formative Research Concerning Media Education About AIDS (Acquired Immune Deficiency Syndrome)

Louise Glegg

A study was conducted to examine the impact of techniques used to educate the public about AIDS (Acquired Immune Deficiency Syndrome) using the mass media. To accomplish this goal, the study investigated the knowledge, attitudes and information sources about AIDS relating to members of the following groups: the general public (i.e. male and female heterosexuals); a group directly associated with high risk factors (i.e. male homosexuals); and a group which is associated with the preceding group (i.e. female homosexuals). The study also determined the production techniques which are linked to subsequent shifts in knowledge and attitudes in response to an educational film on AIDS. Overall, heterosexuals showed a general awareness of AIDS. Homosexuals showed a more in-depth knowledge of the disease and more of them felt that they knew how to reduce their risk of getting AIDS. Television was the source of the most information about AIDS for the heterosexuals. For the homosexuals this source was magazines. More homosexuals than heterosexuals obtained information about AIDS from a friend or relative. Both groups learned from the film, however several aspects were identified which either contributed to mislearning or made the audience defensive. Although the homosexuals had more lenient attitudes towards AIDS issues than the heterosexuals, following the film both groups shifted towards a more lenient position. The two groups felt that the film would be effective for educating the public about AIDS, however on a moment-by-moment basis the heterosexuals consistently rated it higher than the homosexuals. The homosexuals shifted in a negative and positive direction at particular moments in the film. The findings of this study indicate the need for more effective public education about AIDS which uses television, and the importance of combining it with evaluation measures.

DEDICATION

To the nurses working in hospitals, clinics and homes in many parts of the world to ease the pain and suffering of their patients who have AIDS.

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CHAPTER 1: INTRODUCTION AND LITERATURE REVIEW

AIDS and the Need for A Change in Lifestyles and Attitudes

The Incidence of AIDS

To stem the increasing incidence of AIDS (Acquired Immune Deficiency Syndrome) in Canada has become a priority health goal (Standing Committee on National Health and Welfare, 1986, p.7). While scientists continue their search to discover both a cure and a medical means to prevent this fatal disease, other approaches, and in particular education about behaviour change, are being called upon to control it (Standing Committee on National Health and Welfare, 1986 p.7).

As of 28 April 1986, 541 persons in Canada had been diagnosed as having AIDS, of which 50 percent have died, although all those diagnosed as having AIDS are normally expected to die from the disease.

The first case of AIDS was reported in Canada in February 1982 and since then, the number of persons diagnosed with AIDS has increased at a dramatic rate of approximately 2.5 times per year. (Standing Committee on Health and Welfare, 1986, p.1).

In Canada, unlike some countries in Africa, homosexual and bisexual men constitute the largest group of cases of AIDS (76 percent). However, the disease is also found in male and female heterosexuals, and in children.

[In Canada] AIDS has not spread widely beyond recognized risk groups, however, there has been an increase in cases occurring in heterosexual partners of individuals at risk, and in North American prostitutes. (National Advisory Committee on AIDS, 1986, p.1).

We know that AIDS is spreading within the heterosexual population. The only question is how fast and how widely. (Echenberg, 1985, p.2130).

In Africa, AIDS affects men and women in roughly equal numbers (60 and

40 percent of cases respectively)... According to three doctors at the University of Manitoba in Canada, however, the North American picture is likely to change, with women increasingly becoming infected. (Chouinard, 1986, p.16).

Transmission of the HTLV-III Virus and the Impact on Behaviour

AIDS, which is caused by a virus called the HTLV-III virus, is primarily a sexually transmitted disease. The virus can also be transmitted through blood transfusions, contaminated needles, and from an infected mother to her infant either before or during childbirth (Smith, 1985, pp. 51-81). A characteristic of AIDS which contributes to its spread is that carriers of the virus who display no obvious symptoms of the disease may infect others (Smith, 1985, p.58). Thus, as with many other sexually transmitted diseases, it may be impossible for a person to detect through observation, a person who is infected.

Because AIDS is primarily a sexually transmitted disease, efforts to control its transmission via this route will necessarily involve sexual behaviour. This will include "limiting the number of sexual partners and the use of condoms for high risk sexual exposures". (National Advisory Committee on AIDS, 1986, p.2). However we face a problem in changing behaviours, as described by Lundberg (1985, p. 3441),

In our technological age we have come to expect and to rely on pharmacologic, surgical and immunologic methods for the prevention or treatment of disease. But, in fact, much of the greatest current progress is instead being made by changes in lifestyle. Exercise, diet, limitations on the use of tobacco and alcohol, automobile seat belts, and the like are having a major influence on the incidence of many diseases.

AIDS and Changes in Sexual Behaviour of Homosexual Males

Statistics indicate that the incidence of AIDS continues to increase both in the male

homosexual population in North America and in the heterosexual population. Despite the increase in AIDS, surveys conducted with homosexual and bisexual males in several cities in the United States and Canada (Joseph, 1984; Golubjatnikov, 1983; McKusick, 1985; Schechter, 1984; and U.S. Department of Health and Human Services, 1985) suggest that many of these men are reducing their high risk sexual practices and to some extent increasing low risk ones.

A 1984-85 study (U.S. Department of Health and Human Services, 1985) of homosexual and bisexual males in San Francisco involved telephone interviewing, setting up an educational program based on the responses and then re-interviewing participants. Participants reported a decrease in unsafe sexual acts. The authors of the study warned that the results should be interpreted taking into consideration that,

The multiple and varied sources of information about AIDS and its presumed methods of transmission preclude attribution of behavioral change among homosexuals to any single source of educational intervention. The self-reported changes observed in these two telephone surveys are consistent with the aims of the campaign conducted by the San Francisco AIDS Foundation and those of similar efforts by other groups. (U.S. Department of Health and Human Services, 1985, p.614).

According to an article in Medical World News (1985, p.60-61), the rapidly decreasing incidence of rectal gonorrhoea (used as a measure of the incidence of sexually transmitted diseases) from 5,000 cases in 1980 to 1,300 in 1984 supports the reports of behaviour change. However, the change in sexual behaviour of homosexual men in San Francisco may have come too late, as the prevalence of the AIDS antibody is so high in this group that it approaches 50% and therefore greatly increases the risk.

In 1983, McKusik et al. surveyed homosexual men in San Francisco whom he categorized into four groups as follows: Bathhouse; Bar; No Bar - No Bath; and Committed Relationship. The survey revealed that,

Homosexual men in monogamous relationships showed little changes in sexual behaviour within their relationship. Men in non-monogamous relationships and men not in relationships reported substantial reductions in high-risk sexual activity, but not a corresponding increase in low-risk sexual behaviour. Knowledge of health guidelines was quite high, but this knowledge had no relation to sexual behaviour. (1985, p.495).

In the interpretation of his results, McKusik stressed the need for more than information to motivate some homosexual men to change to less risky behaviour.

It is remarkable that 50 percent of the Bath group and 58 percent of the Bar group still believed that they were less susceptible to AIDS than others, and 65 percent still felt that they had made all changes they needed to, when the behavioral indices regarding their conformity to health guidelines and their health history shows this group is the highest risk of all four groups...Information may have helped some people to make changes, but other motivational strategies will need to be employed to reduce risk further. Sexual behaviour may be comparable to other high-risk behaviors such as tobacco smoking, obesity, seat belt use, and alcohol consumption, where knowledge alone is not sufficient to change behaviour.

(McKusik, 1985, p.495-6).

The San Francisco Department of Health has announced that, the educational campaigns that have been successful in the homosexual community will be inadequate in the heterosexual community. Education is still the prime strategic tool for control of the epidemic in the homosexual community because of the high prevalence of the virus and the large number of contacts that many homosexual men have had over the past few years. Current evidence shows that the prevalence of the virus is extremely low, less than one percent. The immediacy of AIDS that has driven changes in sexual behaviour in the San Francisco area is lacking. We cannot expect mass education to be nearly so successful in changing

practices in the heterosexual community. (Echenberg, 1985, p. 2130).²

McKusick (1985, p.496) states that some educational leads emerge from his data. He hypothesized that using sex to resolve tension, and as an expression of gay identity, were related to increased sexual activity, while recall of a victim in the advanced stages of AIDS was related to decreased sexual activity. He concluded that alternative modes of tension release and expression coupled with greater visibility of persons with AIDS might be useful in influencing behaviour change.

In 1984 Schechter et al. conducted a study in Vancouver in doctors' offices in which gay men filled out a form about their sexual practices and again three months later. Over half of the 388 men studied reported a decrease in the number of sexual partners. He concluded that except for oral-genital contact, which is considered high risk, specific low risk sexual practices were more likely to have increased than decreased. (1984, p.1293).

Globatnikov's (1983) two year study of male homosexuals participating in an educational programme in Madison, a Wisconsin university town with a relatively low incidence of AIDS, revealed that participants decreased their numbers of sexual partners, thus decreasing their risk of AIDS.

Joseph et al. (1984) conducted a preliminary study to develop a psychosocial inventory to be used to study the responses of homosexual men to the threat of AIDS. Based on her results (p.1301), she suggests that,

Although limiting their personal sexual behaviour is not problematic for many gay men - both those in monogamous relationships and those who are less sexually active - the attack on the norms of permissiveness, raises more fundamental issues about allegiance and identity. The level of medical and epidemiologic awareness varied in the participants, and on the whole, their mastery of the available data was impressive. On the other hand, as might be imagined with so grave a threat, known facts were at times supplemented by private ideas about AIDS. It is apparent that considerable change is taking place, much of it serving to reduce the number and

type of sexual activities. The essential point is that both the development of more complete psychological insights and appropriate intervention efforts require a more adequate description of those who are not undertaking particular behavioral change.

AIDS and Changes in Sexual Behaviour of the General Public

Several polls and one published study which indicate the general public's awareness of and attitudes towards AIDS and its prevention were obtained. A Gallop Poll conducted in Canada (National Advisory Committee on AIDS, 1985, Annex 4) revealed that when asked about their awareness of AIDS: 80% said "Yes"; 18% said "Don't know". Two polls conducted in the United States for Newsweek magazine in 1985 and 1983 revealed that 41 percent of respondents in 1985 were very or a little worried that they or someone they know would get AIDS, in comparison to 22% in 1983. (Newsweek, 1985, p.23). This lack of study of heterosexuals' attitudes to AIDS prevention reflects the emphasis until recently on homosexual males and AIDS.

In a 1981 study to determine high school students' awareness of AIDS (Price et al. 1985) 73% of students responded that they were not worried about getting AIDS (p.108). Although on the questionnaire there were only few questions on AIDS prevention or transmission, and the researchers did not distinguish between homosexuals and male homosexuals, the conclusion drawn was that, "as a whole, the students do not possess a high level of AIDS knowledge." (Price, p.108). The researchers hypothesized that the students' low concern about AIDS may be because: they feel that it is only a disease of homosexuals and they do not consider themselves to be homosexuals; or that they may not have perceived the seriousness of AIDS,

It is possible that students did not mark that they were personally worried about contracting AIDS on the questionnaire because they were concerned someone may find out and label them as gay. The fact that fewer males than females (58% and 100% respectively) responded that they were personally worried about getting

AIDS supports this contention. Generally females do not seem to be as concerned about the homosexual label as males That a large percentage of male and female students identified homosexuals as being most likely to get AIDS, suggests that the high school students view it as a disease transmitted via homosexual and not heterosexual behaviour (Price, 1985, p.108-109).

The Impact of AIDS on Broader Social Issues

The impact of AIDS is not only related to medical aspects of the disease, but also far-reaching social ones. There seems to be a widespread belief that the virus which is associated with AIDS can be transmitted through casual contact, such as shaking hands. In Price's study, (1985) study to evaluate the level of awareness about AIDS of United States high school students one of the questions asked was, "True or False? One should avoid touching or coming near a person with AIDS; he/she might have it transmitted to them." (p.108). Only 36% of males and 43% of females gave the correct answer (which is "False").

A Gallop Poll (National Advisory Committee on AIDS, 1985, Annex 4) which surveyed 1,060 Canadians by telephone in September 1984, indicated that 31% would avoid using the same washroom facilities as a person with AIDS, and 29% would avoid eating food served or prepared by a person with AIDS, because of concern about getting AIDS. Furthermore, the disease's link with groups which are already disenfranchised (i.e. homosexual men, intravenous drug abusers, immigrants from countries where the incidence of AIDS is very high) causes additional hardship for members of these groups (Smith, 1985, p.72).

...this (link with disenfranchised groups) introduced social and political factors that have not been present in most other disease outbreaks. To some extent, the AIDS epidemic is a unique experience in public health. (Brandt, 1985, p.3376).

Numerous cases of discrimination against people with AIDS have been cited. A 27

year old salesman was fired after he refused to submit to an AIDS antibody test after his employer found out that he was gay (Abramson, H. pp.A1, A9). In September 1985 18,000 New York school children boycotted school in response to New York City officials allowing a seven year old girl with AIDS to attend school. (Adler, J. et al., 1985, p.1824). Instances where the employer fired an employee who only had symptoms similar to those of AIDS such as a cough, have also been cited. For example, "A gay salesman in a major department store caught a cold. His supervisor, fearing the salesman had AIDS, fired him, according to Lambda, a gay legal aid group." (Roth, T., 1985).

The Role of Public Education About AIDS in Promoting a Change in Lifestyles and Attitudes

The Call For Public Education on AIDS

AIDS is a serious threat to many sexually active people, both homosexual and heterosexual. Presently the primary means of reducing the risk of transmission is through low risk behaviour. Furthermore, in a society with a growing number of members who have AIDS it will become increasingly necessary to make policy decisions - ones which are based on the latest scientific facts about the disease and how it is transmitted. For these reasons, government bodies, health and social welfare agencies and officials, and community groups are calling upon education to promote low risk behaviour and attitudes that reflect the facts about AIDS.

A principal function of public health agencies has always been to inform the community about disease and to promote health, placing much of the responsibility on individuals to act in the light of the facts presented. In the absence of a vaccine, effective treatment, or cure, it became evident almost immediately that our only weapon against AIDS was a preventive measure: education. (Silverman, M.F. et al., 1985, p.19)

Until a vaccine comes along, AIDS investigators agree, only two options are

available to contain the disease's spread. The first, antibody screening of all blood, organ, and semen donors and protection of newly diagnosed hemophiliacs by heat treatment of Factor VIII concentrate, is already under way. The second, educating high risk groups to change or avoid behavioral risks associated with AIDS transmission, is barely off the ground (Medical World News, 1985, p.60).

The recommendations of the Standing Committee on National Health and Welfare made in May, 1986 included the following suggestions about education.

This information [about low risk sexual behaviour] has most effectively reached the male homosexual community [the largest high risk group] predominantly through their own organizations, but requires further attention and effort. This information should also be directed to the heterosexual population and targeted toward the sexually active sectors of the population, for example, youth, university students and prostitutes.

Equally important as the control of the spread of the virus itself, is the need for information to alleviate the social stigma of AIDS. There is a grave concern that discrimination will result if the public is not correctly informed of the extremely low probability of contracting AIDS from casual contact. The public must also be correctly informed so that they will be able to support rational and correct policies.

According to Dr. N. Gilmore, chairman of the National Advisory Committee on AIDS, people want to believe that things won't get worse before a cure is found. He advises that, "We [health care professionals] have really got to get active. We've really got to change people's behaviour." (1986, p.A1)

Mr. Bill Mindell, of the Ontario Public Education Panel on AIDS, has warned, "We have to prepare the next generation. But it will be hard for middle class parents to accept that AIDS is going to be a problem for their daughters and sons." (1986, p.B6).

The 1985 United States Public Health Service plan for the prevention and control of AIDS includes public education. It outlines the need to

... Continue to implement national, state and community risk reduction and education programs as early prevention and control measures. Provide current information on AIDS to all segments of the American public. Special efforts will be made for: a) Individuals at increased risk for AIDS to effect behaviour change, which currently is the only mechanism available to prevent infection .. (Public Health Reports, 1985, p.459).

Public Sensitivity to the AIDS Topic

As Silverman (1985, p.19) has pointed out, the topic of AIDS is very sensitive, At no time in history has a public health crisis and our response to it been so interwoven with human values and attitudes; never have the social ramifications of our actions been so problematic. Not only is AIDS formidable in itself, it is complicated by our great mobility as individuals and groups, our instantaneous access to information through the mass media and computer banks, and our sensitivity to issues such as sexual identity, medical confidentiality, civil liberties and discrimination. In addition health education is a sensitive subject. Although sex has become a more acceptable topic of discussion, gay sex has been somewhat less commonly discussed publicly. Educational materials would need to address the issue of sexual behaviour explicitly and directly. Further, some lesbians and gay men felt that focusing on gay sexual practices might appear to lay blame and increase homophobia.

An example of the sensitivity of the topic of AIDS in the gay community was the negative reaction of gay leaders at a national meeting to a poster made as part of the initial educational efforts in San Francisco. The poster stated, "Limit number of partners. Use a condom. Don't share body fluids." (Silverman, 1985, p.19). According to Silverman, "Only two years later this same poster is considered benign and is no longer seen as offensive or discriminating." (1985, p.19).

Many people continue to view sexually transmitted disease as a "... metaphor for evil (social decay)" (Brandt, 1985; p.92). As an example of this approach is an educational booklet which was published by the Worldwide Church of God (1985). It describes the association between immoral behaviour and sexual lifestyles that are associated with the risk of contracting sexually transmitted diseases. "Today it takes deep convictions and courage to swim against the tide of modern permissiveness and adhere to high moral and sexual standards." (Worldwide Church of God, 1985, p.13).

Some of the practices which prevent sexually transmitted diseases, such as using a condom, are also seen as unethical by certain groups who view birth control as immoral (Brandt, 1985, p.37). For example, it was not until recently that certain American states permitted the use of contraceptives. "... in 1965, the United States Supreme Court declared unconstitutional a law in the State of Connecticut forbidding married couples to use contraceptives under penalty of fine or imprisonment." (Kirkendall, 1981, p.1).

Because of the differing moral viewpoints about sexuality, there are groups for and against educating about sexually transmitted diseases in schools. In the late 1960's several groups in the United States were so opposed to sex education that many schools "...abandoned the concept." (Kirkendall, 1981, p.15).

The Role of Formative Evaluation in Developing Educational Media Products

The term formative evaluation was coined by Scriven (1967) to refer to the process of obtaining feedback from an audience about the effectiveness of an educational media product prior to or during its development. This term was used to distinguish this approach from summative evaluation, which involves conducting an evaluation once a production has been completed. Fundamental to the formative evaluation approach is the notion that the producer does not always have available guidelines for enough aspects of a message on a particular topic that is to be effectively communicated to a particular audience. Another way of saying this is that the producer assumes that he or she cannot

predict how the audience will react to all aspects of his or her program.

Formative evaluation techniques have been used since the 1920's when silent films and radio were first used for educational purposes (Cambre, 1982, p.3). However, it was not until the mid-fifties that researchers used these techniques more widely, having realized that "...the evidence accrued which might serve as guidelines for educational television production are slim." (Coldevin, 1980, p.64).

The approach taken by Baggaley (1986, p.45) to develop a film on smoking prevention for the Canadian Cancer Society illustrates these techniques. The producer questioned how smokers would respond to segments with messages to stop smoking -- would they accept the messages or become defensive?

By using the formative evaluation approach, the producer obtains feedback from the audience on what they need to know and how best to communicate this to them before he or she completes the production process. The techniques used in a formative evaluation might range from conducting a study to determine knowledge levels about a certain topic to testing a script, or actually pilot testing a rough version of a program. They could also include testing a previously made program to find out its strengths and weaknesses, and then incorporating this information into the production of a new television program (Baggaley, 1986, pp. 29 -43).

In response to the producer's concerns in the previously mentioned study into the best techniques to use in developing a smoking prevention film, Baggaley analyzed smokers' responses to previously made films on the topic. Some of the results revealed that,

Smokers appear willing to consider practical guidelines for smoking cessation, for they respond most positively to segments of the films in which practical 'quitting tips' are given; however, smokers are extremely sensitive to any apparent attempt, however unintentional, to preach to them about smoking. They respond negatively at moments at which visual symbols of medical authority appear such as a white

surgical coat or a lung x-ray - as if anticipating a didactic message. (Baggaley, 1985, p.46).

There are several factors which mitigate against the use of formative evaluation techniques: (a) the cost; (b) "its extremely sensitive and often political nature" which may result in producers resisting attempts at evaluation unless they see its benefits; and (c) the logistics of coordinating independent research and production schedules (Baggaley, 1985, p.46).

The types of questions that formative evaluations address are related to many of the questions that designers of health education campaigns ask when they plan the best ways to affect public behaviour through education.

Developing Public Health Education Media Campaigns and the Need for Evaluation

Expressed in very simple terms, the objectives of most health education programs are to stimulate the target audience to either: (a) substitute a low health risk behaviour for one that is a high health risk, or (b) avoid high health risk behaviors. For example, an educational program might aim to stimulate people to get more exercise. Another program might be directed at stimulating children to avoid smoking.

The minimal research which has been conducted into the effectiveness of these types of campaigns indicates that few of them meet their objectives. According to Flay (1981, p.58), "Only a few well evaluated mass media health promotion programs have demonstrated meaningful behaviour change."

Some health education programs which were evaluated and failed to meet their objectives include as follows: a seat-belt campaign conducted using spot television announcements (Robertson, 1976); a family planning campaign conducted using a multi-media approach (Udry, 1974); a television series, "Feeling Good", which aimed to promote an overall healthy lifestyle by teaching about topics such as breast

self-examination and awareness of the risks of alcohol and cholesterol consumption (Swinehart, 1976); and a radio and television-based anti-drug campaign which was aimed at youth (Hanneman, 1977).

There are many reasons for the failure of health education media campaigns. One frequent failure results from ineffectively appealing to fear of the consequences of high health risk behaviors (Atkin, 1981, p.50). Producers who use this strategy usually fail not only to determine whether a fear approach is appropriate, but also precisely the most effective way to develop it (Swinehart, 1976, p.235). Swinehart points out that, "...some people continue to ask whether fear appeals should be used, but it is more appropriate to ask, how much fear and what kind should be used with which audience and under what conditions." (1976, p.235).

Some campaign organizers are against the use of fear appeals. Instead, they aim to motivate the audience by informing them and by giving them the "straight" facts. Hyman (1947) studied these types of information campaigns, and concluded that "...those responsible for information campaigns cannot rely simply on "increasing the flow" to spread their information effectively." (p.172). According to Hyman, the information approach fails because the developers do not consider the possibility of barriers to audience acceptance of information. For example, one such barrier relates to the fact that "people seek information congenial to prior attitudes and avoid exposure to that which is not". (Hyman, p. 168).

Lashley, in his post-World War I study of films to educate the public about sexually transmitted diseases (1921, p.184), recognized the importance of both increasing knowledge and changing attitudes in order to reach health education objectives. He reported,

The problem with which the experiments reported here deal is that of the informational and educational effects of certain motion-picture films used as propaganda in venereal disease control. Popular education in sex hygiene aims

toward two educational goals: first, it seeks to increase popular knowledge concerning the facts of sexual physiology and psychology with a view to equipping the public for better methods of controlling venereal diseases and other sexual ills; second, it seeks to arouse an emotional attitude in the public which will stimulate real application of the information assimilated, since it is doubtful if any amount of information without accompanying emotional factors will lead to any significant changes in behaviour.

Hyman, (1976, p.172) advises that to avoid failure in an educational campaign, it is important to research the different factors that may affect its success. For example he suggests conducting a survey which would "tell you information such as factors affecting public opinion [eg. gender], and what aspects of an issue must be stressed to reach unexposed or unsympathetic groups."

In health education, as in education in general, there are few principles for developing effective educational materials. Atkin, (1979) outlines the principles that have been linked with an increase in effectiveness of mass health education media campaigns. These principles include as follows: select message sources that are perceived as trustworthy by the intended audience - the homophily between the source and receiver may be more important than the competence of the authoritative source; use attractive sources to attract attention on topics towards which the audience is apathetic; "traditional fear appeals can be effective under the appropriate circumstances"; two-sided appeals that refute counter-arguments may also be influential; the theme should be relevant to the needs of the receivers and the style should be engaging." (Atkin, 1979, p.664) Atkin (1979) adds that evaluation in health education campaigns is important. "The crucial role of pre-campaign audience analysis and pilot testing of alternative sources and appeals cannot be overlooked."

Windsor (1980, p.204) emphasizes the need for evaluation of health education campaigns despite the factors that mitigate against conducting them. He states that,

Community health programs often lack the resources to conduct evaluations of their educational and community organizations efforts. Even when resources such as time, money or administrative support are available for program evaluations, the lack of technical expertise or expertise among practitioners may prevent rigorous evaluative efforts.

Despite the problems, it is essential that evaluations of community health education programs be conducted as an integral part of delivering educational services. Before expending large amounts of time and money, demonstration programs need to be systematically examined for what, if any, changes have occurred in proposed outcome variables such as knowledge, attitudes or health care utilization practices.

CHAPTER 2: THE PRESENT STUDY

Statement of the Problem: The Need to Formatively Evaluate AIDS Education Campaigns

In Chapter 1 it was pointed out that not only is there a dearth of literature describing the AIDS education campaigns which have been mounted to date, but that there is no literature describing any campaigns or productions that have been systematically evaluated. Several studies have described a number of leads for educating male homosexuals to reduce AIDS risks. The massive education campaign to educate the gay male community in San Francisco has been considered effective, although it is possible that the high incidence of AIDS in that community contributed significantly to risk reduction behaviour.

Based on the low success rate of most other health education campaigns that have been conducted so far, in combination with the emotional and sensitive nature of the topic of AIDS, it is predicted that mistakes will be made. Given the limited funding available for AIDS education programs, and the urgency and severity of problem, it is crucial to develop educational campaigns using formative evaluation techniques. The cost of failure is high.

Purpose of the Study

It was the purpose of this study to obtain information for use in setting up media-based public education programs in Canada. Based on the previously reported statements from government agencies and community groups, it is evident that there is a need for education to meet the following objectives.

1. To decrease high risk behaviors associated with AIDS.
2. To increase social acceptance of persons with AIDS.

Because of the need to meet the above educational objectives by reaching a wide audience in a short time, it will be necessary to use television and the other mass media.

Based on the literature described in Chapter 1, it is predicted that both the general

public and groups associated with high risk factors (such as homosexual males) will resist educational efforts. However, the previous research into media health education has low external validity for a new primary target population (i.e. homosexual males) and the new topic (i.e. AIDS). Therefore, to increase the likelihood that the production techniques to be used are effective, it will be necessary to:

1. Determine the knowledge and attitudes of the public and groups associated with a high risk of contracting AIDS.
2. Overcome public resistance to the topic of AIDS.
3. Determine the level of what the public considers acceptable in terms of subject matter and presentation.
4. Determine the barriers of members of groups associated with high AIDS risks, and how best to overcome them.

To obtain this information it will be necessary to conduct:

1. Formative evaluations of media material on AIDS at all stages of development.
2. Summative evaluations of existing educational products on AIDS.

In this study responses were sought from both the general public and the gay community (of which homosexual males are associated with high risk), to answer questions about: (a) the current state of public awareness, (b) sources of public information, and (c) effective and ineffective production techniques.

A more detailed description of the research questions is listed below.

1. What is the current state of public awareness.
 - what are knowledge levels about AIDS?
 - what are attitudes towards social issues related to AIDS?
 - what are attitudes towards personal risk and risk reduction behaviour?
2. What are sources of public information.
 - what are the main educational sources being used to learn about AIDS?
3. What are effective and ineffective production techniques.

- what production techniques might have a positive impact in teaching people about AIDS?
- what techniques might have an adverse impact?

Research Design

The research design used is a one group pre-test post--test design, a design which Campbell and Stanley, (1963, p.7) refer to as "pre-experimental". This design, which was intended to measure knowledge gain and attitude shift in the audience as a result of different production techniques, is standard for many educational television formative evaluation studies. Moment-by-moment responses were obtained during the treatment which consisted of viewing a videotape. Some data were obtained before and after the treatment using survey methods.

Definition of Variables and Other Research Questions

Definition of Variables

The independent variable is two levels of sexual interest. These are: homosexual, defined as interest in the same sex; and heterosexual, defined as interest in the opposite sex. As in Klecka's study (cited in Nie N.H. et al., p.435, 1975), of masculinity and femininity, as measured by aggressive and succorant behaviour, the researcher cannot assume that the variables, sexual interest, "...lie at opposite ends of the same continuum.", because they might refer to "...two distinct dimensions of sex role behaviour."

The covariates are as follows:

1. Baseline knowledge about AIDS.
2. Baseline attitudes to AIDS-related issues.

The dependent variables are as follows:

1. Pre-post viewing shifts in knowledge about AIDS.
2. Pre-post viewing shifts in attitudes to personal risk reduction behaviour.

3. Pre-post viewing shifts in attitudes to AIDS related issues.
4. Attitude to overall effectiveness of the video to educate.
5. Momentary shifts in response to the video, in either a positive or negative direction, as measured by the Program Evaluation and Analysis Computer.

Definition of Other Research Questions

The following additional information was obtained from the survey:

1. Extent of personal acquaintance with a person with AIDS.
2. Educational sources about AIDS.

Operationalization of Variables

The Independent Variable

The independent variable, sexual interest, was measured using the combined scores of the responses to two questionnaire questions about sexual orientation. Because of the sensitive topic of homosexuality, it was thought that obtaining information about it had to be approached with particular care. Therefore it was decided that it would be important to have respondents measure their own level of sexual interest rather than merely assuming that membership in a particular group was an accurate indicator of this construct. For example it was felt that it was possible that there could be some bisexual members in a singles club for the general public, or that in a group of gay people there could be some members who are asexual.

To measure sexual interest, two 6-point monopolar scales of sexual interest were developed. One of the scales indicates level of interest in the same sex, and the other one the level of interest in the opposite sex. As discussed in the definition of the independent variables, one cannot assume that the variables sexual interest with the same sex and sexual interest with the opposite sex "lie at opposite ends of the continuum" (Klecka's study cited in Nie, N.H., et al., p.435, 1975) In other words the rationale for using two

separate monopolar scales instead of one bipolar scale is that interest in the same sex may not necessarily be at the opposite end of the scale for interest in the opposite sex. For example, it is possible that a person could have a high interest both in members of the same sex and those of the opposite sex.

Each of the 6-point scales ranges from "0" to "5". A "0" indicates no sexual interest in members of a particular group (either the same or opposite sex). Whereas, a "5" indicates a high sexual interest in members of a particular group (either the same or opposite sex). For each respondent, the difference between their scores on the first and second scales were calculated to determine their level of sexual interest in the same versus the opposite sex.

Because of their sensitive nature, the questions about sexual interest were placed as the last two questions, Questions 42 and 43 on the post-test.

The Covariates and Dependent Variables (Knowledge and Attitudes About AIDS)

The covariates and dependent variables which measured knowledge, self-perception of knowledge, and attitudes about AIDS were measured by questions on the pre- and post-viewing questionnaires. The covariates were measured by determining baseline knowledge and attitudes in relation to AIDS. The dependent variables were measured by determining amount and direction of shifts in post-viewing responses in comparison to baseline responses. The following shifts were measured: (a) shifts towards and away from the correct response, (b) shifts towards and away from more lenient attitudes about AIDS related issues and (c) shifts towards and away from risk reduction behaviours.

There were 19 items which tested knowledge about AIDS. The questions were developed to measure constructs which indicate a knowledge of the disease process and its prevention. Many of these items were also designed to measure constructs which were presented in the film.

The question formats included the following: multiple choice, Likert scale (4 or

5-points), and fill-in-the-blanks. These question formats were selected because of their high validity and ease in coding.

The questions covered the following areas of knowledge:

1. General familiarity with the terminology, i.e. AIDS and ARC (Questions 1 and 2). (See Appendix A)
2. Incidence of AIDS in Canada (Question 6).
3. Rate at which AIDS is increasing in Canada (Question 7).
4. Groups at risk (Questions 15 and 23).
5. Risk factors associated with AIDS (Questions 26 and 32).
6. Transmission modes (Question 33).
7. Symptomatology (Questions 13, 20 and 22).
8. Diseases associated with AIDS (Question 16).
9. Life expectancy of a person with AIDS (Question 10).
10. The disease process (Question 14).
11. AIDS blood testing procedure (Question 5).
12. Awareness of extent of progress of medical research in AIDS (Question 19).

Of the above questions, the rate of increase of AIDS (but not the incidence) was covered in the film. The figures which were presented related to the United States situation, but were similar to that in Canada. The AIDS blood testing procedure was not explicitly presented in the film.

In addition to the questions above, there were two questions on perceived personal knowledge about AIDS. They were designed with a Likert scale format.

Seven items about attitudes to AIDS-related issues were on the pre-test. The questions were designed to measure attitudes on a variety of issues which reflect those currently being covered in the media. Some of these issues were directly raised in the film. Other issues, such as certain questions about civil liberties, although not explicitly

presented, did relate to information about AIDS which was presented.

All attitude items used a Likert scale format. The questions measured the constructs listed below:

1. Civil liberties in relation to the control of AIDS (Questions 21 and 31).
2. Adequacy of the public's knowledge about AIDS (Question 29).
3. Adequacy of media coverage of AIDS (Question 30).
4. Perception of lifestyle change in response to AIDS risks. (Question 17).

The Dependent Variables (Responses to Film)

There was one question on the overall effectiveness of the film. It used a Likert scale format (post-test question 3).

Momentary shifts in response to the program were measured using a computer-based electronic response analysis system, the Program Evaluation and Analysis Computer. This system measured changes in responses to the program every three seconds. Viewers were asked to respond by rating any aspect of the program on a 4-point scale, with a choice of the following ratings: Good, Fairly Good, Not Very Good, Poor.

Other Research Questions

On the pre-test there were four items to determine information sources about AIDS. They included two multiple choice and two fill-in-the-blank questions (pre-test questions 11, 11a, 12, and 12a).

There were two items on the pre-test which were designed to measure the extent to which the participants were personally acquainted with a person who had AIDS or ARC. They used a dichotomous multiple choice format (pre-test questions 3 and 4).

There were five items on demographics. They used either a Likert scale or a multiple choice format. The questions were designed to measure the following constructs:

1. Gender (Question 37).
2. Age (Question 38).
3. Education (Question 40).
4. Occupation (Question 41).

Subjects

109 subjects initially participated in one of seven intact groups. These groups were selected from English-speaking, predominantly middle class schools and community groups in Montreal. They included: Three gay groups; a straight singles groups; two women's groups; and a college class. (See Table 1) The sample was reduced to 103 because four respondents showed no sexual interest or were bisexual, and two did not respond to all of the questions. There were 36 homosexual men, 10 homosexual women yielding a total of 46 homosexuals. There were 25 heterosexual men and 32 heterosexual women, giving a total of 57 heterosexuals.

The age range reflects that of the group in which the highest incidence of AIDS occurs. The breakdown according to sex and sexual interest reflects the high incidence of AIDS in male homosexuals. Sexual interest (same sex/opposite sex) is hypothesized to be a factor influencing both: (a) baseline knowledge and attitudes; and (b) the effectiveness of the different educational strategies.

It should be noted that although the incidence of AIDS is extremely low in homosexual women, their attitudes towards civil liberties issues related to AIDS and the portrayal of homosexuality in the media are sought. It is also important to balance out the samples to ensure that females are represented not only in the heterosexual group, but also in the homosexual group.

Table 1 Demographic DataSexual interest in members of
the OPPOSITE sex (Post/Q 42):

		^a Het and Hom
(No interest)	0:	28
	1:	13
	2:	9
	3:	8
	4:	12
(High interest)	5:	<u>39</u>

Sexual interest in members of
the SAME sex (Post/Q 43):

(No interest)	0:	50
	1:	6
	2:	3
	3:	4
	4:	8
(High interest)	5:	<u>39</u>

SEXUAL ORIENTATION (difference scores: Post/Q 42 and Q 43):

Heterosexual (Het):	Q 42 > Q 43:	58
Homosexual (Hom):	Q 42 < Q 43:	47
Asexual / Bisexual:	Q 42 = Q 43:	4

SEX (Post/Q 37):

	^b Het	^c Hom
MALE:	25	36
FEMALE:	32	10

AGE (Post Q/ 38):

17-25:	23	19
26-35:	14	18
36-45:	18	6
45-55:	2	3

EDUCATION (PostQ/40):

High school:	38	30
University graduate:	19	16

Currently EMPLOYED outside the home (Post Q/ 36):

	36	34
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OCCUPATION (Post Q/41):

Homemaker:	6	1
Trade/technical:	2	3
Student:	25	17
Professional/managerial:	20	18
Clerical/secretarial:	3	4
Other:	1	3

*Note. ^aHet and Hom: N=109. ^bHet: n=57. ^cHom: n=46.

Table 1 cont'd.

	<u>Het</u>	<u>Hom</u>
Acquainted with a person with AIDS or ARC (PreQ/ 3):	1	16
Acquainted with a person who has died of AIDS (PreQ/ 4):	-	14

Recruitment

Groups of participants were recruited by telephoning community organizations and agencies, as well as local community educational institutions. To inform members of these organizations about how they could be involved in the study the researcher attended the meetings of several organizations. Some groups used posters made by the researcher to describe the project and inform their members. Others announced the sessions via newsletters and by telephoning.

Although almost all of the gay organizations approached immediately expressed interest in participating in the study, this was not the case with groups from the general public. As a result it was necessary to informally educate the contacts for most of these groups about the need for greater public awareness about AIDS.

Motivation for participating in the test sessions was: to gain knowledge about AIDS, to contribute to identifying techniques for effective educational programs for others, and the opportunity to receive a copy of the report of the study.

Ethical Considerations

At the start of the test session all subjects received a written statement which:

1. Explained the purpose of the research.
2. Guaranteed the anonymity of responses and the right to withdraw from the

study at any time.

See Appendix B for a copy of the 'Consent to Participate in Research' form.

The Concordia University Research Ethics Committee approved the study.

Approval was also obtained from the research ethics committee of the participating college and the executive members of groups which participated. Representatives of any groups which expressed concern about the possibility of reporting results in a manner which had an anti-homosexual bias were assured that there would be no bias in the report.

Permission for the researcher to use a videotaped copy of the film was obtained from the Canadian distributor. He was the representative for Canada of the American film production company which owned the rights to the film.

The Film Treatment

The treatment consisted of viewing an educational film on AIDS. Criteria for selection of the film were that it must have as follows:

1. Accurate content.
2. Up-to-date content.
3. Content relevant to Canada.
4. A range of production techniques.
5. Professional technical production values.
6. Not have been viewed by the subjects.

The film used was entitled "AIDS: What Everyone Needs To Know". It was produced in 1985 by Churchill Films, a major American production company which specializes in health education films. It was 18 minutes in length and was aimed at the general public. Its content was accurate and up-to-date. Most of its content, except for the statistics presented, were relevant to the Canadian context.

The film combined documentary and didactic styles. It presented a range of production techniques. These included: (a) live film footage of: interviews with medical

experts, an interview-style conversation between a man who had AIDS and his wife which was filmed with them in shadow, shots of what appeared to be actors depicting the different symptoms of AIDS and stages of the disease, and some behaviours that have either high risk or very low risk; (b) animated graphics depicting: how the immune system functions, how the AIDS virus attacks it, how AIDS can be transmitted, and the extent to which AIDS is increasing; (c) graphics of text such as a list of high risk behaviors, (d) audio track which included the voices of the patient and the experts who were interviewed, as well as a male narrator's voice-over; (e) background music.

The film had not been viewed by the subjects, as its distribution in another province (Ontario) had just commenced. The educational objectives of the program, as outlined in the available documentation, a temporary study guide, were to enable the viewers to:

1. Explain how the AIDS virus destroys the immune system's ability to protect the body from various diseases.
2. Describe how the virus is transmitted.
3. Explain why casual contact with an AIDS patient is not dangerous.
4. Identify and be wary of the kinds of activity that may lead to contracting AIDS.

The objectives include a note that, "Even adult audiences may have difficulty with unfamiliar material on the immune system".

The Data Collection Procedure

Materials and Apparatus

The moment-by-moment responses were obtained using a computer-based electronic response analysis system called the Program Evaluation and Analysis Computer (P.E.A.C.), which was designed by PEAC Media Research Incorporated (Nickerson, 1979). The system consists of an Apple II micro computer and monitor which are attached to standard peripheral equipment such as disk drives, and a printer. It also includes special software and custom designed response analysis equipment. This equipment is described

below. The specialized P.E.A.C. equipment includes a set of 24 cordless hand units which resemble hand held calculators. Each hand unit is powered by its own rechargeable batteries. Each hand unit also has a pad of 11 keys with either a number or a letter on each key - the letter or key represents a particular response to the program. In this study a 4-point A to D scale was used. When the participant presses a particular key, the letter or number is displayed on it in an LED display on the unit. The letter is also stored in the unit's memory. If he or she then presses a different key, the new letter or number is displayed in the window. And this new response is stored in the hand unit's memory. (For one large group an extra set of hand units was used) .

In order to function, the hand units must be programmed to: 1) switch on a few minutes before the program begins, and 2) store the responses being input into their memory. The P.E.A.C. software is used for programming. The hand units were programmed to switch on and receive data before each session by hooking them up to the computer. This was done via a special case into which they all plug, and a communication cable that is attached to this case and the computer.

For each session, once data had been input into the hand units, it was transferred to the computer using the same hookup, and a different computer program. It was then stored permanently on P.E.A.C. data disks.

The videotape used for viewing was a one half inch VHS video tape of the film, which had been transferred from a one half inch VHS original.

A white cardboard poster, which measured 36 by 20 inches was used to display the range of possible hand unit responses to the program. The following was written in three inch high letters in heavy black print on the poster:

A = GOOD

B = FAIRLY GOOD

C = NOT VERY GOOD

D = POOR.

The 'Consent to Participate in Research' form and the pre- and post-viewing questionnaires were printed on white paper. For samples, see Appendices B and A.

The equipment used for playing the tape was a 21 inch colour monitor and a VHS video cassette recorder which the researchers transported to the testing sites. One of the groups had its own 21 inch colour monitor and video cassette recorder.

Testing Procedures

Data collection sessions were held in a variety of settings, from individuals' homes to classrooms and community centres.

The people who participated in administering the sessions were as follows.

1. The researcher was in charge of the sessions and participated in the discussions.
2. The researcher's advisor co-administered the sessions and participated in the discussions.
3. Physicians (a different one for each session) with expertise in AIDS participated in the discussion groups by responding to participants' questions about the disease.
4. Two assistant researchers, both female colleagues, assisted with the sessions. One of them was a nurse specializing in the treatment of cancer patients. The nursing colleague assisted with most of the sessions and participated in the discussion groups.

The procedure followed at each session is described below.

1. At the beginning of each session the researcher introduced herself, her advisor, the physician assisting with the discussion, and the other researcher(s) assisting with the study. She briefly explained the procedures for the session and the objectives of the project. Care was taken to make a point of very quickly explaining that there was a post-viewing questionnaire, in order to avoid the possibility of sensitizing the participants to make an effort to remember pre-viewing questions.

The ethics form, 'Consent to Participate in Research', was distributed and the main points of it were explained. (10 min.)

2. The pre-viewing questionnaires and empty envelopes were distributed. The subjects were asked to complete the questionnaire. (20 min.)

3. The hand units were handed out and each person was asked to write the hand unit number on his or her questionnaire. The subjects were asked to place their completed questionnaires in the envelopes. The researcher's advisor explained how to operate the hand units. Participants were asked to look at the poster and note that it served as a reminder of what the different hand unit keys represent. The subjects were requested to express their honest opinions about the program and to not be concerned about responding negatively to any part of it. It was explained to them that it was not the researchers who had produced it, and that they had no vested interest in it. (5 min.)

4. At this point the hand units turned on (according to their pre-programmed setting) and subjects were asked to indicate with a show of hands as soon as their own had lit up. Then they were asked to participate in a brief session to practice using the hand units. When everyone indicated that they knew how to use the hand units, the video cassette recorder was turned on and they were able to watch the video and respond to it with the hand units. (1 min.)

5. Once the program had ended, the post-viewing questionnaires were handed out. Subjects were asked to place their hand unit number on them. The hand units were collected. (20 min.)

6. Then the subjects were invited to comment on the video and ask questions about the medical and psycho/social aspects of AIDS. The physician, the advisor and the researcher facilitated the discussion. Print material on AIDS and local AIDS organizations was handed out. The researcher thanked the group of subjects, the group's leader and the physician. The group members were offered a copy of the

researcher's report when it became available.

(30-60 min.)

CHAPTER 3: RESULTS

The purpose of this study was to examine the impact of techniques used to educate the public about AIDS using the mass media. To accomplish this goal, the researcher investigated the knowledge, attitudes and information sources about AIDS relating to both homosexuals and heterosexuals. The study also identified the production techniques which are linked to subsequent shifts in knowledge and attitudes in response to an educational film on AIDS.

Data Analysis

The data measuring knowledge and attitudes, including overall reactions to the film, were analyzed using non-parametric techniques. These statistical techniques were used because it was not possible to make the assumptions required for the application of parametric statistics (such as the normal distribution of scores on a measure which indicates a directional attitude shift). Both nominal and ordinal scales were used to measure knowledge. Only ordinal scales were used to measure attitudes. Because both nominal and ordinal measurement scales were used, different statistical techniques which were applicable to these scales were performed. The different techniques made available different types of results. The full list of questions is reported in Appendix A, and will be cited at length in the Results section below.

The data to determine educational sources were measured on nominal and ordinal scales. They were analyzed using basic descriptive statistical techniques.

The mean moment-by-moment responses to the film were analyzed using descriptive statistical techniques.

Analysis of Educational Sources About AIDS and Personal Acquaintance With a Person With AIDS

The extent of personal acquaintance with a person with AIDS and educational sources were analyzed using basic descriptive techniques (See Tables 1 and 2).

Analysis of Educational Sources About AIDS

Table 2. Educational Sources on AIDS of Heterosexuals and Homosexuals

	Responses by Group	
	Her ^a %	Hom ^b %
From which of the following media have you obtained information about AIDS? (Check <u>more than one box</u> as appropriate) (PreQ/ 11)		
PAMPHLETS:	25	75
POSTERS:	11	32
BOOKS:	5	30
NEWSPAPERS:	88	98
MAGAZINES:	54	77
RADIO:	38	43
TELEVISION:	91	82
FILMS:	14	25
None of these:	2	^c
From which of the above did you receive the most information about AIDS? (Check <u>one box only</u>) (PreQ/ 11a)		
PAMPHLETS:	2	23
POSTERS:	2	-
BOOKS:	-	-
NEWSPAPERS:	29	23
MAGAZINES:	11	26
RADIO:	5	5
TELEVISION:	50	23
FILMS:	-	-
None of these:	<u>2</u>	<u>100</u>
From which of the above sources have you obtained information about AIDS? (Check <u>more than one box</u> as appropriate) (PreQ/ 12)		
WORKSHOP:	-	20
LECTURE:	18	45
RELATIVE / FRIEND:	16	59
HEALTH PROFESSIONAL:	13	48
None of these:	13	9

Note. ^an = 57. ^bn = 46.

Table 2 cont'd.

Responses by Group

<u>Het^a</u>	<u>Hom^b</u>
<u>%</u>	<u>%</u>

From which of the above did you receive the most information about AIDS? (Check one box only)
(PreQ/12a)

WORKSHOP:	5	10
LECTURE:	22	12
RELATIVE / FRIEND:	9	40
HEALTH PROFESSIONAL:	9	14
None of these:	55	24
	<u>100</u>	<u>100</u>

Note: ^an = 57. ^bn = 46.

Analysis of Attitudes and Knowledge About AIDS, and Overall Attitudes to the Film (Ordinal Data)

The ordinal data, which measured both knowledge about AIDS and attitudes related to the disease, as well as overall attitudes to the film, were obtained in response to Likert-type scale questions (as explained previously).

The data were analyzed to determine whether there were significant differences between heterosexuals and homosexuals in the following:

1. Pre-viewing knowledge about AIDS.
2. Pre-viewing attitudes related to AIDS.
3. Shifts in knowledge about AIDS following the film.
4. Shifts in attitudes related to AIDS following the film.

To determine whether these differences were significant involved two steps: (a) obtaining the mean pre-viewing responses as well as the mean shifts (post-viewing minus pre-viewing scores) for both the heterosexuals and the homosexuals for each question, and (b) performing the Mann Whitney U test on each set of responses. The rationale for

the use of the Mann Whitney U test was that there were two independent groups measured on an ordinal scale (Siegel, S., 1956). The results of the two-tailed test gave an overall U, and an overall Z which was corrected for ties and used for samples greater than 20. The data obtained from these analyses are displayed in Tables 3 and 4.

Analysis of Knowledge About AIDS (Nominal Data)

The nominal data, which measured knowledge about AIDS, were obtained in response to multiple choice or fill-in-the-blank questions (as explained previously). The data were analyzed to determine: (a) whether there were significant differences between the heterosexuals and homosexuals on pre-viewing knowledge levels about AIDS, and (b) whether each group's shift following the film was significantly towards or away from learning. Shifts were defined as either a shift from wrong to right answers, or the reverse.

To measure differences between the two groups on pre-viewing knowledge, a one sample, two-tailed Chi Squared test (Siegel p. 42-43) was used. The rationale for this was that the data were nominal and the expected frequencies for each group were five or more. Yates' correction was used to correct for continuity of data (Siegel S., 1956) (See Table 5).

To measure whether shifts for each group were significantly towards or away from learning, the two-tailed one-sample, two category Binomial test was used. The rationale for its use was the large number of low and zero frequencies in the shifts in responses measured on a nominal scale. (Siegel, p.38-39). The data obtained from these analyses are displayed in Table 6.

Table 3. Baseline Knowledge and Attitudes About AIDS, and Overall Attitudes to Film of Heterosexuals and Homosexuals (Ordinal Data)

^a Q.NO.	Het \bar{x} score	Hom \bar{x} score	^b Het \bar{x} Rank	Hom \bar{x} Rank	^c Scale	U	Z	p<
21	3.09	4.54	37.32	70.20	5	474.0	-5.81	.01
31	3.72	4.57	42.34	63.97	5	760.0	-3.95	.01
27	2.02	3.87	36.85	70.77	5	447.5	-5.91	.01
29	4.39	4.59	49.57	55.01	5	1172.5	-1.15	N.S.
30	3.89	2.87	61.75	39.92	5	755.5	3.78	.01
22	3.37	2.59	60.17	41.88	5	845.5	3.17	.01
25	1.84	1.27	57.55	40.56	4	794.5	3.32	.01
32	4.54	4.76	49.68	54.88	5	1178.5	-1.36	N.S.
33	3.68	4.07	48.63	56.17	5	1119.0	-1.45	N.S.
26	1.84	1.61	55.61	47.53	5	1105.5	1.60	N.S.
20	1.47	1.35	54.11	49.39	5	1191.0	.98	N.S.
24	1.28	1.43	49.54	55.04	5	1171.0	-1.28	N.S.
18	1.21	1.20	52.30	51.63	5	1294.0	.20	N.S.
23	3.97	4.59	44.84	60.87	5	903.0	-3.10	.01
28	2.44	1.96	58.63	43.78	5	933.0	-2.63	.01
19	2.63	2.70	51.30	52.87	5	1271.0	-0.27	N.S.
9	1.81	1.89	48.90	51.31	3	1152.0	-0.43	N.S.
17	1.46	2.36	38.55	63.93	4	597.0	-4.66	.01
3/post	1.47	1.80	46.62	57.68	4	1004.5	-2.10	.05

Note. ^aQ. NO. = Question Number. ^bHet \bar{x} Rank = Mann Whitney U Rank. ^cScale = Number of points on response scale.

Table 4. Shifts in Knowledge and Attitudes About AIDS of Heterosexuals and Homosexuals (Ordinal Data)

^a Q. No.	^b Het \bar{x} shift	Hom \bar{x} shift	^c Het \bar{x} rank	Hom \bar{x} rank	^d Scale	U	Z	P<
21	0.19	0.11	54.12	49.37	5	1190	0.92	N.S.
31	0.14	0.04	53.55	50.08	5	1222.5	0.70	N.S.
27	0.12	0.72	53.33	50.35	5	1235.	0.62	N.S.
29	0.03	-0.13	52.96	50.82	5	1256.5	1.43	N.S.
30	0.46	0.09	57.08	45.71	5	1021.5	2.12	.05
22	-1.11	-0.61	46.61	58.68	5	1003.5	-2.12	.05
25	-0.58	-0.07	44.96	60.72	4	910.0	-3.00	.05
32	0.13	0.15	52.46	51.43	5	1285.0	0.26	N.S.
33	1.00	0.15	57.53	45.15	5	996.0	2.44	.05
26	-0.75	-0.35	47.10	58.08	5	1031.5	-2.27	.05
20	-0.35	-0.09	47.51	57.57	5	1055	-2.11	.05
24	-0.17	-0.17	51.67	52.41	5	1292.0	-0.18	N.S.
18	-0.19	-0.03	49.82	54.71	5	1186.5	-1.48	N.S.
23	-0.41	-0.18	48.67	56.13	5	1121.0	-1.40	N.S.
28	-0.44	0.02	46.06	59.36	5	972.5	-2.36	.05
19	0.44	-0.09	56.32	46.64	5	1064.5	1.78	N.S.
9	0.15	0.18	51.83	52.21	3	1301.5	-0.08	N.S.
17	0.07	-0.43	61.08	40.75	4	793.5	3.68	.05

Note. ^aQ.No. = Question Number. ^bHet \bar{x} shift = \bar{x} (pre - post). ^cHet \bar{x} rank = Mann Whitney U rank

^dScale = Number of points on response scale.

Table 5. Baseline Knowledge About AIDS of Heterosexuals and Homosexuals (Nominal Responses)

^c Q. No.	<u>Het's Correct Responses^a</u>		<u>Hom's Correct Responses^b</u>		X ²
	E	%	E	%	
1	47	83	41	89	1.22
2	6	11	28	61	28.44**
6	23	40	24	52	.30
7	19	33	20	43	.93
15a	39	68	42	91	9.06**
15b	55	96	44	96	.05
15c	41	72	43	93	9.27**
15d	31	54	35	76	5.40*
15e	35	61	40	87	9.15**
14a	41	72	38	83	1.84
14b	46	81	40	87	.93
14c	14	25	27	59	12.01**
14d	28	49	18	39	.50
14e	50	88	43	93	1.56
13a	21	37	24	52	2.25
13b	47	82	71	89	1.22
13c	20	35	27	59	5.52*
13d	45	79	38	83	.28
13e	43	75	36	78	.13
16a	46	81	39	85	.39
16b	18	32	25	54	5.16
16c	45	79	32	70	.44
16d	30	53	38	83	10.72**
16e	43	75	42	91	5.35*
10	21	37	31	67	9.44**
5	14	25	29	53	15.20**

Note. ^an = 57. ^bn = 46. ^cQ. No. = Question Number. *p < .05. **p < .01.

Table 6. Shifts in Knowledge About AIDS of Heterosexuals and Homosexuals (Nominal Responses)

CQ. NO.	^a Het Shift			^b Hom Shift		
	to Correct	Het Shift to Incorrect	p<	to Correct	Hom Shift to Incorrect	p<
1	7	4	N.S.	2	2	N.S.
2	25	1	.01	9	1	.05
6	2	7	N.S.	1	1	N.S.
7	26	4	.01	6	3	.05
15a	12	1	.01	1	0	N.S.
15b	1	0	N.S.	0	0	-
15c	12	1	.01	0	0	-
15d	17	3	.01	3	2	N.S.
15e	18	1	.01	2	0	N.S.
14a	13	15	N.S.	4	9	N.S.
14b	6	9	N.S.	3	7	N.S.
14c	40	0	.01	16	0	.01
14d	3	23	.01	2	12	.05
14e	6	0	.01	1	0	N.S.
13a	8	8	N.S.	6	9	N.S.
13b	5	2	N.S.	3	2	N.S.
13c	29	0	.01	6	0	.01
13d	9	3	N.S.	6	2	N.S.
13e	11	3	N.S.	7	0	.05
16a	4	9	N.S.	2	11	N.S.
16b	32	2	.01	16	1	.01
16c	7	6	N.S.	3	3	N.S.
16d	22	2	.01	4	1	N.S.
16e	12	0	.01	2	1	N.S.
10	26	1	N.S.	9	3	N.S.
5	2	6	N.S.	3	4	N.S.

Note. ^an = 57. ^bn = 46. CQ. NO. = Question Number. p = 2-tailed Binomial test.

**Analysis of Attitudes and Knowledge Related to AIDS and Overall
Attitudes to the Film (Ordinal Data) - The Pre and Post-Viewing Questions**

Although all of the attitude questions required ordinal responses, some of the knowledge ones did as well. The questions to measure attitudes related to AIDS and knowledge measured on an ordinal scale, are described below.

1. Civil liberties.

Question 21) People with AIDS should be isolated from the community.

Question 31) Children with AIDS should be prevented from attending school.

Question 27) The military should use the AIDS blood test to screen recruits.

2. Extent of public awareness about AIDS.

Question 29) Society is well enough informed about AIDS.

Question 30) Media publicity about AIDS exaggerates its seriousness.

Question 22) You would know how to recognize the symptoms of AIDS.

Question 25) You would know how to reduce your risk of getting AIDS.

3. Modes of transmission of the virus associated with AIDS.

Question 32) One can catch the AIDS virus simply by being near someone who has it.

Question 33) AIDS is only transmitted by sexual contact.

Question 26) The more sexual partners a person has, the more likely that person is to get AIDS.

Question 20) People with no symptoms of AIDS can carry the virus and infect others.

4. Miscellaneous (a mixture of attitudes and knowledge).

Question 24) A person with AIDS is likely to die.

Question 18) A person with AIDS has a lowered resistance to infections that the body cannot fight off.

Question 23) Gay men have the same incidence of AIDS as gay women.

Question 28) Scientists are uncertain whether all people with positive AIDS blood tests will develop AIDS.

Question 19) Medical science is reaching a cure for AIDS.

Question 9) How serious a risk is AIDS to you?

Question 17) To what extent have you changed your sexual lifestyle? (asked pre-viewing)

Having viewed the film, to what extent are you likely to change your sexual lifestyle? (asked post-viewing)

5. Overall Effectiveness of the Film.

Question 3) How effective do you think the film will be in educating the public about AIDS? (asked post-viewing)

Analysis of Knowledge About AIDS (Nominal Data) - The Pre and Post-Viewing Questions

Most of the knowledge questions required a nominal response. The questions which measured knowledge about AIDS (nominal data) are listed below. Questions for which the correct facts were not covered in the film are identified by an asterisk.

1. Definitions of AIDS and ARC.

Question 1) A.I.D.S. stands for....?

Question 2) A.R.C. stands for....?

2. Incidence of AIDS in Canada.

*Question 6) In Canada the number of reported cases of AIDS is approximately...

*Question 7) At approximately what rate are reported cases of AIDS increasing in Canada?

3. Risk Groups:

Question 15a) Heterosexual men?

Question 15b) Homosexual men?

Question 15c) Heterosexual women?

Question 15d) Homosexual women?

Question 15e) Children?

4. Targets of the AIDS virus.

Question 14a) The B cells?

Question 14b) The skin?

*Question 14c) The helper T-cells?

Question 14d) Certain white blood cells?

Question 14e) None of the above?

5. Symptoms of AIDS.

*Question 13a) Dry cough?

Question 13b) Yellowish patches in the groin area?

Question 13c) Purplish blotches on the skin?

Question 13d) Frequent urination?

Question 13e) None of the above?

6. Diseases associated with AIDS.

Question 16a) Lung cancer?

Question 16b) Skin cancer?

Question 16c) Leukemia?

Question 16d) Pneumonia?

Question 16e) None of the above?

7. Miscellaneous.

Question 10) Most people diagnosed with AIDS are likely to die within..?

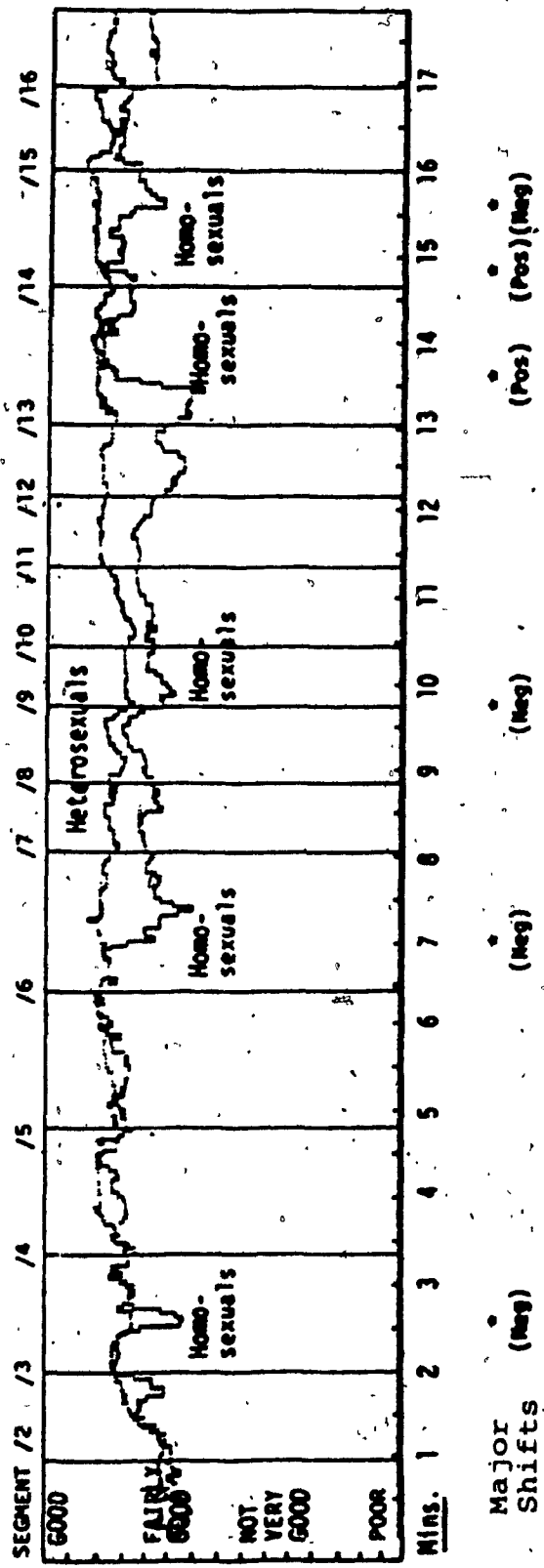
Question 5) The AIDS blood test which is performed most frequently is used to tell doctors...?

Analysis of Moment-by-Moment Responses

The mean moment-by-moment responses to the film were analyzed descriptively. A graph was created (See Figure 1) which showed the mean responses of the two subject groups, the heterosexuals and the homosexuals. Viewer responses had been sampled at 3-second intervals throughout the film presentation. The fluctuations in the graph were examined in order to determine the overall responses of both groups, as well as any fluctuations in either a positive or negative direction. This use of the P.E.A.C. system in combination with a descriptive kind of analysis was designed to complement the inferential analyses of overall knowledge and attitude change.

Figure 1. Moment-by-moment Data (P.E.A.C. Graph)

Audience sample - Heterosexuals, N=57; Homosexuals, N=46



Discussion

Educational Sources on AIDS

The most frequently selected media sources of information on AIDS for both groups were newspapers and television. Over three quarters of the homosexuals also used magazines and pamphlets (See Table 2).

When asked from which media sources they received the most information, the most frequently occurring response of the heterosexuals was television (50%). The next most frequently occurring response was newspapers, at 29%. For the homosexuals, the most frequently occurring response was magazines, at 26%. The next most frequently occurring responses were tied at 23% for pamphlets, newspapers and television.

Participants were also asked about use of the following non-media educational sources: (a) workshop, (b) lecture, (c) relative/friend, and (d) health professional. In comparison to the heterosexuals, a relatively higher proportion of homosexuals used all of these sources. Of all the sources, relative/friend was indicated most frequently by the homosexuals as a source that they used and one from which they received the most information.

Personal Acquaintance With a Person With AIDS

On the two questions asking whether participants had friends or acquaintances who had to their knowledge: (a) been diagnosed as having either AIDS or ARC, or (b) had died of AIDS, close to one third of the homosexuals replied affirmatively to both questions. This was in contrast to the heterosexual groups who responded at a rate of two percent and zero percent respectively to the preceding questions (See Table 1).

Knowledge and Attitudes About AIDS and Overall Attitudes to Film

There was no significant difference between heterosexuals and homosexuals in

either pre-viewing responses or shifts on the five questions described below. For each of the questions, except the last one, the direction of the shift was identical for both groups and was in the same direction as the pre-viewing response. (For example, if the pre-viewing response was Agree, the shift was also towards the direction of Agree). The first four of these questions measured AIDS awareness, and the last, attitudes related to AIDS.

Both groups agreed strongly that a person with AIDS is likely to die. They disagreed strongly that one can catch the virus by being near someone who has it. On the question of whether people with no symptoms of AIDS can carry the virus and infect others, both groups agreed strongly. Both groups disagreed slightly that AIDS is only transmitted by sexual contact.

On one of the questions about attitude in relation to AIDS, there was no significant difference in responses between the groups in terms of both pre-viewing responses and shifts, in spite of a difference in direction of shifts. Viewers were asked for their opinion about whether science is reaching a cure for AIDS. Both groups responded Don't Know prior to the film. Following it, the heterosexuals tended to shift in the direction of disagreement, in contrast to the homosexuals' tendency to shift to agreement.

Responses to the six questions described below indicated significant differences between heterosexuals and homosexuals on both the pre-viewing questions and in post-viewing shifts. For the first three questions, which include one question on knowledge about AIDS, post-viewing shifts revealed a difference in direction. The other three questions, which are all related to attitude, showed no significant difference in direction of shifts.

Viewers were asked to respond to the statement, "Scientists are uncertain whether all people with positive AIDS blood tests will develop AIDS". Although both groups agreed somewhat, significantly more of the heterosexuals expressed opinions closer to Don't Know ($p < .01$). Following the film the heterosexuals shifted to agreement whereas the

homosexuals shifted to disagreement, a significant difference in shifts ($p < .05$). There was a significant difference between both groups ($p < .01$) on the question of whether society is well enough informed about AIDS. Both groups disagreed strongly, with homosexuals indicating stronger disagreement. Following the film, heterosexuals shifted in the direction of disagreement, whereas homosexuals shifted towards agreement. This was a significant difference in shifts ($p < .05$).

Prior to the film viewers were asked on a 4-point scale ranging from Not at All to Greatly. "To what extent have you changed your sexual lifestyle to reduce your risk of AIDS?". The heterosexuals responded between Slightly and Not at All, whereas the homosexuals responded between Slightly and Quite a Lot, to reveal a significant difference ($p < .01$). The post-viewing question was worded slightly differently, as follows, "Having viewed the film to what extent are you likely to change your lifestyle in order to reduce your risk of getting AIDS?". The heterosexuals shifted in the direction of greater change. Whereas the homosexuals shifted in the direction of less change, a significant difference in shifts ($p < .01$).

When asked for their opinions about whether media publicity about AIDS exaggerates its seriousness, the heterosexuals responded that they disagreed somewhat. Homosexuals responded Don't Know. This was a significant difference in responses ($p < .01$). Following the film both groups shifted in the direction of disagreement, with heterosexuals showing a significantly greater shift in this direction ($p < .05$).

In response to the statement, "You would know how to recognize the symptoms of AIDS", heterosexuals responded between Disagree Slightly and Don't Know. There was a significant difference between groups ($p < .01$). Although both groups shifted towards agreement, the heterosexual shift was significantly greater ($p < .05$).

Viewers' opinions about the statement, "You know how to reduce your risk of getting AIDS" were as follows. Heterosexuals agreed slightly, whereas homosexuals agreed strongly - a significant difference ($p < .01$). Both groups shifted in the direction of

agreement, with the heterosexuals demonstrating a significantly greater shift ($p < .01$).

On the four questions described below, there was a significant difference between heterosexuals and homosexuals on their responses to pre-viewing questions. However, post-viewing, both groups consistently tended to shift in a similar direction, with no significant difference between the two groups. The first question relates to knowledge levels, and the other three to attitudes.

On the question of whether gay men have the same incidence of AIDS as gay women, both groups disagreed. Heterosexuals disagreed somewhat and homosexuals disagreed strongly -- a significant difference ($p < .01$). Following the film both groups tended to shift (with no significant differences) toward agreement.

In response to the statement, "The military should use the AIDS blood test to screen recruits", there was a significant difference. The heterosexuals agreed somewhat, however, the homosexuals disagreed somewhat. Following the film, both groups tended to shift in the direction of disagreement, with no significant difference in shifts between both groups.

When indicating their opinions on whether persons with AIDS should be isolated from the community, the heterosexuals responded Don't Know whereas the homosexuals disagreed strongly, revealing a significant difference ($p < .01$). Although following the film, both groups tended to shift in the direction of disagreement, there was no significant difference in their shifts.

On the subject of whether children with AIDS should be prevented from attending school, the heterosexuals somewhat disagreed whereas the homosexuals disagreed strongly - a significant difference between both groups ($p < .01$). Both groups tended to shift towards disagreement following the film, with no significant differences between groups on these shifts.

Following the film, viewers were asked the following question, "How effective do you think the film will be in educating the general public about AIDS?". They could

respond on a 4-point scale which ranged from Very Effective to Very Ineffective.

Eighty-eight percent of the viewers felt that the film would be (Very or Fairly) effective in educating the general public about AIDS (See Table 3).

The mean responses of the heterosexuals and homosexuals were between Fairly Effective and Very Effective, with the heterosexuals rating it significantly higher than the homosexuals ($p < .05$).

A large proportion of heterosexuals (83%) and homosexuals (89%) were knowledgeable about the definition of "AIDS" prior to the film. Therefore the lack of a significant shift in responses (in either direction) for either group was desirable.

With regards to the planted symptoms of AIDS, "yellowish patches in the groin area" and "frequent urination", over 80% of the heterosexuals and homosexuals correctly identified these as not being symptoms of the disease. And for both groups there was no significant shift away from learning or towards mislearning.

On the question of groups which are at risk for AIDS, prior to the film, at least 96% of both heterosexuals and homosexuals correctly identified homosexual males as being at risk. There was no significant shift in responses following the film. For homosexuals there was no significant shift in identifying heterosexual men and homosexual women and children, from a relatively high correct response rate.

In response to a different part of the above question which asked about groups at risk, prior to the film homosexuals had a very high proportion of correct responses about heterosexual males being at risk (90% correct). There was no significant shift from this high correct baseline response of the homosexuals,

On the question of the life expectancy of a person with AIDS, the homosexuals, who had a baseline proportion of correct answers of 67%, did not shift in either direction. (The lack of shift for the heterosexuals, who had a significantly lower proportion of correct responses pre-viewing (37%, $p < .01$) was considered an undesirable non-shift).

On the diseases associated with AIDS, homosexuals had a high proportion of correct

responses on the disease, pneumonia (83%), and there was no significant shift in responses following the film.

On the planted diseases associated with AIDS, which were "lung cancer" and "leukemia", there was a high correct (i.e. nonselection) rate for both heterosexuals and homosexuals (of at least 79%) with no significant differences. There was no significant shift by either group following the film.

Few heterosexuals (11%) were knowledgeable about the definition of "ARC" prior to the film. However, a significantly greater proportion of homosexuals were knowledgeable (61%, $p < .01$). Following the film both groups shifted significantly towards learning the definition ($p < .01$).

Fewer than half of both the heterosexuals (33%) and homosexuals (43%) were aware of the rate at which AIDS is increasing in Canada, with no significant difference between both groups. Both groups shifted significantly to the correct response following the film ($p < .05$), (heterosexual $p < .01$; homosexual $p < .05$).

Both groups shifted significantly to learning that "purplish blotches" are a symptom of AIDS. The heterosexuals improved their proportion of correct responses from a low baseline of 35% ($p < .01$). The homosexuals, who had a significantly higher baseline of 59%, also shifted to learning ($p < .01$).

Few heterosexuals (25%) were aware that the AIDS virus attacks the helper T-cells. A significantly greater proportion of homosexuals (59%, $p < .01$) were knowledgeable about this. After the film, both groups shifted significantly to learning ($p < .01$ for both groups).

Over 50% of heterosexuals were correct in identifying men and women of either sexual orientation, as well as children, as being at risk for contracting AIDS. Excluding one of these categories of people, that of homosexual males, a significantly greater proportion of homosexuals than heterosexuals correctly identified all categories as being at risk ($p < .05$). (For the category of homosexual men, both heterosexuals and

homosexuals responded at a 96% correct level.)

Heterosexuals shifted significantly to identifying both heterosexual and homosexual women and children as being at risk ($p < .01$). For heterosexuals there was no significant shift to identifying heterosexual males (from a baseline of 68% correct).

With proportions of correct responses of heterosexuals on pre-viewing questions significantly different from those of homosexuals ($p < .05$), a relatively low proportion of the former group correctly identified skin cancer and pneumonia as diseases commonly associated with AIDS. Their percentages of correct responses were 32% and 53% respectively.

Although a relatively low proportion of homosexuals (54%) correctly identified skin cancer, a very large proportion (83%) identified pneumonia.

Both groups shifted significantly to correctly identifying skin cancer ($p < .01$ heterosexual; $p < .01$ homosexual).

Heterosexuals also shifted significantly to correctly identifying pneumonia ($p < .01$).

A relatively low proportion of heterosexuals (25%) knew exactly what the AIDS blood test which is used most frequently tells doctors.

A significantly larger proportion of homosexuals (60%) were aware of it ($p < .01$). For both groups there was no significant shift to learning -- an undesirable result for both groups, given the importance of the need to understand the test in order to be capable of making well-informed decisions about AIDS-related civil liberties issues.

Less than half of the heterosexuals (37%) were knowledgeable about the life expectancy of a person with AIDS. (In contrast to 67% of the homosexuals, a significantly greater proportion ($p < .01$.) Neither the heterosexuals nor the homosexuals shifted significantly to learning on this topic, which was considered undesirable for the heterosexuals.

The heterosexuals (37%) demonstrated low awareness of dry cough as being a

symptom of AIDS. Neither group shifted significantly to learning. There was no significant difference with the homosexuals (52% correct).

On the subject of whether heterosexual males are at risk for AIDS, heterosexuals had a 68% correct level. This was significantly lower than the homosexual level of 91% ($p < .01$). The heterosexuals did not shift significantly in either direction following the film.

Forty-nine percent of the heterosexuals were aware that the virus attacks certain white blood cells. There was no significant difference for the homosexuals (39% correct). Following the film both groups shifted significantly away from correctly identifying this target of the AIDS virus (heterosexual $p < .01$; homosexual $p < .05$).

The Moment-by-Moment Responses

The moment-by-moment responses to the film (See Figure 1) confirmed the high overall rating of the film's effectiveness (See Table 3). The average moment-by-moment ratings given by the heterosexual subjects were consistently high. The average ratings of the homosexual viewers were marginally lower, and subject to occasional sudden variations.

Six points occurred at which the homosexual subjects' responses shifted instantaneously towards one end of the 4-point scale or the other. No such shifts are evident in the responses of the heterosexual subjects. At four of these points the homosexual group's responses appeared to shift in the negative direction (i.e. towards POOR). The film's content at these points was:

1. References by a person with AIDS to his loss of hope, and to his acceptance of the fact that he will die. (2 min./30 - 33 sec.)
2. An animated sequence depicting the increasing incidence of AIDS in society. (7 min./00 - 3 sec.)
3. A shot of a bathroom door, and sound effect of a toilet flushing, used to illustrate the symptom, diarrhea. (9 min./42 - 45 sec.)

4. A narrative instruction, reinforced by visual graphic, to avoid sex with high-risk groups. (15 min./33 - 36 sec.)

Two moments were apparent to which the homosexual subjects responded positively (i.e. towards GOOD).

5. A section concerning the ways in which AIDS cannot be spread. (13 min./27 -30 secs.)

(N.B. the response was maintained during each of the two 3-second periods which followed)

6. A narrative instruction, reinforced by visual graphic, to apply 'safe-sex' principles via the use of condoms. (14 min./48 -51 sec.)

Considered collectively, these momentary reactions suggest a heightened sensitivity on the part of the homosexual viewers towards particular production emphases and strategies. The specific implications for future film production are discussed in the next chapter.

CHAPTER 4: CONCLUSIONS

Educational Sources on AIDS

The most frequently selected media sources of information on AIDS for both the heterosexual and homosexual groups were newspapers and television. This guides educational campaign planners in terms of media to use - namely television and newspapers. The majority of homosexuals not only also used magazines and pamphlets for information, but many of them obtained the most information from magazines. This confirms the literature which indicates that groups which seek detailed information on a health topic use print materials. That the heterosexuals felt that they received the most information about AIDS from television, affirms that it is probably an effective medium in terms of reaching the general public on this topic, even though it may not necessarily be used to communicate very detailed information.

Homosexuals were more likely than heterosexuals to use non-mediated sources of information on AIDS, such as workshops, health professionals etc.. This may reflect the greater number of non-mediated educational opportunities targeted at the male homosexual community and also the fear of heterosexuals of being associated with the disease, because of its link with homosexuals. It may also reflect the perception of heterosexuals that it is a disease about which they need not be concerned. Of these non-mediated sources, the homosexuals were most likely to obtain information from a relative or friend. This indicates that perhaps trust and confidentiality are very important issues in discussing this topic, given its sensitive nature. It also confirms that the media may be a good way to overcome the possible barrier of face-to-face interaction which is required in any non-mediated, mass education campaign (such as lectures, workshops) - at least initially, until the public becomes more educated about the topic.

Baseline Knowledge

Overall heterosexuals showed a general awareness of AIDS and homosexuals

showed indepth knowledge. This reflects the homosexuals' greater personal association with persons with AIDS or ARC, as well as the media publicity and educational efforts which have focused on the gay (male) community. It confirms the literature describing male homosexuals' decreases in high AIDS risk activities.

Prior to the film both groups indicated familiarity with the term "AIDS" although few heterosexuals were familiar with the term "ARC". Few members of either group knew the rate at which AIDS is increasing in Canada. The homosexuals were more knowledgeable than the heterosexuals about which groups are at risk, except for one group, that of "heterosexual males". Neither the homosexuals nor the heterosexuals were more knowledgeable than each other about this group. The latter finding reflects the widespread coverage of AIDS as a disease of homosexual males and the minimal emphasis to date on the risks for heterosexuals. Greater efforts will need to be made to educate the heterosexuals about the risk to them.

Both groups were aware of the fatality of AIDS. They were also aware that it may be transmitted sexually and that it is not transmitted by being next to someone who has it. However, heterosexuals were not aware of the life expectancy of a person with AIDS -- in contrast to the homosexuals. This may be because of heterosexuals' lesser acquaintance with persons with AIDS and people who have died from the disease.

Homosexuals showed greater awareness of certain diseases and symptoms associated with AIDS. This is also probably due to their greater interest in the topic and educational efforts aimed at them. Neither group was knowledgeable about the clinical objectives of the commonly used AIDS test. This reflects its often misleading title and poor explanation by the media, which do not stress that it is a test for the presence of the AIDS antibody and not specifically the AIDS virus. Greater efforts need to be made to communicate this information, as it has great bearing on making informed decisions about the civil rights factors relating to testing the public.

Despite their lack of knowledge about the dynamics of the AIDS test, the

homosexuals were knowledgeable about the fact that scientists do not know if all those who test positively for the AIDS virus will get AIDS. This again reflects their greater knowledge about the disease and their interest in issues that affect civil liberties.

Perceptions about personal risk reduction knowledge reflected the differences between the two groups on knowledge about AIDS. Although heterosexuals felt that they would not be able to recognize symptoms of AIDS, homosexuals felt that they would. Heterosexuals agreed slightly that they would know how to reduce their risk of getting AIDS, however, homosexuals agreed strongly.

Baseline Attitudes

Prior to the film homosexuals showed more liberal attitudes than the heterosexuals. This is most likely due to the high incidence of AIDS among homosexual males and thus their vested interest in civil liberties - as they might effect them. It may also be due to their greater knowledge of the disease and how it is transmitted. Both groups expressed strong disagreement that society is well enough informed about AIDS, with the homosexuals expressing even stronger disagreement. The heterosexuals disagreed that media publicity exaggerates the seriousness of AIDS, whereas the homosexuals did not know. This may have been because the homosexuals felt that on the one hand the media sensationalizes the topic and links the disease with their community, but on the other hand, had a desire for people to be aware of the seriousness of AIDS.

Although heterosexuals did not know if persons with AIDS should be isolated from the community, homosexuals disagreed slightly. Heterosexuals disagreed somewhat about whether children with AIDS should be prevented from attending school whereas homosexuals agreed strongly with this. Heterosexuals agreed that the military should use the AIDS blood test to screen recruits whereas the homosexuals disagreed.

The more lenient views of the homosexuals may have been due to their greater knowledge of the disease or to their need to protect their own rights, given the high

incidence of AIDS in homosexual males and the prevailing laws and attitudes which affect this group.

Homosexuals reported that they had changed their lifestyles from Quite a Lot to Slightly in order to reduce their AIDS risk, whereas the heterosexuals had changed from Slightly to Not at All. This reflects the perception among homosexual males of the risk of AIDS and that of heterosexuals of a very minimal risk.

Increases in Knowledge

Both the heterosexuals and homosexuals learned the definition of ARC, the rate at which AIDS is increasing in Canada, that purplish blotches are a symptom of AIDS, that the AIDS virus attacks the T-cells, and that skin cancer is associated with AIDS. Heterosexuals also learned that pneumonia is a disease associated with AIDS. These facts were all covered in the film, with both audio and visual reinforcement. Although American statistics were given, they could be correctly applied to the Canadian situation.

Non-Learning

Heterosexuals and homosexuals did not learn about the objectives of the AIDS blood test. Neither group learned that a dry cough is a symptom of AIDS. These topics were not explicitly covered in the film. Because of the lack of knowledge about the objectives of the AIDS blood test and its importance in terms of civil liberties, this should be dealt with in future AIDS education campaigns.

Heterosexuals did not learn the life expectancy of a person with AIDS nor that heterosexual males are at risk for AIDS, although these topics were covered in the film. There were not reinforcing graphics about life expectancy, which may have facilitated learning of these figures. However despite the reinforcing visual for heterosexual males being at risk, perhaps heterosexuals were denying this fact, given the association of the disease with male homosexuals, and the low emphasis to date in the media on the risks for

heterosexuals. These results confirm the need to evaluate the effectiveness of AIDS educational media materials while they are being produced in order to determine what is not working.

Mislearning

Heterosexuals and homosexuals incorrectly shifted away from responding that the AIDS virus attacks certain white blood cells. The effect may be due to an animated graphic sequence in the film which depicts the helper T-cells, which are white blood cells, as blue. The mistaken impression may have been heightened by the fact that blood cells which were depicted in the sequence as white were not T-cells, but other cells serving a complementary function. The film's failure to clarify that T-cells are actually white blood cells is a shortcoming common to other AIDS education materials currently available. This is a shortcoming, given the high probability that some people are aware that white blood cells fight infections and may therefore more readily relate to this technical information.

Both groups also shifted to the opinion that gay men have the same incidence of AIDS as gay women. The mistaken impression that homosexual men and women have the same incidence of AIDS was possibly due to an unintentional failure by the film to distinguish between gay men and the gay community. It is important for future educational productions to make a point of distinguishing between male and female homosexuals in order to avoid reinforcing the incorrect messages being made by some groups, such as certain religious groups, that AIDS is a disease caused by homosexuality.

The need to formatively evaluate educational campaigns in order to determine any production techniques that could have adverse effects is demonstrated by these results.

Shifts in Attitude

Following the film both groups tended to shift towards disagreeing about the following issues: that people with AIDS should be isolated from the community, that

children with AIDS should be prevented from attending school, and that the military should use the AIDS blood test to screen recruits. These shifts may have resulted from an increase in knowledge about the disease and in particular ways in which it is and is not transmitted.

Both groups shifted towards agreeing that they could recognize symptoms of AIDS and how to reduce their risks of getting AIDS, with the homosexuals shifting significantly more than the heterosexuals on the former, and the heterosexuals shifting more than the homosexuals on the latter. Given that before the film the homosexuals were less sure about the symptoms of AIDS than about how to reduce their risks (about which they were very certain) it seems logical that in comparison to the heterosexuals, they would perceive that they have learned more about symptoms than risk reduction. The heterosexuals did feel that they learnt about how to reduce their risks, which indicates that the film did contribute to educating them on this topic.

Heterosexuals were likely to make more changes in their sexual lifestyles having viewed the film, however homosexuals were not. This may be because homosexuals have already made changes which they perceive as adequate in order to reduce their AIDS risks.

Both heterosexuals and homosexuals shifted towards disagreeing that media publicity about AIDS exaggerates its seriousness, with heterosexuals showing a greater shift. Heterosexuals were shifting from a position of greater disagreement than the homosexuals, who were undecided pre-viewing. It seems that the film showed both groups about the seriousness of the disease and consequently they tended to feel that media publicity was accurate.

Heterosexuals tended to shift in the direction of disagreeing that society is well enough informed and homosexuals to agreeing that society is well enough informed about the disease. As they were both shifting from positions of disagreement, it seems that as the heterosexuals become better informed, they realized the need for others to do the same. Of the homosexuals, who initially strongly disagreed, fewer tended to disagree (although

there may not have been a significant difference).

Overall Attitudes to the Film

Both the heterosexuals and the homosexuals rated the film between Fairly and Very Effective in terms of educating the public about AIDS, however the heterosexuals rated it more positively than the homosexuals. The moment-by-moment responses help to explain the lower rating given by the homosexuals.

Moment-by-Moment Responses to the Film

The moment-by-moment responses confirmed the relatively high ratings given by both groups, with the heterosexuals consistently giving higher ratings than the homosexuals.

The homosexuals shifted in a negative direction at the moments when a person with AIDS who was being interviewed, expressed a fatalistic attitude towards his death -- a point in the film which may have been interpreted as communicating an overall message of helplessness and lack of control over the disease (even though the person interviewed was fatalistic about dying from the disease and was not fatalistic about actually acquiring AIDS and then dying from it.). When viewed in light of the questionnaire responses, which indicated that the homosexuals perceived themselves as knowing how to reduce their risk of getting AIDS and therefore having control over the disease, this interpretation may be reinforced. Given the large number of homosexuals in comparison to heterosexuals who had been acquainted with a person who had to their knowledge either been diagnosed as having AIDS or ARC, or had died of AIDS, it is possible that the homosexual viewers were responding in terms of their own experiences with people who have AIDS - experiences which may have been more positive and hopeful. It is interesting that in terms of attitudes towards whether science is reaching a cure for AIDS, there was no significant difference between heterosexuals and homosexuals either before or after the film.

This negative moment contrasted with two positive shifts which occurred at a section concerning the ways in which AIDS cannot be spread, and instructions to apply safe sex principles - two points which communicated reassuring messages. It is useful to analyze the results in the light of Baggaley's (1986) research into smoking prevention campaigns. He found that increasing fear, while at the same time increasing optimism about prevention, by offering practical instruction for low risk behaviour was appreciated by the audience. The particular fear approach used in the film being studied may well reflect the realities that its usually young victims have an extremely short lifespan (in comparison to the more chronic diseases such as the lung problems associated with smoking). However other strategies are possible for depicting the negative aspects of the AIDS without communicating an overall tone of no hope. Perhaps these strategies should be used. Further research into this area might reveal useful guidelines. Clearly the high risk groups appreciated the messages which included active ways in which one can reduce one's risk and also reinforced the positive aspects of the disease i.e. that it is not easy to catch through involvement in many everyday activities.

The homosexuals also responded negatively to a shot in which a bathroom door with the sound effect of a toilet flushing was used to illustrate the symptom, diarrhea. This shot was one in a series to illustrate different symptoms of AIDS, such as loss of appetite and night sweats. The dangers of illustrating all concepts relative to a particular educational message, especially if some of them are particularly distasteful, are revealed in this case by the viewers' unfavourable responses. It is also possible that negative reaction to such a shot might actually increase the barriers built up surrounding what are already delicate subjects about which to communicate, those of sexuality and homosexuality.

Another sequence, in which the message communicated was that one should avoid sex with high risk groups, was received unfavourably by the homosexuals. As the majority of this group were males (and thus in a group linked with a high incidence of AIDS) their defensiveness would most likely be increased by a message that implies that

people should not relate to homosexual men in precisely the way that defines them i.e. via their homosexual lifestyle. And furthermore, contrary to the message, for some monogamous homosexual male couples, or those who practice safe sex, it is not necessary to avoid sex with other homosexual men. Based on their responses to the questionnaires, the homosexuals felt that they had already made a significantly greater change in their sexual lifestyles than the heterosexuals. Following the film there was a significant difference in attitude shifts, with homosexuals shifting in the direction of less change and the heterosexuals in the opposite direction. This illustrates the need for very careful design of messages in order take into consideration the defensiveness of members of groups in which there is a high incidence of AIDS and also to reflect the actual risks and risk reduction behaviours.

It is possible that the negative response to the animated sequence which depicts the increasing incidence of AIDS was because it suggested ambiguously that AIDS could be caught by standing next to someone who has it. This brings to the fore the need for artists to be extremely careful about conveying unclear or confusing messages in their graphics, and to test them formatively. This same point was raised about the possible misinterpretation of the helper T-cell as not being a white blood cell because it was depicted as blue.

That some viewer reactions such as a negative response to a production factor suggesting a fatalistic attitude were not apparently predicted by the producer, brings home the need for feedback from the audience on how they perceive the messages being communicated and what can be done to improve the messages.

Implications for Future AIDS Education

The findings of this study indicate the need for more effective public education about AIDS, and the importance of combining it with evaluation measures. The latter should monitor (a) the topics to be covered, and (b) the media production techniques to be used. Evaluation should be emphasized during the production of AIDS campaign materials themselves so that the materials can be fine-tuned to take account of adverse effects which were not predicted.

The results indicate some principles that may be generalizable to other AIDS education productions -- namely that (a) messages must be designed which do not communicate a fatalistic attitude about the disease, (b) positive instructions on how to reduce one's risk without entirely ceasing sex with members of groups in which there is a high incidence of the disease should be given, (c) the positive aspects of the disease, such as how it is not spread, should be stressed, (d) homosexual males should be clearly distinguished from homosexuals as the latter term may include males and females.

Given that trust and confidentiality seem to be important factors for homosexuals in accessing information about AIDS, it may be important to stress the use of television and the other media (as opposed to lectures or workshops), which can be accessed in private. This also suggests possible production techniques, such as use of a friend or relative figure in productions. Given that heterosexuals do not associate the disease with homosexual males, or block doing so, television and the other mass media may be better than public information sessions, at least initially.

The findings also revealed specific topics for education. These include (a) education of both heterosexuals and homosexuals about the clinical objectives of the commonly used AIDS blood test, which tests for the presence of the AIDS antibody and not the AIDS virus, and (b) education of heterosexuals about the fact that heterosexual males are at risk for acquiring AIDS.

Above all, the study confirms the need for those designing health education media

campaigns to first find out what members of the target audience know about the topic and what they are doing based on this knowledge, and then determine how best to influence them to live a healthier life.

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APPENDIX A

APPENDIX A1: QUESTIONNAIRE I -- AIDS EDUCATION PROJECT

APPENDIX A2: QUESTIONNAIRE II -- AIDS EDUCATION PROJECT

N.B. Since the questions were numbered to correspond to the pre-and post-viewing questionnaires, certain question numbers are missing.

APPENDIX A1. QUESTIONNAIRE I - AIDS EDUCATION PROJECT

Your answers to these questions will be used in the development of guidelines for public education about AIDS.

Your participation in the project is strictly ANONYMOUS and CONFIDENTIAL.

PLEASE FILL IN THE BLANKS FOR THE FOLLOWING QUESTIONS

- 1) 'A.I.D.S.' stands for _____
- 2) 'A.R.C.' stands for _____

PLEASE CHECK OFF (x) ONE BOX ONLY FOR EACH OF THE FOLLOWING QUESTIONS

- 3) Have any of your family, friends or acquaintances, to your knowledge, been diagnosed as having either AIDS or ARC?
 - Yes
 - No
- 4) Have any of your family, friends or acquaintances, to your knowledge, died of AIDS?
 - Yes
 - No
- 5) The AIDS blood test which is performed most frequently is used to tell doctors:
 - if the AIDS virus is present
 - if a substance produced by the AIDS virus is present
 - if antibodies to the AIDS virus are present
 - if B-cells are present
 - none of the above

- 6) In Canada the number of REPORTED cases of AIDS is approximately:
- 25 people
 - 400 people
 - 2,000 people
 - 14,00 people
- 7) At approximately what rate are REPORTED cases of AIDS increasing in Canada?
- Doubling every month
 - Doubling every 6 months
 - Doubling every year
 - Doubling every 2 years
- 8) -
- 9) How serious a risk is AIDS to you?
- Not serious
 - Fairly serious
 - Extremely serious
- 10) Most people diagnosed with AIDS are likely to die within:
- 6 months of diagnosis
 - 1 year of diagnosis
 - 2 years of diagnosis
 - 5 years of diagnosis
 - none of the above

PLEASE CHECK OFF MORE THAN ONE BOX AS APPROPRIATE FOR EACH OF THE FOLLOWING QUESTIONS

11) From which of the following MEDIA have you obtained INFORMATION about AIDS?

- Pamphlets
- Posters
- Books
- Newspapers
- Magazines
- Radio
- Television
- Films
- None of these

From which of the ABOVE MEDIA did you receive the MOST information about AIDS?

12) From which of the following sources have you obtained INFORMATION about AIDS?

- Workshop
- Lecture
- Relative or friend
- Health professional
- None of these
- Other -- which? _____

From which of the sources listed in this question did you obtain the MOST information about AIDS?

13) Listed below are several symptoms of disease. Please check off any of those which are symptoms of AIDS.

- Dry cough
- Yellowish patches in the groin area
- Purplish blotches on the skin
- Frequent urination
- None of the above

14) The AIDS virus destroys the body's immune system. Please check off any of the following that it attacks.

- The B-cells
- The skin
- The helper T-cells
- Certain white blood cells
- None of the above

15) Which of the following groups can get AIDS?

- Heterosexual men
- Homosexual men
- Heterosexual women
- Homosexual women
- Children

16) Listed below are several types of diseases. Please check off any of those that are commonly diagnosed in people with AIDS.

- Lung cancer
- Skin cancer
- Leukemia
- Pneumonia
- None of the above

PLEASE CHECK OFF ONLY ONE BOX FOR EACH OF THE FOLLOWING QUESTIONS

17) To what extent have you changed your sexual lifestyle in order to reduce your risk of getting AIDS?

- Not at all
- Slightly
- Quite a lot
- Greatly

18) A person with AIDS has a lowered resistance to infections that the body can normally fight off.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

19) Medical science is reaching a cure for AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

20) People with no symptoms of AIDS can carry the virus and infect others.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

21) People with AIDS should be isolated from the community.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

22) You would know how to recognize the symptoms of AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

- 23) Gay men have the same incidence of AIDS as gay women.
- STRONGLY AGREE
 - AGREE SLIGHTLY
 - Don't know
 - DISAGREE SLIGHTLY
 - STRONGLY DISAGREE
- 24) A person with AIDS is likely to die.
- * - STRONGLY AGREE
 - AGREE SLIGHTLY
 - Don't know
 - DISAGREE SLIGHTLY
 - STRONGLY DISAGREE
- 25) You know how to reduce your risk of getting AIDS.
- STRONGLY AGREE
 - AGREE SLIGHTLY
 - DISAGREE SLIGHTLY
 - STRONGLY DISAGREE
- 26) The more sexual partners a person has, the more likely that person is to get AIDS.
- STRONGLY AGREE
 - AGREE SLIGHTLY
 - Don't know
 - DISAGREE SLIGHTLY
 - STRONGLY DISAGREE
- 27) The military should use the AIDS blood test to screen recruits.
- STRONGLY AGREE
 - AGREE SLIGHTLY
 - Don't know
 - DISAGREE SLIGHTLY
 - STRONGLY DISAGREE

28) Scientists are uncertain whether all people with positive AIDS blood tests will develop AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

29) Society is well enough informed about AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

30) Media publicity about AIDS exaggerates its seriousness.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

31) Children with AIDS should be prevented from attending school.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

32) One can catch the AIDS virus simply by being near someone who has it.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

33) AIDS is only transmitted by sexual contact.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

APPENDIX A2. QUESTIONNAIRE II - AIDS EDUCATION PROJECT

Your answers to these questions will be used in the development of guidelines for public education about AIDS.

Your participation in the project is strictly ANONYMOUS and CONFIDENTIAL.

PLEASE FILL IN THE BLANKS FOR THE FOLLOWING QUESTIONS

- 1) 'A.I.D.S.' stands for _____
- 2) 'A.R.C.' stands for _____

PLEASE CHECK OFF (x) ONE BOX ONLY FOR EACH OF THE FOLLOWING QUESTIONS

- 3) How effective do you think the film will be in educating the general public about AIDS?
 - Very effective
 - Fairly effective
 - Not very effective
 - Very ineffective
- 4) _____
- 5) The AIDS blood test which is performed most frequently is used to tell doctors:
 - if the AIDS virus is present
 - if a substance produced by the AIDS virus is present
 - if antibodies to the AIDS virus are present
 - if B-cells are present
 - none of the above
- 6) In Canada the number of REPORTED cases of AIDS is approximately:
 - 25 people
 - 400 people
 - 2,000 people
 - 14,000 people

7) At approximately what rate are REPORTED cases of AIDS increasing in Canada?

- Doubling every month
- Doubling every 6 months
- Doubling every year
- Doubling every 2 years

8) -

9) How serious a risk is AIDS to you?

- Not serious
- Fairly serious
- Extremely serious

10) Most people diagnosed with AIDS are likely to die within:

- 6 months of diagnosis
- 1 year of diagnosis
- 2 years of diagnosis
- 5 years of diagnosis
- none of the above

PLEASE CHECK OFF MORE THAN ONE BOX AS APPROPRIATE FOR EACH OF THE FOLLOWING QUESTIONS

11) _____

12) _____

13) Listed below are several symptoms of disease. Please check off any of those which are symptoms of AIDS.

- Dry cough
- Yellowish patches in the groin area
- Purplish blotches on the skin
- Frequent urination
- None of the above

14) The AIDS virus destroys the body's immune system. Please check off any of the following that it attacks.

- The B-cells
- The skin
- The helper T-cells
- Certain white blood cells
- None of the above

15) Which of the following groups can get AIDS?

- Heterosexual men
- Homosexual men
- Heterosexual women
- Homosexual women
- Children

16) Listed below are several types of diseases. Please check off any of those that are commonly diagnosed in people with AIDS.

- Lung cancer
- Skin cancer
- Leukemia
- Pneumonia
- None of the above

PLEASE CHECK OFF ONLY ONE BOX FOR EACH OF THE FOLLOWING QUESTIONS

17) Having viewed the film, to what extent are you likely to change your sexual lifestyle in order to reduce your risk of getting AIDS?

- Not at all
- Slightly
- Quite a lot
- Greatly

18) A person with AIDS has a lowered resistance to infections that the body can normally fight off.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

19) Medical science is reaching a cure for AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

20) People with no symptoms of AIDS can carry the virus and infect others.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

21) People with AIDS should be isolated from the community

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

22) You would know how to recognize the symptoms of AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

23) Gay men have the same incidence of AIDS as gay women.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

24) A person with AIDS is likely to die.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

25) You know how to reduce your risk of getting AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

26) The more sexual partners a person has, the more likely that person is to get AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

27) The military should use the AIDS blood test to screen recruits.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

28) Scientists are uncertain whether all people with positive AIDS blood tests will develop AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

29) Society is well enough informed about AIDS.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

30) Media publicity about AIDS exaggerates its seriousness.

- STRONGLY AGREE
- AGREE SLIGHTLY
- Don't know
- DISAGREE SLIGHTLY
- STRONGLY DISAGREE

PLEASE CHECK OFF ONE BOX FOR THE FOLLOWING QUESTIONS

36) Are you currently employed outside the home?

- Yes
- No

37) Sex:

- Male
 - Female
- A

38) Age:

- 18-21
- 22-25
- 26-35
- 36-45
- 46-55
- 56+

FOR THE FOLLOWING QUESTIONS PLEASE CHECK OFF MORE THAN ONE
BOX AS APPROPRIATE

40) Education:

- Completed elementary school
- Graduated from high school
- Attended a specialized training program
- Graduated from a specialized training program
- Attended a university undergraduate degree program
- Graduated from a university undergraduate degree program
- Obtained higher academic qualifications

41) Occupation (If retired, please indicate your last occupation):

- Homemaker
- Trade/technical
- Student
- Professional/managerial
- Clerical/secretarial
- Other -- which? _____

FOR THE FOLLOWING QUESTIONS PLEASE CIRCLE THE APPROPRIATE NUMBER

42) Please indicate your sexual interest in members of the OPPOSITE sex.

0 1 2 3 4 5

No sexual interest
in members
opposite sex

High sexual interest
in members of the
opposite sex

43) Please indicate your sexual interest in members of the SAME sex.

0 1 2 3 4 5

No sexual interest
in members
of the same sex

High sexual interest
in members
of the same sex

PLEASE WRITE ANY COMMENTS ON THE REVERSE SIDE
OF THIS PAGE.

THANK YOU VERY MUCH FOR YOUR ASSISTANCE
WITH THIS PROJECT!!

APPENDIX B: PARTICIPANT CONSENT FORM

APPENDIX B. PARTICIPANT CONSENT FORM**Consent to Take Part in Research**

This is to state that I agree to participate in a programme of research conducted by Concordia University on public knowledge of Acquired Immunodeficiency Syndrome (AIDS).

- I understand that the purpose of the research is a) to obtain data on public knowledge about AIDS, and b) to develop a new film on the subject on AIDS prevention.
- I understand that I may be asked to complete a brief questionnaire on the above topic, and also to view related film material.
- I understand that I may be invited to take part in a general discussion of the effectiveness of the above material.
- I understand that my participation in the study is totally anonymous.
- I understand that the data from this study may be published.
- I understand that I am free to withdraw my consent and to discontinue my participation at any time without giving notice and without negative consequences.
- I understand that I am participating in this research solely in order to advance the art of successful public health promotion, and that the study has no further motive with which I have not been acquainted.

I HAVE CAREFULLY STUDIED AND I UNDERSTAND THIS AGREEMENT,
AND THEREFORE I FREELY CONSENT AND AGREE TO PARTICIPATE
IN THE STUDY.

NAME (PLEASE PRINT) _____

SIGNATURE _____

WITNESS SIGNATURE _____

DATE _____