PERCEPTION OF HIV/AIDS AMONG STUDENTS AT THE UNIVERSITY OF JOEN SUU

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ABSTRACT

Perception of HIV/AIDS among Students at the University of Joensuu
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Key words: Perception, HIV/AIDS, Students, Finland, Joensuu, Attitudes, Knowledge, Behavior.

The purpose of this study is to describe Finnish students’ perception of HIV/AIDS and individuals with HIV/AIDS while they are studying at the University of Joensuu. This study has used the concept of perception to capture students’ attitudes, knowledge, and feelings towards HIV/AIDS and individuals with HIV/AIDS, as well as perception of sexual risk behaviors. This study is part of a larger research project concerning HIV/AIDS carried out by the Department of Nursing at the University of Kuopio. The results might not only be used in planning and implementing health education for young people, but might also provide a sense of harmonization of health care education - a sensitive approach that might deepen our knowledge and awareness of students’ sexual behavior.

The data were collected in the spring term mainly by using a questionnaire. A simple random sample of 400 basic degree students was obtained at universities of Kuopio and Joensuu. The study uses only the Joensuu sample where the response rate was 40% with 124 females and 36 males. The results show that on average students have a good knowledge concerning HIV/AIDS, positive attitude towards persons infected with the virus and a rather realistic perception of risks involved in unhealthy or unprotected sexual behaviors.

The most negative attitudes were found towards intravenous (IV) drug users (53.5%) and homosexuality (15.1% of the respondents). Knowledge did not have an effect on the level of beliefs and prejudices of the students. Religion had no great influence on the students’ knowledge, attitudes and perception of sexual risk behavior. The differences between faculties were minimal.

In a nutshell, Joensuu University students’ perception of HIV/AIDS and individuals with HIV/AIDS reveals cognitive, affective and behavior components towards the virus/disease.
Acknowledgements

To my family, relatives and friends – Peace.

For the realization of this study, a great amount of help was received from a number of respected persons. Needless to say the author of this study is to be held responsible for any inexperienced sentence.

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I am grateful to the researchers at the University of Kuopio for their kind cooperation.
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CHAPTER ONE: Introduction

For two and a half decade, HIV/AIDS as an academic, sensitive topic and a health issue has been the subject of a large debate and concern, full of controversies. Most of the research done on this topic is been carried out by Western scholars with greater focus on non-Western, developing or underdeveloped countries. Even though, some have made strong statements about cancer, Alzheimer, or obesity being one of the most serious health crises facing the Western World, others prefer to look at the relatively brief history of HIV/AIDS, as becoming more than a ghastly and relentless disease. For Weeks, ‘it has come to symbolize an age where fear, prejudice and irrationality battle against reason, responsibility and collective endeavor’ (quoted in Aggleton and Homans 1988, 10).

Eventually, there are real enough reasons for debate. Some tens of millions of people throughout the world (i.e. adults and children estimated to be living with HIV around the globe – see figure 1 below) are infected with the HIV virus, the cause of AIDS (The European Centre for Disease Prevention and Control, ECDC 2007). More so, there is an increasing number of persons living with HIV who are unaware of their serostatus in Europe (see tables 1 & 2), even though emphasis has been made regarding the need of HIV testing being free of charge (i.e. it should be a basic responsibility of all societies across Europe) and most especially including a proper follow-up in terms of guidance, support, treatment and care. More still, it is understood that a later diagnosis may lead to much more suffering which can result in greater morbidity and mortality – as about 24% of all HIV positive death has been linked to late presentation (www.ecdc.europa.eu).

Meanwhile, a number of factors have also been identified as encouraging the low testing rate. They are divided into two groups patient related: including the lack of perception of being at risk, lack of knowledge on testing possibilities, fear of positive results, concerns about lack of confidentiality (Eastern Europe) and the fear of stigmatization. The other is health system related including populations marginalized and excluded (migrants) and the geographic location.
Figure 1: Adults and Children Estimated to be Living with HIV in 2007

Table 1: Estimated Proportion of HIV – Infected Persons Unaware of their Infection. (www.ecdc.europa.eu).

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated % HIV-infected persons unaware of their infection</th>
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<tbody>
<tr>
<td>Czech Republic</td>
<td>20-25%</td>
</tr>
<tr>
<td>Denmark</td>
<td>15-20%</td>
</tr>
<tr>
<td>France</td>
<td>30%</td>
</tr>
<tr>
<td>Germany</td>
<td>25-30%</td>
</tr>
<tr>
<td>Italy</td>
<td>25%</td>
</tr>
<tr>
<td>Latvia</td>
<td>50%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>40%</td>
</tr>
<tr>
<td>Poland</td>
<td>&gt;50%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>20-30%</td>
</tr>
<tr>
<td>Sweden</td>
<td>12-20%</td>
</tr>
</tbody>
</table>
Table 2: Modeled Estimates for Adults for Europe End 2006

<table>
<thead>
<tr>
<th></th>
<th>All Europe WHO Region</th>
<th>Western Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living or ever lived with HIV</td>
<td>2,890,000</td>
<td>1,130,000</td>
</tr>
<tr>
<td>Ever diagnosed with HIV</td>
<td>1,620,000</td>
<td>820,000</td>
</tr>
<tr>
<td>Ever developed AIDS</td>
<td>460,000</td>
<td>320,000</td>
</tr>
<tr>
<td>Cumulative deaths</td>
<td>480,000</td>
<td>330,000</td>
</tr>
<tr>
<td>Currently living with HIV</td>
<td>2,340,000</td>
<td>700,000</td>
</tr>
<tr>
<td>Diagnosed (%)</td>
<td>1,110,000 (48%)</td>
<td>450,000 (65%)</td>
</tr>
<tr>
<td>Undiagnosed</td>
<td>1,220,000 (52%)</td>
<td>250,000 (35%)</td>
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Adults and children estimated to be living with HIV in 2007 around the globe is represented in Figure 1 revealing that the virus has been diagnosed and thus poses a serious health threat in every continent – though the distribution of its spread appears uneven. Tables (1 & 2) represent the proportions of infected persons estimated to be living with HIV, whom are unaware and modeled estimates for European adults (i.e. in Europe WHO Region and Western Europe) respectively. The latter seems more detailed because it does not only give the figures of persons unaware of been infected but also persons most likely to be living with HIV and those who have developed AIDS as well.

Many perhaps most, of these will go on to get the full blown syndrome. I did not come across any document offering the exact figures of people with the virus, or the disease world wide but met those who perceive it as a disease of the poor, the underprivileged, most of whom are victimized. Many citizens of the developing countries have been refused or denied visas to travel to the Western countries for medical reasons. This is to say, on grounds that they are HIV positive or that they have AIDS. In some situations, visas already granted for studies, medical purposes, tourism or economic reasons had been revoked upon the realization of the HIV infection and AIDS. Immigration laws in these countries (Western) have undergone huge reforms since the emergence of
HIV/AIDS during the early 1980s. For instance, though the United States has the highest AIDS caseload in the world, which might be considered a net ‘exporter’ of the disease, immigration law excludes seropositive foreigners visiting the United States to attend AIDS conferences (Adam 1989).

The purpose of this study is to assess student’s perception of HIV/AIDS while they are studying at the University of Joensuu. To my knowledge this study is the first of its kind to be done in the institution and its part of the larger research project on students’ perception of HIV/AIDS conducted by the Department of Nursing Science at the University of Kuopio (Finland). The study aims at identifying university students’ general knowledge and beliefs, attitudes, and perceptions of HIV/AIDS, people with HIV/AIDS, and sexual risk behavior.

More so, the study paves the way for reducing the idea related to fear, misconceptions, misinformation and negative attitudes towards individuals or persons with HIV/AIDS (Tierney 1995) by warning us to be ever suspicious of our perception of disease and illness. This is to say, it is also very important that we identify illness/disease/sickness as something individual too, not only collective, cultural or a social phenomenon. In most cases, illness/disease/sickness is not insinuating that it belongs to some particular group of persons and it might be misleading to think in this way (for instance, when some White persons from the Western societies are involved in illegal business transactions, it is often said that they are involved in ‘Black Market’ – without any clear definition of what the ‘White Market’ might be or is it assumed that the opposite is the case?).

The idea here is not only of disease being thought of as something of a particular individual (affecting some individuals) but rather that there is always an individual tragedy involved, for an early identification of the cause(s) of an illness could lead to affective prevention mechanisms. Again, it is understood that when more groups of persons or individuals are having a disease it could take a different dimension since many others too may be involved such as medical officials, health care planners, traditional practitioners, the society etc.
For the realization of this study, the perspective of some school of thoughts is used as lay down foundation to the issues (i.e. positivism, empiricism and objectivism). In this line, the study is not only intending to examine students’ perception about illness/disease that may influence their behaviors in life process but also whether its central points would be proven or considered as having a reality external to the population (preferably value free); and if they should be considered social constructions built up from the perceptions and actions of the population.

In addition, among other things emphasis is made on the attitudes, behaviors, conceptions and knowledge of students towards HIV/AIDS which has resulted as a consequence of perception. Thus, offering us a room to review various issues relating to the attitudes, knowledge and beliefs of Joensuu University Students towards HIV/AIDS and individuals with HIV/AIDS – as most research interest in the recent past has been focused on students towards these issues globally and particularly, in other universities in Finland (Turku, Kuopio and Oulu). This, alongside the ontological approach is the more reason why the methodology used is a kind of extensive – laying down foundation for prospective research. The study is been divided into six chapters. Chapters one and two present the introduction, background of the study as well as the social context of HIV/AIDS. In Chapter three, the sociology of people living with HIV/AIDS, the definition of social perception and the research questions are been presented. Chapter four involves methodology – research strategy, data collection and analysis. Chapter five is the research findings (results). Finally, the last chapter (six) is the conclusions.

Eventually, the origin/history (evolution), social aspects, social context and organization of HIV/AIDS is been discussed as background of the research literature, to contribute to our understanding of issues, as well as to the empirical work. The more reason why discussions of issues concerning the background of the study form the starting-point for the philosophy which underlies this research: that is to say the origins and evolution of HIV/AIDS can not just simply be separated partly because they provide a historical account that offers some advantages and partly because they help develop a more critical appreciation of the social dynamics surrounding HIV infection and AIDS. First, it
suggests an answer to the question posed most provocatively by those members of societies wishing to know why Africa had a uniquely terrible HIV/AIDS epidemic. For instance, some analysts suggest that Africa has a distinctive sexual system, while others attribute it to poverty and exploitation. Second, according to Iliffe (2006) a historical approach highlights the evolution and role of the virus. Because HIV evolves with extraordinary speed and complexity, and because that evolution has taken place under the eyes of modern medical science, it is possible to write a history of the virus itself in a way that is probably unique among human epidemic diseases. At the same time, the distinctive character of the virus – mildly infectious, slow-acting, ineradicable, and fatal – has shaped both the disease and human responses to it.

On the other hand, not only has the origins and evolution of HIV/AIDS develop a more critical appreciation of the social dynamics surrounding the disease, but it has also inform universal understanding of the disease as a challenge. Weeks (1985), states that AIDS is not a disease of a particular type of person. It affects, and kills, heterosexuals and homosexuals, women and men, white and black, young and old, rich and poor, the promiscuous and the non-promiscuous. It is the result not of the way of life but of a virus. Moreover, despite the nature of the illness it causes, HIV is not transmitted through the air, or by casual contact, or by quite intimate activity such as kissing. It is spread only through the exchange of bodily fluids, particularly vaginal fluids, semen and blood (Weeks 1985).

Weeks (1985) continue that, some groups of people might be more at risk than others. But it is misleading to talk about ‘risk categories’. This inevitably leads to a confident belief that it is always someone else’s disease. The identification of AIDS as a ‘gay plague’, connected to Haitians, or linked to black Africans has potentially disastrous effects. It does not only lead to the stigmatization of the disease itself, but it also encourages those who do not see themselves as gay, Haitians, or black Africans to believe that they will not get it.
According to him (Weeks 1985) it is not high risk ‘categories’ that spread HIV/AIDS but high risk activities, those which involves the interchange of bodily fluids. These include genital and anal intercourse without protection, oral sex which involves the swallowing of semen, sexual practices (like fist fucking) which might rupture delicate blood vessels, oral-anal sex, drug-taking where needles are shared. ‘Promiscuity’ as such is not the danger. Obviously, the more partners you have the more likely you are to come into contact with someone who is carrying the virus. But it is not the number of partners that constitutes the real danger; it is what you do with them - nor does drug abuse alone lead to HIV/AIDS. It can only do so when blood is exchanged via dirty needles.

More still, there is been greater focus on the analysis of the students’ knowledge and attitudes towards HIV/AIDS because of the fact that the survey used in this study was used recently in a research carried out on nursing students attitudes’ and knowledge towards HIV/AIDS at the University of Kuopio (Finland), Estonia and Lithuania (polytechnics providing education for public health nurses). Some comparative materials especially regarding methodology and findings of the previous research could be seen in this study.
CHAPTER TWO – Background of the Study

2.1 History, Origin, and Evolution of HIV/AIDS

Most societies have changed since the beginning of the AIDS pandemic. Some twenty years ago, persons with HIV/AIDS were perceived or regarded with fear and hostility; today, it seems they are more or less likely to arouse compassion and a sense of solidarity. The initial reaction of both individuals and governments was often to deny the existence of the virus/disease, but this has now been largely replaced by greater lucidity and understanding (Lawson 1999). In this study, I have observed the history of HIV/AIDS as a subject of large debate, full of controversies and polemic. Most noticeably, the origin and evolution of the disease - that which causes immense suffering to millions of people around the world. According to Iliffe (2006), the first traces of the human immunodeficiency virus (HIV) that causes the acquired immune deficiency syndrome (AIDS) was gathered in 1959 amidst the collapse of European colonial rule in Africa. In January, 1959 the control of the African townships of Leopoldville, the capital of the Belgian Congo was briefly seized by the protesters, shocking its rulers into frantic decolonization. In the same year an American researcher studying malaria took blood specimens from patients in the city. When testing procedures for HIV became available during the mid 1980s, 672 of his frozen specimens from different parts of the Equatorial Africa were tested. The only one proved positive, came from unnamed African man in Leopoldville, now renamed Kinshasa. The test was confirmed by the Western Blot technique – generally considered the most reliable method – and by different procedures in three laboratories. Although nothing of this kind can be absolutely certain, as Iliffe puts it, there are strong grounds to believe that HIV existed at Kinshasa in 1959 and that it was rare.

Iliffe (Ibid) continues that once AIDS was recognized as a medical condition early in the 1980s; researchers found several early accounts of patients whose recorded symptoms had resembled it and not implying the lone Kinshasa case as constituting the major beginning of the AIDS epidemic in Western Equatorial Africa. But Luc Montagnier,
whose laboratory first identified HIV, thought that an American man who died in 1952 after suffering fever, malaise, and especially the *pneumocystis carinii*, pneumonia that afflicted later American AIDS patient, was the earliest case, but no blood had been stored for later testing and the symptoms demonstrated only suppression of the immune system, for which there could have been reasons other than HIV. The same was true of a Japanese Canadian who died in 1958 and a Haitian American in 1959. More convincing was the case of the fifteen-year-old, sexually active American youth who died in 1969 with multiple symptoms including an aggressive form of Kaposi sarcoma, a tumor common in later AIDS patients. His stored blood tested by Western Blot was HIV positive, but the finding was later questioned. Other possible early cases were found in Western Equatorial Africa. There was no stored blood by which to confirm a specialist’s retrospective diagnosis of AIDS in an African woman who was hospitalized at Lisala on the middle Congo in 1958 and died in Kinshasa four years later after suffering wasting and Kaposi’s sarcoma. But a Norwegian seaman contracted HIV sometime before 1966, possibly while visiting Douala on the coast of Cameroon in 1961-2, and later infected his wife and child, all three retrospectively tested HIV-positive, although with a form of the virus different from that found in Kinshasa in 1959 (Iliffe 2006, 3-4).

Another controversy concerning the origin and evolution of HIV/AIDS is briefly explored in two scenarios by Feldman (1990, 1-2). In scenario one he writes, ‘it was the 1950s and we were in a biological warfare laboratory in possibly the United States or the Soviet Union. An experimental retrovirus, later to be named human immunodeficiency virus, type one (HIV-1), was manufactured using an existing animal retrovirus as a model – something went terribly wrong. The virus escapes and gradually made its way through sexual relations, infected needless, and blood transfusions to diverse at risk populations in different parts of the world’.

In scenario two, Simian immunodeficiency virus (SIV) mutated into human immunodeficiency virus, type two (HIV-2), perhaps from blood contamination while skinning an infected monkey, possibly in a remote West African village many decades ago. This now human retrovirus rapidly evolved, and as it inadvertently spreads through
sexual transmission into new tribal populations to the East, it took on a more aggressive and more lethal character. By the late 1950s, the new virus HIV-1 had entered into the Belgian Congo (now D.R. Congo) and perhaps elsewhere in central Africa. With the rise of urbanism and jet travel in central Africa, the virus spreads rapidly from city to city throughout central Africa, into Haiti, and among gay men in North America. By the late 1970s about four (4) percent of all sexually active gay men in San Francisco were infected. By the early 1980s, about four (4) percent of all men and women in the central African nation of Burundi were similarly infected.

However, it is possible that there are other viable sources of origin as well as evolution of HIV/AIDS but in any case persons of my age group at least to my personal knowledge in the South West Province of the Republic of Cameroon, precisely in the town of Limbe think the virus originated among white middle class gay men in New York and San Francisco of the United States in the early 1980s. These thoughts are derived as a result of the HIV/AIDS sensitizing program that was carried out extensively throughout the country in the early 1990s. Most noticeably, prevention mechanisms like the use of condoms during sexual intercourse and the idea of abstinence was introduced in every secondary and high school in Limbe. The campaign was successful especially as there was a general and real fear of the ‘killer disease that has no cure’.

Perhaps, these controversies or speculations on the origin and evolution of HIV/AIDS could be causing greater consternation, distress, or harm by influencing individuals’ perception, as well as the general organization of the disease. According to Farmer (1989), Haitian citizens were severely stigmatized due to the speculations that AIDS may have originated in their country. Tourists stayed away from Haiti. Economic investments declined, Haitian-Americans found themselves increasingly losing their jobs. It is possible that the economic pressure caused by this fear of AIDS may have, at least in part, been responsible for the overthrow of the ‘Baby Doc’ Duvalier regime in Haiti during the mid-1980s. Feldman (1989) argues that anti-African bigotry is flourishing as a result of the current speculation that AIDS may have begun in Africa. AIDS is blamed on Africans, or blamed
on gays, or blamed on Haitians. AIDS is a stigmatized and stigmatizing disease and social phenomenon that is perceived to pollute everyone and everything. Really, it does, as on the other hand a typical African man or woman could advise his/her children in their native language to be very careful not to contract the disease ‘the white man brought’.

2.2 HIV/AIDS and Discourses about Sexuality

Recent figures published by UNAIDS (The Joint United Nations Program for HIV/AIDS) show that HIV/AIDS has been diagnosed in every continent on the globe; there are 33.0 million people living with HIV/AIDS (UNAIDS 2007) seeing the overall number who are HIV positive dropping from around 33.2 million. Yet its distribution is far from even. The 17th International Conference on HIV/AIDS which was held in New Mexico in July, 2008 emphasized on defeating the discrimination against those with HIV/AIDS, on more coordinated research and on the strengthening of health systems in developing nations. It was also discussed that stigma, lack of gender rights are affecting prevention of HIV/AIDS. But for Watney (1987, in Aggleton and Homans 1988), it is not strange that every major epidemic initially is seen within a specific localized population, in medical history. In other words, there has been a long historical connection between disease and moral ‘scape-goating’ (Porter 1986, quoted in Aggleton and Homans 1988, 33)’.

Here, the word promiscuity is crucial which effectively cordons off married woman from independent non-monogamous female sexuality, drawing on a deep reservoir of retributive judgment which is a major characteristic of Western HIV/AIDS commentary (Watney 1987). Usually, individuals divide up people with HIV/AIDS into two categories in a discourse of ‘victims’, the majority of whom are ‘guilty’ and a minority innocent; hence HIV/AIDS is being used to articulate certain theories of sexuality. On the other hand HIV like any other virus is not a person or group of persons, not a state or a
nation, not a country or a continent, but rather a blood disease, against which relatively simple precautions are highly affective.

In fact, the linguistics organization of HIV/AIDS (AIDSPEAK) focuses greatly upon the medicalization and stigmatization of AIDS. According to Plummer (1988), a way one should understand health and illness, as medicalizing HIV/AIDS must rely on the pervasive ideology of the medical model. Within this paradigm, the causes of ill-health are located within the body – in the breakdown of tissues and systems – and AIDS itself is conceptualized in an elaborate scientific vocabulary of lymphocytes, antibodies and syndromes. Its specific etiology is said to be lodged in a germ – the Human Immunodeficiency Virus – and its management lies in hospitalized care and the long-term search for a vaccine. In contrary, efforts to stigmatize HIV/AIDS operate as a problem that is located not within the body but in behaviors and lifestyles. Here, HIV/AIDS itself is conceptualized not in scientific terms but morally and theologically via reference to sin, evil and moral irresponsibility. Within this paradigm, a serious illness could not to be managed by hospitalization, rather by segregation; discrimination and exclusion (cf. Goffman 1963).

The stigma of HIV/AIDS Ken Plummer (1988) gathers is derived from many sources. Most traditionally, are the actual physical bodily marks, the blotches that sign post the presence of Kaposi’s sarcoma and the physical disabilities that some people with AIDS experience - extreme loss of weight, skin disease, lymphadenopathy, and mobility problems. He continues that racism too is another deep structure onto which the fear of HIV/AIDS has been mapped. The major rival explanation for the origins of HIV/AIDS to that of homosexuality and drug use has connected it to ‘blacks Africans’. A whole new fear of foreigners subsequently has developed, with many countries now testing without the consent of individuals – and even expelling black visitors from Africa on grounds of national security.

Elizabethe Pisani (2008), an epidemiologist working with the United Nations recently in a discourse emphasized that the sexual behaviors of Africans are most pertinent in the
spread of HIV/AIDS, in South and East African countries i.e. South Africa, Botswana, Kenya, Uganda etc. She holds that Africans are too promiscuous, with one person having about four sex partners at a given time. In such situations infections are highest especially when some stages of the virus are present, for they would multiply rapidly. In addition, she (Pisani) argues that funds donated to combat the disease in the continent are not used properly. In a bid to provide a solution, she added that funds or the fight should focus on those groups which are most at risk to be infected and not those already infected by the virus. More still, there should be a promotion of condoms and the use of clean needles.

It took no time for her to be criticized by those who feel/think that the race card is still an issue attached to the acquisition and spread of HIV/AIDS and that Africans are simply ‘scapegoated’. These critics hold that in most of these African countries, homosexuality and the use of intravenous drugs (IV) are either weird or considered illegal – or could occur very rarely. They gather if sexual promiscuity and the use of unsafe needles is the case, there has been extensive educational and sensitizing program towards the prevention of HIV/AIDS in the continent for almost two decades. Hence, they argue that first, Pisani has not been working with the issue in Africa as much as she (has done) does in Asia. Second, she is insinuating in a way like sexual promiscuity is difficult to come-by in other continents. In other words, like sexual relationships elsewhere could only be between one man and one woman or if it happens to end – each may exercise some patience for an interval of at least six months before finding or having another partner. Third, she is using the tendency to describe Africans in terms of her traits, values and to perceive their sexual behaviors as being caused only by personal rather than environmental factors. This of course has left these critics wondering if they could term the ‘one night stand’, ‘the idea of out sex’, and the huge varieties of sex shops, toys, and articles in Western countries promiscuous or should they use the term only where the spread is high.

Conversely, there are other ideologies with still very extreme discourses on HIV/AIDS. For them, HIV was created (not discovered) with the intention of reducing the ever growing African population, same as how conflicts within the continent is been
manipulated abroad. Also, to them the term/word AIDS means ‘American Invention to Discourage Sex’. Despite the warnings issued publicly by a distinguished medic and renown researcher on the HIV virus and AIDS, Cameroonian born (inventor of the VANHIVAX therapeutic vaccine) professor Victor Anomah Ngu (2008), revealing that HIV is a natural virus and not fabricated by Americans – these ideologists are still wondering how it could be possible that AIDS which, was first diagnosed in the U.S (around the early 1980s) is now becoming rampant in Africa more than in the U.S. As if this is not enough, Sub-Saharan Africa has now been classified as the part of the globe with the highest number of HIV infected and AIDS cases. These ideologists are trying to imagine the issue of sex tourism (alongside their promiscuous lifestyles, coupled with other means of transmission) that could had possibly led to the spread of the virus. According to the present statistics of HIV/AIDS it could had required a huge flow of infected sex tourists (which they say was not possible because their destination could not had been only Africa) into Africa. Also, considering the fact that HIV/AIDS became a more public issue in Africa only around the early 1990s, with their conceptions that the virus in his/her host takes about 5-15 years before being the full blown syndrome – they could not reconcile this with the present statistics. Finally, they concluded that, if this is not part of the continuous strategy of representing the ‘Other’ then HIV was brought to Africa diplomatically, for they do not see or hear its infections and cases in the U.S (where it was discovered) as they do in Africa.

According to these ideologists, there are strong basis for their conceptions regarding the previous decision in 2007 of the Libyan High Court of Justice sentencing five Bulgarian nurses, including a Palestinian doctor to death. For deliberately infecting (injecting the virus into babies) a couple of babies with HIV (considered the most prevailing means of transmission among the young according to them). But, to their greatest dismay these health workers were recently freed off their charges after serious negotiations by the European Union. However, it is not clear if these health workers were guilty of their charges, as some individuals whom were considered main players of the case acknowledges the fact that some degree of torture and intimidation was used to extort information from them.
Researchers in HIV/AIDS related issues such as Hilary Homans, Peter Aggleton and Ian Warwick (1987) could identify this as lay beliefs of health and illness, but had emphasized its importance to social and health experts within the context of HIV infection and AIDS. First, lay beliefs about health and illness (as they put it) are likely to act as powerful mediators of official health education messages which rely on professional and biomedical explanations to inform people about the causes of HIV infection and/or AIDS. Second, popular understandings of health may have a significant role to play in influencing people’s perceptions of ‘risk’ associated with particular social situations and particular social and sexual acts. Third, they may affect the ways in which changes in health status are experienced – be these AIDS-related or otherwise.

Presumably, it is possible that there are relatively few studies concerning the lay beliefs about HIV infection and AIDS, particularly among young persons. It should be emphasized that some individuals especially from Africa hold huge varieties of lay belief (even in body parts). This appears to be very difficult to proof factually but on the other hand researchers who could get patients’ personal communication with physicians as a potent source of information might understand more. Lay beliefs of illnesses and health as some have described is widespread among members of population, factually incorrect and in frequent cases undermining disease control in the field of information, education and communication. One could say, these beliefs are not only resistant to conventional educational method but rather very powerful and persistence in a way as their origin could be traced at times but remain conveyed informally. For instance, some studies done in both lay beliefs about Hepatitis and high blood in the United States (see Chen 2003; and Wilson 2002) revealed that the lay beliefs held by respondents were in accurate or sharply diverging away from current medical understanding, as most of them within the study populations lack the adequate knowledge or information about the disease.

Similarly, it should be suggested that exploring interrelated issue between young persons understanding of HIV/AIDS and other illness, their conceptualization of it and above all the ultimate origin of HIV/AIDS could be of greater importance. More so, it could be claimed that knowledge about the causes of HIV/AIDS is quite great, but whether individuals could really share plates and spoons with HIV infected persons they know,
not to talk of intimate moments remains personal (nowadays, we see love relationships between persons with AIDS or with individuals infected by HIV).

Human sexuality seen in various perspectives has been combined or limited to four levels (Greenberg et al. 1992). First, that which is including the physical identity, sexual growth and development, reaction to sexual stimulus and the control of fertility (biological level). Second the cultural level where our thoughts and acts are been described from the influences of our culture. Third that the attitudes towards ourselves and other persons is been covered by sexuality (psychological level). Finally, there is an ethical level consisting of the factors which affect our decisions such as religion, the conception of the influence of culture on our thoughts and acts.

Pisani’s (2008) notion of sexual promiscuity among most Africans could be said to be in line with the former three levels and should be taken into account. As an individual coming from West Africa, I think there are reasons to attribute sexual promiscuity or the idea of indiscriminate sex among most Africans to high levels of unemployment (idleness, free time) and gross insufficient provision of basis physiological needs (housing, clothing, feeding – poverty) instead. A great number of the African youthful populations are either unemployed or not sure to have complete average standards of things they need. They survive on a day to day basis or generally pessimistic about the future (the more reason that there are increased beliefs of the existence of God).

2.4 The Public Organization of HIV/AIDS

HIV/AIDS became a public health issue in the later part of the 20th century, where it was reflected by individuals in everyday life. For Plummer (1988), HIV/AIDS is rarely out of public consciousness. All governments have had to take notice of the pandemic: more than 200 bills have been introduced in state legislation across North America in 1986 alone. ‘In November 1986, the UK government established its own AIDS committee
under Lord Whitelaw and announced a 20 million pounds package public information campaign which would leaflet every household in the land (Plummer 1985 quoted in Aggleton and Homans 1988, 31)’. Meanwhile in December 1986, one million Finnish Marks (FIM) was spent for this purpose, which a further 2.8 million FIM being absorbed by the 1987 campaign, in Finland. In subsequent years the annual sum spent has been approximately 2 million FIM (Finnish National Board of Health, 1986-87).

The World Health Organization in 1995 announced that HIV/AIDS is its major priority, and an enormous AIDS industry – medical, moral and media – has been built up around the syndrome. During this period some 4-5 million persons had develop AIDS and over 19 million individuals had been infected with HIV. A dramatic growth of the pandemic was also observed in the Eastern parts of Europe where the infection seemed to be part of the price to be paid for the liberalization that has accompanied the end of the communist era. In the United Kingdom, in spite the medical progress, more than 20000 new cases were known to be infected by HIV, while in Finland there were 223 AIDS cases and 714 HIV positive persons by October 1995 (Kansanterveyslaitos 1995a 1995b).

2.5 Personal Organization of HIV/AIDS: Identifying & Managing AIDS

For Plummer (ed.) (1988), HIV/AIDS is not only to be recognized publicly before it can become a ‘social problem’, but personally too for it to become an illness. As Locker (1981, 4) has remarked ‘disease and illness are then distinct phenomena. Disease is a category applied to a variety of biological events such as changes in physiological, biochemical or anatomical structure and functioning. As biological states events is independently of human knowledge and evaluation. By contrast, illness is a social state created by human evaluation; it is a symbolic ordering of affairs by the application of a label. Consequently, it is not an entity but a meaning used to explain, organize and evaluate these events or states of affairs’.
Some researchers have argued that AIDS is a fairly easy disease syndrome to identify and manage, for its symptoms like chronic diarrhea, ‘wasting’, Kaposi’s sarcoma, pneumonia could be seen written all over the body - along with the presence of HIV infection itself, would seem to make its recognition a straightforward matter of medical expertise.

Again Plummer (ibid) used Patton’s argument (1985), referring to AIDS not only as a ‘diverse disease’ but rather that its successful transformation into an illness is a complex process which involves sophisticated social negotiations by a variety of parties. Given the complexities associated with defining AIDS, the multiplicity of diseases linked to it, the wide array of symptoms generated by it, the massive variability in the pace of its progress and the stigma and secrecy that engulf it, recognizing AIDS itself can be no easy matter. Psychoneuroimmunological research suggests that support and attitude contribute to the survival chances for people with life-threatening illnesses (Coates, Temoshok, and Mandel 1984; Kiecolt-Glaser and Glaser 1988). This belief has led community-based organization to offer ‘buddies’ to people with AIDS to provide practical and emotional support. So far not much has been done to identify the personal support networks available to people with HIV infection, the impact of illness on these networks and their role in maintaining the quality of life of people with HIV/AIDS. “Information is needed about the quality of life, how they are presently coping, and what can be done to maintain a reasonable life even if their health continues to deteriorate” (Weitz 1989).

2.6 Social Organization of HIV/AIDS: AIDS – Impact

HIV/AIDS have enormous impact to its victims, their families, friends and society at large, especially as it could be explained, labeled, or experienced in a way that are in accordance with the existing or prevailing societal ideas or concepts. Not to talk of the pains and cost of the disease itself, spreading out everywhere to refashion whole aspects of society. As Plummer (ed.) (1988, 40) puts it ‘to know you have AIDS is to be constantly aware that you have more than just a disease, it is to embark upon a profound
symbolic re-ording of your life’. He (Ibid) sighted Kotarba’s (1983) argument emphasizing the need to understand that individuals with AIDS confront potential dependence on medicine and potential awareness of imminent death alongside potential guilt, stigma, secrecy, and self-blame. Already, many victims of HIV/AIDS (including IV drug users, homosexuals, prostitutes etc.) might be feeling more reluctant to talk about their status or that they are not aware of it. This may be due to a fear to face more discrimination, an increased isolation or reduced supportive networks (especially in communities where the spread is not so wild). Many victims are living with high levels of discrimination even in high prevalence countries in Sub-Saharan Africa (UNAIDS, 2000).

It could be understood that the study aims at highlighting or identifying some of the key social meanings which HIV/AIDS has engendered – in fact, exploring some of the ways in which HIV/AIDS is organized. However, efforts have been made to identify some of the systematic biases that can be found in mass media or national newspaper reporting on HIV/AIDS. Here, the study explores some of the possible consequences of these towards popular perception of risk as well as for the effectiveness of more recent health education initiatives. In fact, there are evidence that the effectiveness of health education relating to HIV/AIDS may be hampered in the immediate future by understandings created and reinforced by sophisticated mass media and national newspaper coverage of HIV/AIDS (Wellings 1987). By and large, this is been far from accurate in its identification of the causes of HIV/AIDS, the scale of the epidemic, the groups most affected by it and the means by which the virus is transmitted. In the light of this (Wellings 1987), we should remain vigilant in our appraisal of the content of newspaper articles or media images relating to HIV/AIDS. Health educators in particular have an important role to play in correcting misleading reporting, as well as in providing newspapers (news agencies) with press release information relating to new interventions and initiatives.

Finally, the purpose of the study is to assess, in one university in Finland, students’ perception of HIV/AIDS. The aim is to describe, measure, and compare Finnish students’ general attitudes, behaviors, homophobic attitudes, and perception of sexual risk
behaviors relating to HIV/AIDS. More so, to assess knowledge of AIDS and of the human immunodeficiency virus (HIV) among students and to determine whether these students engage in behaviors that could increase their risk of HIV infection.
CHAPTER THREE: Sociology of People living with HIV/AIDS

HIV/AIDS has a relatively short history, having been named and given meaning only since 1981. In this period, a number of actors have sought to assimilate the syndrome into their own symbolic systems and, at times, to wield HIV infection as an instrument to accomplish a variety of goals (Adam, 1989). This social construction of AIDS images has profound consequences for all aspects of public policy about the disease. It shapes state budget priorities, it places the disease among its competitors for medical research, and it defines the ‘worth’ and moral status of its sufferers. Among the contenders for symbolic ‘ownership’ are journalists, preachers, politicians, physicians, public health officials, Gay organizations, people with AIDS coalitions, AIDS political action groups, and community-based organizations dedicated to public education and support of the afflicted. Each has its own set of interests and impact upon the generation of AIDS discourse.

It has been said that most individuals with weak family ties, low levels of education or who can not find a job, and a lengthy criminal records could be those at risk of contracting the HIV virus or already suffering from HIV infection (Berk 1987), since they are variously constructed as people with ‘nothing to lose and so having disastrous consequences for social order’ (Berk 1987), as inhabitants of ‘marginal subcultures in society’ (Messeri 1988), or as variable-determined machines of mal-adaptation (Kaplan, Johnson, Bailey, and Simon 1987).

To take a case in point, Adam (1989) writes much could still be learned from study of the blockages in the information distribution system that inhibit the dissemination of practical information about how to avoid HIV transmission. The development and propagation of practical information about HIV transmission and avoidance through ‘safe sex’ were pioneered by grassroots organizations at a time when state agencies refused to recognize the syndrome, even though the public’s education about proper transmission prevention could often rely on the idea of how ‘experts’ can convince the uninformed public of the need for risk reduction (Altman 1987, 162). Primarily, the ‘general
population’ at low risk of transmission received first attention from the development of the state-founded mass media projects while gay, black, Hispanic, and injection-drug-using women and men have had to depend on the more meager resources of community-based organizations. For instance, in the United States and the United Kingdom, AIDS funding has been explicitly qualified by legislative bans on the ‘promotion’ of homosexuality in printed materials.

The HIV/AIDS information system raises larger issues about the overall social organization of information production and distribution in different societies. The pattern of the spoken and the unspoken, especially in the educational system and the media with the widest reach, reveal an organization of power concerning who may speak (authoritatively) to whom (Adam 1989).

3.1 HIV/AIDS and Class, Gender, and Race Relations

Initially, HIV/AIDS has greatly been linked to particular groups (termed high risk groups), gay communities (white middle class men of New York and San Francisco). Thereafter the Haitians were also termed high risk groups (extreme stories about blood drinking and voodoo rites began to circulate, Moore and Le Barou 1986), focus shifted to intravenous (IV) drug users (men and women), and then to black Americans - nowadays, is more towards Sub-Saharan Africans. Recent studies have seen a whole new fear of foreigners subsequently developed in Western countries, with black visitors from Africa targeted even though it is understood that homosexuality is illegal in Africa – with very rare cases of intravenous (IV) drug abuse.

These social factors have serious impact and consequences on how the social construction of HIV/AIDS affects the types of social relations. According to Schneider (1992), the early conceptualization of AIDS as a disease of gay men (presumed to be white) or of epidemiologically defined ‘risk groups’ (IV drug users, Haitians, men having
sex with men) foreclosed the recognition by virtually everyone, including sociologists, of the racial, class, and gender relations that frame the development of AIDS as a social problem, structure the social consequences of HIV infection, and change as the society organizes to deal with this new disease. In his views, vast majorities (90 %) of people living with HIV/AIDS in the United States are male and most of what has been written about HIV/AIDS is focused on these men. Nationally, drug use accounts for 50 % of the female AIDS cases. Though regional differences exist, the proportion of women getting HIV from male sexual partners has steadily increased since 1982 (Shaw 1988). However, it is supposed here that gender could be acting as the most central social category or location of a persons’ identity – seeming to be a very leading element of identity (Harinen 2007). HIV-infected women do not constitute a self-conscious, politically active community. Most of the women currently at highest risk or with AIDS are may be not sure of having access to adequate medical care or health insurance. The public, to extent that it has awareness of these women no doubt can easily scapegoat female intravenous (IV) drug users and poor women of color. Women are conventionally blamed for their pregnancies, abortions, sexually transmitted disease, and prostitution (Schneider 1988; Shaw and Paleo 1986).

Schneider (1992) perceives that half of the case of HIV/AIDS among black and Latinos occurred among heterosexual intravenous (IV) drug users or their sexual partners. This high frequency of AIDS cases among racial/ethnic heterosexual intravenous (IV) drug users result in most of the AIDS cases among black and Hispanic women (over 70 %) and children (over 80 %). Also, Detroit revealed that black gay men were less knowledgeable about AIDS than black intravenous (IV) drug users (Williams 1986). Cultural differences and racism isolate many racial/ethnic minority men from usual sources of information available to white gay men (Dawson and Thornberg 1988; DiClemente, Boyer and Morales 1988).

For Selik, Castro and Peppaioanov 1988, racial/ethnic minorities constitute 40 % of the cases of AIDS in the United States: 26 % are blacks, 14 % are Latinos. Relative proportions of the total population, blacks and Latinos have an incidence of AIDS 2 or 3
times higher than whites for homosexual and bisexual males and over 20 times higher than for heterosexual males.

Finally, Schneider (1992) places race, class and gender at the center of analysis of the social consequences of HIV infection, and came with four general sociological observations concerning race, class, and gender. First, an individual’s well-being and health status could rely on race, class, and gender as its determinant factors. In concert, they will affect perceptions of health and illness, and discourse and interaction patterns of doctor-patient relationships. Second, in this country there exist hierarchically organized relationships of race, class, and gender, resting on and resulting inequalities of social and political power and control over labor, resources, and services. Third, the experiences of people with AIDS, community and political reactions, the nature of institutional practice, and the dynamics of change in the society are influenced by homophobia and race, class, and gender relations. Fourth, AIDS, as a biological and medical phenomenon of the late twentieth Century, has or will have effects on the nature of homophobia and on race, class, and gender relations.

In a comparative study about the university students’ attitude towards HIV/AIDS in Finland and Kenya done recently by Serlo, (November 2008) reveals that, the first HIV infected persons and AIDS cases in Finland were discovered in the early 1980s. She used the findings of Löytönen (1993) to argue that the evolution of HIV in Finland is due to the following i.e. the development of prevention pills, mass tourism, increasing common mobility, the use of IV drugs and the American lower culture of homosexual men.

However, the Finnish government is becoming increasingly worried about young people/students engaging in risky health behaviors such as the use of tobacco products (cigarettes, cigars, snuffing and pipes) and alcohol. First, it is strictly forbidden by the Finnish Law to sell tobacco products and alcohol to persons considered under aged (Pennanen et al, 2006), while the latter is totally not sold to anybody at a given time in the night. According to the Finnish statistics young people between the ages of 12 and 14 years are likely to have their first experience in smoking. It is estimated that by the age of
fourteen 41 % of the boys and 44 % of the girls have tried smoking (KTL 2007). It was discovered in 2005 that more than 2 % (2.2 %) of the 18 years old individuals were snuffing daily (Rimpelä et al. 2005). These risky health behaviors especially the excessive use of alcohol has been found to have a strong influence on the sexual desire and attitude among individuals. At least 41 % of 18-years old boys and 32 % girls were drinking until they are really drunk (KTL 2007).

Serlo (2008), sighted Suvivuo et al. (2008) to examine the kind of role alcohol could have among a selected group of sexually active teenage girls, with a special emphasis on their locus of control and risky sexual behavior. It was realized that after alcohol consumption girls’ ability to control sexually motivated situations becomes unstable. According to the results sexual education should not only take into consideration the use of alcohol and vice versa but rather that sexual issues be brought up in education concerning the use of substance.

HIV-infection and AIDS cases in Finland have increased regardless of the Finnish government’s effort. In the early 1980s after the first HIV infection and AIDS cases were diagnosed, the government response was to organize extensive HIV/AIDS information campaigns (from 1986 – HIV-related information campaigns undertaken by the Finnish National Board of Health between 1987-1990), where a brochure about HIV/AIDS was sent to every home, schools provided information packages for the use of schools nurses, consisting of videotapes, a set of transparencies and an educational handbook. Still, HIV infections (783, 631 men and 152 women) and AIDS cases (258) increased (Statistics Finland’s Report, 7 November 1996).

Recently, the Ministry of Social Affairs and Health (2007) in a bit to promote the sexual and reproductive health, compiled the first national action program. In this program, preventing and medical treatment alongside sexual health counseling are integrated into the basic services. More so, it addresses many issues and among others includes: making sure that HIV-testing is free of charge in all municipal health care centers and also in private health care services, screening and counseling the young, particularly during the
first visit of counseling, and screening of Chlamydia trachomatis (all under 25 years of age) and the human papillomavirus vaccination expected to work together with the sexual education to reduce the amount of sexually transmitted diseases.

By the end of October 2008 the number of HIV infections in Finland was 2383 (1764 men, 619 women) and 515 AIDS cases (KTL 2008). In the space of one month, there was an increase in these figures, 3593 HIV infections (1771 men, 622 women) and 519 AIDS patients (ref: KTL, 03.12.2008). However, in the past four years 126-193 new cases have been registered each year, but from the beginning of the 1990’s until the year 1999, HIV infections increased more slowly than was estimated. In August 1998, in Helsinki the capital city of Finland they realized that the use of unclean drug needles among IV drug users was to blame for the change in numbers (KTL 2007), even though infections through heterosexual relationships has increased too. In addition, it is estimated that the number of individuals living with HIV is almost four times higher than this statistics; a good majority could be unaware of their HIV - positive status.

Furthermore, some very few individuals (1.0 %) of these HIV-infected persons have been infected by blood or blood product, fourteen per cent (14.0 %) from intravenous drug use, 29.0 % have been infected abroad and 55.1 % (more than half of the HIV positive persons) are between 25-39 years of age. More still, a greater proportion of these HIV infected persons are living in the Southern province of Finland (especially in the Helsinki area), some 94 individuals with HIV are living in the province of Joensuu (KTL 2008).

It is worth mentioning that foreigners living in Finland are contributing in the HIV/AIDS case load as well. They too did not only engage in risky health behaviors such as the use of cigarette products, alcohol, intravenous drugs, and unprotected homosexual and heterosexual relationships, but might had been infected before arriving in Finland. These are nationals from different countries around the globe, constituting a variety of race, and occupying parts of the population proportions of students, civil servants or diplomatic
officials and asylum seekers. In the above HIV/AIDS figures of November 2008, foreigners occupy 702 of the HIV-infections and 113 AIDS cases.

### 3.2 Definition of Social Perception

The study has used the concept of contextualization, and social perception partly to act as a proxy for the literature and partly to be the focus of empirical inquiry respectively. The former is been used latently or implicitly in the literature, where it is not only providing fruitful sources of concepts and evidence of the study – but offers an imput to the analysis and planning of the research. More so, it projects popular perception and social responses to HIV/AIDS as social phenomena, and not simply biological phenomena (Rosenberg 1988; Schneider and Conrad 1983; Cowie 1976; Mechanic 1978; Brandt 1985) – such constructs do not only shape societal and personal responses to the illness or the experience of people/persons with HIV/AIDS, but highlights the kinds of directions sociological research has taken in approaching the problem of HIV/AIDS.

Social perception according to Baron and Byrne (2000) is the process seeking to know and understand other individuals. For them, this theory is used interchangeably with social cognition (we are aware of what we know, understand or think about these individuals) and most commonly linked with stereotypes, considered in context of prejudices and discrimination. The purpose of this study will take social perception to be about impression formation, social schemas and social stereotypes.

The theory of perception is been used partly in an immediate, structured and a meaningful way. Basically, the idea of immediate perception has no apparent delay in the process of awareness. Some scholars have termed it the ‘primary’ approach to perception which is also a cognitive one, focusing primarily on the processes of perceiving and judging persons, with scant attention paid on the content of these perceptions – to the stimulus information on which they are based, or to the functions which they serve (Zebrowitz 1990, 3-6).
Zebrowitz’s (1990, 3-6) notion of perception might explain the structured approach. She acknowledges the fact that there are important differences between object and person perception. That persons, but not objects, are perceived to have intentions, that persons may try to hide their true nature, and that the accuracy of person perception is more difficult to access. Despite these differences, she argues that theoretical explanations for the phenomena of social perception have their roots in theories of object perception, where three major epistemological approaches can be identified: the structuralist approach; the constructivist approach; and the ecological approach.

Even though modern theories of object and person perception incorporate element of both structuralist and constructivist approach, the basic assumption of the former approach is that perceptions derive from elementary sensation. Here, she says perception of an object is thus assumed to be ‘data-driven. It is built up from individual sensory elements, each of which bears some relation to the object. For example, an object will be perceived as an old woman if stimulus cues, shape, color, and/or sound ‘all up’ to ‘old woman’. In the same manner, perceptions of more psychological properties, such as depression or kindness, are assumed to result from the coordination of observable ‘proximal’ appearance and behavior cues to ‘distal’ traits or intentions.

The assumption that observable stimulus cues can specify a person’s psychological properties or even her age has been criticized by adherents of the constructivist approach to perception. This approach maintains that the way in which we perceive an object cannot be predicted simply by adding our sensations of the parts (Zebrowitz 1990). Rather, perceptions are ‘holistic’ and ‘theory-driven’. They are organized and constructed by the mind. Thus, in this approach, the perception of an ‘old woman’ does not reflect simply the sum of various stimulus cues registered by a passive perceiver. Rather, this percept reflects the constructive processes of a perceiver, who actively imposes a holistic structure on the observable cue i.e. having perceived the old woman; you will probably see the same old woman. Also, because perceptions of same object can vary, the constructivist approach emphasizes subjective perceptions – the object or person as perceived by individual – rather than an objective analysis of the stimulus. And, rather
than investigating properties of external stimuli, this approach investigates the perceivers’ internal, mental structures, often called ‘schemas’.

According to Zebrowitz (1990), the ecological approach to perception is an interactive approach to perception, which incorporates aspects of both structuralist and constructivist theories. Like the constructivist approach, it focuses on perceptions of holistic structures – configurations of stimulus information that are not reducible to individual sensory elements. Like the structuralist approach, it assumes that perceptions are grounded in external stimuli rather than being constructions of the mind. The way that the ecological approach can incorporate both of these assumptions is itself structured rather than composed of individual elements, and that this structure is detected by the perceiver rather than being created by the perceiver. How, then, does the ecological approach account for the ‘reversible’ woman? Like the constructivist approach, it does emphasize the role of the perceiver. However, rather than asserting that perceivers may differ in the reality that they construct, the ecological approach asserts that they differ in the reality that they detect - for instance, if you perceive the structure of an old woman and that of a young woman. The mind does not create one or the other. Rather perceiver detects one of or the other, depending upon the particular stimulus information to which they attend. According to the ecological approach, the perceiver’s attention – or ‘attunement’- will depend upon a number of factors, one of which is perceptual experience. Perceptual experience with the old woman attunes the perceiver to the old woman structure within the ambiguous drawing. On the other hand, experience with the young woman attunes the perceiver to the structure of the young woman.

Lastly, Zebrowitz (1990) emphasizes the study of social perception to be the study of ‘naïve psychology’ – that, the goal of such inquiry is to understand our impressions of the other people’s traits, our perception of their emotion, and our explanations for their behavior. An understanding of these social perceptions not only is of interest in its own right but also important implications for adaptive social interactions.
In fact, the meaningful approach of perception in this study is been broaden to capture or measure conceptions/attitudes (knowledge, ignorance), and behaviors/actions (prejudices, pity, rejection), university students have towards HIV/AIDS. In other words, here the study is referring to the trilogy of perception or perception with an attitudinal preconception. Attitude here already has grasped the cognitive component, such as knowledge that describes what students may conceive or think. More so, behavior prejudices, rejection and pity, feelings is comprised in both action and the affective components of attitude.

3.3 Empirical Findings on Perception of HIV/AIDS

Tikkanen and Koskela (1992) did a five year follow-up study of attitudes to HIV infection among Finns (1986 to 1990) with home interviews or by telephone using a structured questionnaire, where 1013 Finns aged 15 to 64 years (1986) were chosen at random from the entire population and from 1987 to 1990 and 1900 annually were similarly selected. The results did not only proof good knowledge about modes of transmission, as well as diagnostic methods and location of test facilities but rather a growing proportion in favor of voluntary testing and a stable opinion over the need for screening certain special groups. More so, over the study year’s perception of the personal threat remain constant and there were no significant alterations in sexual behavior due to the risk of HIV infection. More still, the study revealed that perception among Finns towards issues of HIV infection did not change markedly between 1986 and 1990.

In a review of a research done on Attitudes of professional, Students and the General Public to HIV/AIDS and People with HIV/AIDS by Välimäki et al. (1998), describing literature on attitudes to HIV/AIDS in three fields (i.e. medicine/nursing, psychology and the social sciences) proved that research interest on HIV/AIDS related issues increased dramatically in the 1990’s. The research at that time was empirical using questionnaires with most of it been done in the United States. The main focus was on students’ sexual
behavior and their attitudes towards HIV/AIDS, along side the attitudes of health care personnel. The attitudes did not only appear to have been closely connected to the level of knowledge, gender and culture but rather seemed highly resistant to change and thus more consideration was needed in finding appropriate ways of educating the general public, students and health care professionals.

Suominen et al (2008) did a descriptive and comparative study on Nursing Students’ Attitudes towards HIV/AIDS Patients among Nursing Students in Finland, Estonia and Lithuania, using multi-country survey method. The results showed the existence of significant country differences, with Finnish nursing students showing the most positive attitudes towards HIV/AIDS patients and homosexually oriented patients. However, willingness to provide care and previous experience with HIV/AIDS patients was considered as having the greatest positive impact on nursing students’ attitudes. On the other hand, older nursing students with lengthy work experiences showed a more negative attitude towards homosexual patients. Finally, they did not only emphasize the need for greater harmonization of education or sound knowledge base and good nursing skill to promote a more positive attitude towards HIV/AIDS, but rather that nursing students should be sensitive and show respect for the patient’s human dignity.

Serlo et al (1999) have done a quantitative study on Attitudes of University Students’ towards HIV/AIDS including structured and open ended questions, among 245 students who had started their studies in the autumn of 1993. The results showed the following; television (84 %) and school nurses (30 %) were the most important sources of knowledge concerning HIV/AIDS. The students estimated their knowledge as insufficient even when there was a lot of knowledge available to them, and they defined HIV more correctly than AIDS. Knowledge improved limited sexual behavior but did not increase the use of safe sex and also religion was seen to have an importance for sexual behavior. More so, due to fear students showed more negative feelings towards AIDS than HIV. Female students were also found to be more sexually active than males.
Information sources such as television or radio, press, outdoor advertising, teaching materials, documents etc. has helped in building the knowledge of students towards HIV/AIDS – thus describing what they may conceive or think. In Finland, there is a growing interest for education concerning sex, sexually transmitted diseases and study material on HIV/AIDS. Campaigns related to sexual education were organized in the 1980’s and 1990’s for Finns, at the same time brochure/magazines of sexual education with a contraceptive and a letter to the parents was sent to all homes (targeting those aged 15/16) by the Ministry of Social Affairs and Health. According to the Finnish Ministry of Social Affairs and Health, these packages has not been sent since 2004, resulting to an increase in number of infection from 126 new cases in 2004 to 189 in 2007. Presumably, the ministry may had attributed these increase partly to lack of information, thus compiling the first national action program 2007 – 2011 for the promotion of sexual and reproductive health. Sexual and reproductive health studies are included in the health education studies and curriculum of the comprehensive and vocational schools (Ministry of Social Affairs and Health 2007).

3.4 Research Questions

1. How do the students at Joensuu University perceive HIV/AIDS and persons with HIV/AIDS?
   A. What is their level of knowledge of HIV/AIDS?
   B. What is their general attitude towards HIV/AIDS and persons with HIV/AIDS?
   C. What is their attitude towards homosexuals?
   D. How do they conceive risk related to sexual behavior?
CHAPTER FOUR: Methods and Procedures

4.1 Research Perspectives

This chapter introduces the research perspectives used in the study, and may assist in understanding it aims as well as other practical issues. More so, these perspectives or schools of thought do not determine the nature of the research process itself but addresses a possible interaction between ideas about the study population and the data collected on it. The schools of thought do not only portray the links with the actual research strategy, but enable a consideration of their arguments and the assumptions each make about how we can best understand the study population and what perceptions ideas, attitudes, behaviors and knowledge regarding HIV/AIDS it holds.

Positivism

The doctrine of positivism is extremely difficult to pin down and therefore to outline in a precise manner because it is used in a number of different ways by authors (Bryman 2004). For some writers Bryman gathers it is a descriptive category – one that describes a philosophical position that can be discerned in research – though there are still disagreements about what it comprises; for others, it is a pejorative term used to describe crude and often superficial data collection. But, the intention here is to use the positivist mode of analysis partly to collect and assemble data from the study population; from which students’ perception, conception, attitude, behavior, knowledge would be described and explained. Partly, to test whether the results are statistically significant, meaning that they hold in population and are not due to chance alone.

According to Bryman (2004), positivism is an epistemological position that advocates the application of the methods of the natural sciences to the study of social reality and beyond. For him, the term stretches beyond this principle, though the constituent elements vary between authors – it could also be taken to entail the following:
1. Only phenomena and hence knowledge confirmed by the senses can genuinely be warranted as knowledge (the principle of phenomenalism).

2. The purpose of theory is to generate hypothesis that can be tested and that will thereby allow explanations of the law to be assessed (the principle of deductivism).

3. Knowledge is arrived at through the gathering of facts that provide the basis for laws (the principle of inductivism).

4. Science must (and presumably can) be conducted in a way that is value free (that is, objective).

5. There is a clear distinction between scientific statements and normative statements and a belief that the former are the true domain of the scientist. This last principle is implied by the first because the truth or otherwise of normative statement cannot be confirmed by the senses.

For May (2001), positivism thus explains human behavior in terms of cause and effect and ‘data’ must be collected on the social environment and people’s reaction to it. He argues that, if we believe ourselves to be the product of our environment – created by it – then to some extent we are the mirror image of it. It defines our nature, or our being. We do not have to ask the people themselves because we can predict – to some extent and precision - how they will behave through reference to environmental factors alone.

**Empiricism**

The empirical perspective has beginnings which can be traced at least as far back as the first modern censuses carried out at the beginning of the nineteenth century. The advent of the industrial revolution and the rise of bureaucratic state apparatuses brought about the first modern collections of information drawn from the general population (Lin 1976). Some researchers have emphasized the core features of this empirical perspective as the controlling, manipulation, depiction and presentation of large amounts of data. That its clearest present-day examples would be the published tabulation tables of a large-scale
census or a multi-colored three-dimensional graph or chart that depicts similar tabular information in a figurative form. They hold that, the basic task of the empirical perspective is relatively simple, making use of gross computer power to carry out the reliable processing of bulk information into manageable formats. Information is sorted using common-sense sets of categories. Case is taken in the presentation of the resulting sorts to facilitate the recognition of patterns by the scanning human eye.

In this study, it is intended not to confuse the words empirical and empiricism for the study is using the former approach in the collection of data from the study population to test, generate or interact with the prepositions coming from the theories. The latter approach as Martin Bulmer’s quote indicates, ‘the empiricist school of thought believes that the facts speak for themselves and require no explanation via theoretical engagement (1982b: 31)’.

According to May (2001) positivism shares with empiricism the belief that there are ‘facts’, which we can gather on the social world, independently of how people interpret them – if the aim of the former is to collect and assemble data on the social world from which we can generalize and explain human behavior through the use of our theories. For him, the fundamental difference between empiricism and positivism however, lies in the realm of theory. Data within positivism is theory-driven and designed to test the accuracy of the theory. Empiricism, on the other hand, is a method of research which has not referred explicitly to the theory guiding its data collect procedures. It is thus characterized by the catchphrase ‘the facts speak for themselves’ (Bulmer, 1982b:31).

Bryman (2004) put forward two stands for the term empiricism. First, it is used to denote a general approach to the study of reality that suggests that only knowledge gained through experience and the senses is acceptable. In other words, the position means that ideas must be subjected to the rigors of testing before they can be considered knowledge. The second meaning of the term is related to this and refers to a belief that the accumulation of ‘facts’ is a legitimate goal in its own right. It is this second meaning that is sometimes referred to as ‘naïve empiricism’ (Bryman 2004).
It could simply be understood that while there are differences between positivism and empiricism, the former does rely on the methods of the latter. In addition, both schools of thought assert that there are facts about the social world which the study can gather – independent of variations due to interpretation. Objectivity is then defined in terms of researchers’ detachment from the social world, as well as the accuracy of their data collection instruments (May 2001, 11).

Objectivism

Objectivism is an ontological position that asserts that social phenomena and their meanings have an existence that is independent of social actors. It implies that social phenomena and the categories that we use in everyday discourse have an existence that is independent or separate from actors (Bryman 2004).

On the other hand objectivity, along with generalization and explanation, are considered as fundamental characteristics of a science. May (2001) thinks that, if we are to hold to the view that social science research offers us knowledge about the social world which is not necessarily available by other means, then we are making some privileged claims about our work. He continues that, research thus becomes more than a reflection of our opinions and prejudices: it substantiates, refutes, organizes or generates our theories and produces evidence which may challenge not only our own beliefs, but also those of the society in general.

It is at this point that the debate over objectivity enters in the study. It is often assumed that if our values do not enter into our research, it is objective and above criticism. Objectivity is therefore defined as:

The basic conviction that there is or must be some permanent, a historical matrix or framework to which we can ultimately appeal in determining the nature of rationality, knowledge, truth, reality, goodness, or rightness (Bernstein 1983:8).
4.2 Research Methodology

Basically, this chapter provides an introduction to the survey method used and specifically offers practical guidance on how the survey was conducted. First, it looks at peoples’ behavioral responses that are based very much upon their perceptions of risk. Second, it identifies the different types of survey. Third, it considers the logic of survey method. Fourth, it outlines the stages in the questionnaire construction, summing up to the summary of the questionnaire. Finally, it considers the strategy, data collection, analysis, as well as methodological issues associated with this method.

4.3 Types of Surveys

The use of survey is central in this study as it provides a rapid and relatively inexpensive means for it to discover the characteristics and beliefs of its population. For May (2001), surveys are one of the most frequently employed methods in social research and are used by government, academic researchers in universities and campaigning organizations alike. Nearly all surveys are characterized by the collection of data from large or even very large, number of people. He (ibid) continues that they can range from relatively small local surveys of just a hundred people to large-scale national surveys of several thousands. For him, all surveys aim to describe or explain the characteristics or opinions of a population through the use of a representative sample.

For instance, large-scale government surveys, such as the British General Household Survey, collect a wide range of socio-economic data, on a regular basis. This allows a description not just of the changing characteristics of ‘households’, but of British social life in general. More local surveys maybe used, for example, to find out the housing needs, or extent of disability in a locality. Campaigning organizations often use surveys to measure support for their cause, while academic researches often use survey to test aspects of sociological, psychological or political theory.
Of the various types of surveys (factual, attitudinal, social psychological and explanatory – Ackroyd and Hughes 1983) attitudinal surveys are geared towards gaining data on attitudes: For example, what people think about life in general and events in particular (May 2001). For countries with democratic aspirations, it is important that they gauge the beliefs of their citizens. Often a policy is justified by ‘what the public demands’. However, attitudes surveys can fulfill the function of providing this information. Political opinion polls also fall into this category, this attempts to predict how people will vote. Therefore, there is an assumed correspondence between what people say they will do and what they will actually do.

For May (2001), the results of using attitude surveys developed other interests among researcher, in particular, the relationship between attitudes and behavior. In this sense, both the social psychological and explanatory surveys are more theoretically oriented. He continues that most surveys if not all are explanatory. They ask questions about, say and voting behavior and seek to explain how peoples’ attitudes or intentions are linked to their background or other explanatory variable. However, explanatory surveys are specifically designed to test hypothesis which are derived from theories; for example, Durkheim’s (1952) ideas that suicide is inversely related to social integration.

The survey used in this study is both attitudinal and explanative in nature. It is aimed at measuring facts, such as perceptions, attitudes and behavior, conceptions, knowledge through questions. Here, the study is conceptualizing issues into measures. This is to say, it is been framed into simple questions that facilitates the easy understanding of our participants, and have promoted quick responses; from which there is possibility of categorization and quantification. In addition, the survey research is also predicted on a rigorous approach that aims to remove as much bias from the research process as possible and produce results that are replicable by following the same methods. This May (2001) thinks, can be achieved in a number of ways:
First, there is standardization. According to him (May 2001) it refers to the conditions under which a survey is conducted, but specifically how a questionnaire is designed, administered and analyzed: The crucial assumption here is that of ‘equivalence of
stimulus’ – that is, the study relies to the notion that every respondents has been asked the same questions, with the same meaning, in the same words, same intonation, same sequence, in the same setting and so on.

The assumption, May (2001) gathers is that if the above is the case and if a difference in opinion is expressed in reply to those questions, the resulting variation can be attributed to a ‘true’ difference of opinion, rather than as a result of how the question was asked or the context of the interview. Thus questionnaires concentrate upon the replies of respondents within a structured interviewing situation. Their responses and characteristics are then quantified and aggregation with others in the survey sample, in order to examine patterns or relationships between them by employing the techniques of statistical analysis.

Second, there is replicability. May (2001, 92) argues that it should be possible for other researchers to replicate the survey using the same type of sampling, questionnaire, and so on. He continues that a replication of a survey producing the same results with different groups at different times will increase confidence in the first findings. This also relates to reliability and validity. A survey should aim to be both reliable, whereby we obtain the same results from the same measurements on different occasions, and valid whereby it measures what it is intended to measure. On the other hand, it could also be understood that results of the same measurements can differ in the course of time due to maturation and learning – but basically the same persons should answer consistently in the same questionnaire.

In fact, it is not the measure that is valid or invalid but the use to which the measure is put. We might use educational level to measure social status. The issue is not whether we have measured education properly but whether this is a suitable measure of social status (de Vaus 1996: 55-5).

Finally, there is representative ness. As it is the intention to make generalizing claims about a population it is not only that the sample is representative of the population, but
also that the findings are statistically significant, that is, whether they are larger or smaller than would be expected by chance alone (May 2001).

4.4 Stages of the Questionnaire/Summary

Of the three types of questionnaires conducted or used mainly in data collection in surveys: the mail or self-completion questionnaire, the face-to-face interview schedule, and the telephone survey; - this study have used the mail or self-completion questionnaire in Finnish language, partly because of the typology of our study population, and partly of the nature of our research questions and resources.

However, this study understands the need for a questionnaire to be piloted on a sub-sample before it reaches the full sample – thus it has included the technique due to certain consideration: First, it would not only neatly encapsulate the difference between attitudes, actions, knowledge, and behavior (etc), but rather be effective in tapping what people ‘mean’ when answering questionnaires or in predicting the scale of responses. Second, to inform our understanding of those questions whose response could be isolated or otherwise reduce the length of the questionnaire – or provides in insight about the study outside the sample, thus promoting interaction and participation between the researched and the researcher. More so, to legitimately understand if the questions were properly interpreted by the respondents in a manner in which they were intended or otherwise laying foundations for prospective studies.

On the other hand, mail or self-completion questionnaire is because the study is dealing with an ethically or morally sensitive issue, peoples’ anonymous expression of beliefs has been of advantage. This method provided an outlet for the anonymous expression of strongly held views (May 1991). The respondents took their own time to fill in the questionnaire, while considering their responses – since a covering letter explaining the
purpose of the questionnaire and stressing the need for cooperation and the anonymity of replies was guaranteed.

The study acknowledges the fact that, once the questionnaire was sent in to students’ addresses for self-completion, it had no understanding of the considerations they made in answering the questions but the layout instructions and questions were very simple, clear and unambiguous.

Generally, the survey used in the study is intended to have a comprehensive picture of Joensuu University students’ perception about HIV and AIDS. In other words, it is aimed at informing our understanding on certain issues: as such their knowledge, general attitudes/conceptions, homophobic attitude, as well as their views of sexual risk behaviors associated with HIV and AIDS. Thus, the study selected Finnish students at random from the student register who later co-operated voluntarily.

The survey comprised of ninety-one (91) questions, and was not only constructed in a classificatory, factual, opinion, open and closed standard; but the actual design was done unambiguously, with clarity in mine of what the questions were, who were to answer and how they were intended to be interpreted. This is not in any way imposing that the students who answered the questions agreed with our interpretation but rather that we think our meanings in questions were clear enough – especially as the study conducted some initial fieldwork based on interviews, observation work with the sample and above all a pilot study.

Eventually, our classificatory questions were the personal section (first part) of the survey and were referred to as demographic or face sheet information including campus, age, sex, marital status, mother tongue etc. They included background information of our respondents (student’s personal data) whom the study had provided words of explanation not only instructing how to fill in the information requested – but also stressing how opinions need to be related to the kinds of student answering the questionnaire; - since it assists with the important aim of communicating the need for research and enhancing its
participatory rather than parasitic nature (May 2001). The questions in this part were labeled from A - R.

Statements 1 – 32 in the questionnaire were intended to measure general knowledge of HIV/AIDS among students, besides which options true (1), false (2), and don’t know (3), were included. This level of the questionnaire could be equated to include factual questions – with which there was more latitude to probe, explain and possibly even vary the question wording in a way which could bias opinion questions. Probing then could yield factual information that would not be readily given by a respondent in answer to the initial question (May 2001).

Moreover, statements 34 – 59, 60 – 68 measures ‘general attitude’ and ‘homophobic attitude’ respectively; options strongly agree, agree, undecided, disagree, strongly disagree, with numerical order from 1 – 5 (Likert scale) were included. According to May (2001, 102), with opinion questions wording alterations can easily elicit different answers. And regarding to the principle of standardization, each respondent must reply as a result of unambiguous questions and not as the result of poor question wording, the way in which the question is asked, or as a result of our context. For instance, administering a face – to – face questionnaire to a person in front of a group of friends may well elicit a different answer from when the person is interviewed alone.

Finally, the last part of our questionnaire, i.e. statements 82 – 91 measures students’ perception of sexual risk behaviors and the same option and numeric order of the latter section was included. Basically, the questionnaire was composed mainly of closed questions partly because, the study is intended to capture the students’ perception of HIV/AIDS (more reason the questionnaire was coded to allow the classification of responses into analyzable and meaningful categories; it is ‘the way in which we allocate a numeric code to each category of a variable). This coding process is the first step in preparing data for computer analysis. ‘It constitutes the first step in mapping our observations into data,’ (D. Rose and Sullivan 1996:38) – and partly because they would
permit comparability between students’ answers, and also compartmentalize students into fixed replies (May 2001).

The questionnaire used is a modified version of the State University of New York at Buffalo School of Nursing AIDS Study Questionnaire by Held (1993). The instrument was updated and its validity checked together with Held and medical experts in 2005. In 2007, a team of researchers from the Department of Nursing Science, University of Kuopio – researching nursing students’ attitudes towards HIV/AIDS patients among nursing students in Finland, Estonia and Lithuania obtained permission to use the instrument. In his capacity as methodology instructor, the supervisor of this study obtained permission from the University of Kuopio to use the instrument as a continuation of Finnish students’ perception of HIV/AIDS in the University of Joensuu. In a nutshell, the instrument is divided into three parts - the order is well planned and the questionnaire well lay out and neatly typed or word-processed; instructions on its completion to the respondents clear, unambiguous and easy to follow.

4.5 Data Collection

Questionnaires were posted to the students with a self-addressed envelope, accompanied by a covering letter with words about confidentiality and anonymity, concerning what use will be made, and by whom, of the information they provide. More so, they were informed of the purpose and context of the research, and how the sort of research is impossible without their co-operation; - and also, clearly what they are being asked to do. The students answered voluntarily and without names because of the nature of the questions. In those cases where the questionnaire did not reach the student, the address was rechecked and a new questionnaire mailed. The answers were handled and analyzed confidentially.
Ethical issues were a particularly important consideration in this study because of the sensitivity of the subject. According to Finnish tradition and custom, no ethical approval is required for a study like this, as every student voluntarily answer the questionnaire, and their anonymity guaranteed. Every student had the opportunity to leave the questionnaire without answering.

The questionnaires were handed over to the respondents. The students were asked to return the questionnaire without any identifying information in a sealed envelope to ensure the confidentiality and anonymity of data collection. Completion and return of the questionnaire were construed as informed consent.

4.6 Data Analysis

The variables are analyzed by using the SPSS for windows 16.0 (Punch 2005). The data is been analyzed in the following stages: simple description analysis, one way (ANOVA) variable relationships and various testing required for interpreting distribution of scores. The simple descriptive analysis includes summarizing the survey data. To summarize the scores for each variable in the data, central tendency (mean), variation, standard deviation and variance, and the frequency distributions have been used.

Hence, an interval scale is analyzed using descriptive statistics and by means of cross-tabulation and the chi-square test. General attitudes and homophobia are first examined using descriptive analysis and by cross-tabulation and a chi-square test. More so, it is worth noting that, this study has put more emphasis to the mean of the distribution. Thus, average mean score for general attitudes and homophobia is formed on the basis of responses to each item, which were scored on a scale 1 – 5. The scores are summed within each domain and then divided by the number of item in that domain, given an individual general attitude score and an individual homophobic score of between zero and five. The highest score indicating the most positive attitudes towards people with HIV/AIDS and people who are homosexually oriented. To evaluate the significance
of the association between the categorical variables and the general attitude and homophbic scales, the chi-square test is used.

The association between students’ dichotomous background variables and their scores on these scales is tested by means of one way ANOVA for normally distributed scores and the non-parametric Mann-Whitney U-test because of the skewness of the distribution of the scores. The categorical background variables and the non-normally distributed scores are post hoc analyzed with Bonferroni corrections. The association with numerical background variables and the scale scores is tested with the Spearman test. For differences between students, one-way ANOVA and the t-test are used for normally distributed scores and the Mann-Whitney u-test and the Kruskall-Wallis test for skewed scores. In all test (except Levene’s test – test of homogeneity), p < 0.05 are interpreted as statistically significant.
CHAPTER FIVE: Findings/Results

It is the intention of this study to stress or define exactly what makes the target group special and why it is very important to know their perceptions of HIV/AIDS. First, there is a feeling that the target group is exhaustive, for these students are not only been selected at randomly from all the various university levels but also from all the different faculties and non-faculty institutions of the University of Joensuu. The university level is most likely the phase of life during which students make concrete and mature decisions in their lives. For instance, knowing specifically what they intend to be in future and what their career objectives might be or finding a life partner. They (students) are at high risk of sexually transmittable diseases (STDs), including HIV, considering that their bodily pleasures being strong, with a high affinity for sex since they are in the middle stage of sexual behavior, and possibly changing partners frequently. In a nutshell, it seems that in most cases of HIV/AIDS that have been reported in Centers for Disease Control and Prevention around the globe may had included students in one way or the other (given that the median duration of the incubation period, between infection with HIV and onset of AIDS, is nearly 10 years, so many 29 – 49 – years – old with HIV/AIDS may have been infected when they were 19 – 39 – years – old, approximate university age), and had resulted mostly from heterosexual intercourse rather than gay practices, injected drug use or from blood transfusion.

Second, it should be understood that this group of students particularly in Joensuu University do not only vary in gender, age or backgrounds but rather in views and opinions concerning HIV/AIDS related attitudes and beliefs or concerning disease and illness in general. Thus, it seems very interesting to look at the implications of such variance, partly because their perceptions appear to be closely related to levels of knowledge, gender and culture partly because, it is important to encourage and urge them to reconsider their own knowledge and attitudes or to press for further HIV/AIDS education. For instance, in the work of Välimäki, Suominen and Peate (1997), they gather that some students prefer to consider HIV infection as a ‘punitive consequence of a promiscuous sexual lifestyle’ (Redjimi & Lert, 1993). More so, it is obvious that male
university students have shown to the issue of HIV/AIDS a more negative attitude (Sheehan et al. 1990), and even more extreme punitive attitudes towards high risk groups were found in small minority consisting predominantly males (Nispet & McQueen, 1993). On the other hand female students have proven not to be same and are more in endorsing higher norms for safe sex practices (Nader et al. 1989). In addition, age is been seen as a strong predictor of students’ knowledge and attitudes to AIDS (Sigelman et al. 1993), as well as older heterosexual undergraduates, who are less willing to interact with people with AIDS compared with younger students (Lewis et al. 1993). In fact, students’ perceptions of personal risk too were found to be influenced by education i.e. increasing with increasing levels of education. The highest percentage of respondents that reported participating in one or more high-risk behaviors associated with HIV infection (6 %), was found in the 18 -29 age group (National Center for Health Statistics 1994).

The study included mainly Finnish students from all the faculties and non-faculty institutes of the university, 4963 of who were registered present during the spring term 2008 and accepted that their addresses be used. The final sample included 400 students who are studying at various university levels with minimum being 1 year and maximum being 6 years. The response percentage was 40 %. A majority 23.9 % (33) of the students had studied for 2 years already. Altogether 21.7 % (31) of the respondents were male and 78.3 % (112) female. The mean age of the respondents was 28.35 (SD 8.4, minimum 19 – maximum 65). Students of age 21 represented the largest group of the sample with 14.0 % (20). Generally, 75 % of the respondents were 32 years and below, 50 % were 25 years and below, while 25 % were 22 years and below. Students studying pedagogic, history and English were represented more than any other discipline i.e. 13.1 % (18), 5.8 % (8) and 5.8 % (8) respectively.

As regards marital status, 60.1 % (86) of the study group either with kid(s) or without are married or cohabitating. 82.5 % (118) do not have any children, while 16.9 % (24) have children. Single or never married students occupied 38.5 % (55) of the target group while a very small portion was occupied by widow/divorce/separated i.e. 1.4 % (2).
5.1 General Knowledge

In order to measure the students’ knowledge of HIV and AIDS, they were asked to indicate their answers to various statements concerning concepts of HIV and AIDS, its consequences, those practices seeming to be at high risk of infection, mode of transmission and prevention, and the provision of primary care to individuals with HIV/AIDS. They understood that HIV is a virus (Human Immunodeficiency Virus) that causes AIDS (Acquired Immune Deficiency Syndrome). They (99.3 % or 142) answered true to the statement that those who practice unprotected sex with increasing partners, sharing needles with intravenous drug users are at high risk of contracting HIV (Table 3b). They understood also that there is no cure yet for AIDS and answered true of it being a lethal disease, meaning an incurable disease which tortures the patient, leading to death as the patient’s immunity and condition becomes gradually weaker (Serlo et al. 1999). More so, a majority of the students (62.9 % or 90) estimated their knowledge to have sufficient information concerning HIV/AIDS as seen below (table 3a). But, few students who wrote their place of residence before admission into Joensuu University in smaller areas were not so sure about their sufficiency in information about HIV/AIDS.

Table 3a: Knowledge of HIV/AIDS

<table>
<thead>
<tr>
<th>Do you think you have enough information of HIV/AIDS?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>143</td>
<td>100.0</td>
</tr>
<tr>
<td>Yes</td>
<td>90</td>
<td>62.9</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
<td>37.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3b: Knowledge of HIV/AIDS

The risk of contracting HIV increases as the number of one’s sexual partners increases.

<table>
<thead>
<tr>
<th>Valid</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = True</td>
<td>133</td>
<td>93.0</td>
<td>95.0</td>
<td>95.0</td>
</tr>
<tr>
<td>2 = False</td>
<td>5</td>
<td>3.5</td>
<td>3.6</td>
<td>98.6</td>
</tr>
<tr>
<td>3 = Don't Know</td>
<td>2</td>
<td>1.4</td>
<td>1.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>97.9</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Missing System | 3 | 2.1 | |

Total | 143 | 100.0 | |

It could be understood that knowledge indicates the students’ personal concern of HIV/AIDS – insinuating that there are some consensus about contraction and prevention of the disease among students, leading to a disease prevention behavior. In other words, the skills acquired by students to reduce risk of HIV infection could be used in other health related issues/crises as well, thus empowering them to take control and responsibility for their actions even out side the university setting.

5.2 General Attitude

Even though a huge majority (about 96.5 %) of the students (80.5 % of whom have not lived, worked or studied abroad for longer than six months) did not know a family member, friend or another person with HIV or AIDS, neither had they ever been asked to care for a person with HIV or AIDS nor did they ever refuse to care for a person with HIV or AIDS – still 57.7 % (79) demonstrated in their response their willingness to care for a person with HIV or AIDS, while 42.3 % (58) were not willing to care for HIV/AIDS patients. The mean general attitude score was 3.7 (SD 1.2, minimum 1.0 – maximum 5.0) and most of the students had positive attitudes. 79.1 % (113) agreed in feeling more sympathetic towards people who acquire HIV from blood transfusions than
from the abuse or use of intravenous drugs. They expressed huge positive opinions (94.4 % or 134) by disagreeing that health care institutions should have the right to refuse to provide care to patients with HIV/AIDS and also if they feel it is not worth while for them to expend their time and energy caring for a person with AIDS who is dying. Some remained undecided as to whether they should have the right to refuse to deal with persons with AIDS or would they refuse to care for a person with AIDS.

A lesser percentage of students (9.16 % or 15) agreed that to care for people with HIV or AIDS should be based on voluntary basis only. And 53.5 % (76) of the students agreed that they would feel uncomfortable dealing with an intravenous drug user with HIV or AIDS, but again dealing with a Hemophiliac (bleeding disease) who has HIV or AIDS, 38.0 % (54) accepted that they would feel uncomfortable. Background variable like religious preference were found not to have significant influence on the students’ knowledge, attitudes and perception of sexual risk behaviors. Only 13.5 % (19) answered that religion is very important in their lives, 15.6 % (22) somewhat important, 34.8 % (49) not so important, 30.5 % (43) not at all important, and 5.7 % (8) did not know.

Generally, students demonstrated positive attitudes in their responses when 57.7% accepted that they are willing to care for a person with HIV/AIDS. Particularly, background factors such as having previous experience with HIV/AIDS emerged as a significant factor and was associated with more positive attitudes. There were only 5 (3.5 %) students who knew someone with HIV/AIDS and they had a higher attitude level. But none of the entire students have been asked to provide care or had provided care for a person with HIV/AIDS before.

**Table 4a: Test of Homogeneity of Variance**

<table>
<thead>
<tr>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.973</td>
<td>1</td>
<td>141</td>
<td>.000</td>
</tr>
</tbody>
</table>

I do not feel it is worthwhile for me to expend my time and energy caring for a person with AIDS who is dying.
Table 4b: ANOVA for General Attitude

ANOVA

I do not feel it is worthwhile for me to expend my time and energy caring for a person with AIDS who is dying.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.508</td>
<td>1</td>
<td>4.508</td>
<td>8.833</td>
<td>.003</td>
</tr>
<tr>
<td>Within Groups</td>
<td>71.954</td>
<td>141</td>
<td>.510</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>76.462</td>
<td>142</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4a/b above reveals the tests of homogeneity of variance and of statistical significance respectively. It is presumed that the level of significance (sig.) should be equal to 0.05 or less if we are to conclude that the difference between the average attitude score is significant. Here, the level of significance is .003.

The attitude of students seems interesting especially as it was found not to be influenced (only a slight correlation existed between knowledge scores and attitude scores i.e. 0.264) by those factors which some earlier studies have proven to be a determinant of attitudes. For instance, in Tierney’s study (1995) where it was proven that attitude could often be associated with fears and misconception, while fears could be as result of or low levels of knowledge. In other words, those factors usually seen as strong in predicting attitude – (most particularly previous experience with persons with HIV/AIDS) were not precisely the cases in this study. The students in this study had never been asked to care for a person with HIV/AIDS, had never refused to care and had never cared for a person with HIV/AIDS. In fact, only 5 (3.5 %) students knew a family member, a friend or another person with HIV/AIDS.

More so, no significant gender difference (given that the mean difference in general attitude for men was 3.56 and for women 3.80 i.e. the difference was 0.24 or 4.8 %) were seen as influencing students’ HIV/AIDS-related attitudes as was seen in the studies of Lester (1989) where male undergraduate students seemed to have stronger negative attitudes towards AIDS patients, and Sheehan et al. (1990) – where male university students showed more negative attitudes towards the issue of AIDS. Perhaps, students
have changed their attitudes in a way towards a greater understanding partly because of the increasing numbers of HIV/AIDS cases and partly because it seems they (students) are most at risk of contracting the virus. In this line, Suominen (2008) raised serious concern about some negative attitudes of both nurses and nursing students towards HIV/AIDS and their reluctance to care for patients with HIV/AIDS – in a bit to increase their knowledge, enhance their attitudes, as well as willingness to care for HIV/AIDS patients.

### 5.3 Homophobic Attitude

**Table 5: Cross Tabulation on Homophobic Attitudes**

<table>
<thead>
<tr>
<th>I would feel uncomfortable dealing with a homosexual with HIV or AIDS.</th>
<th>Your sex</th>
<th>1 = Man</th>
<th>2 = Woman</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Strongly Agree</td>
<td>Count</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>% within Your sex</td>
<td></td>
<td>22.6%</td>
<td>2.7%</td>
<td>7.0%</td>
</tr>
<tr>
<td>2 = Agree</td>
<td>Count</td>
<td>10</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>% within Your sex</td>
<td></td>
<td>32.3%</td>
<td>8.1%</td>
<td>13.4%</td>
</tr>
<tr>
<td>3 = Undecided</td>
<td>Count</td>
<td>3</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>% within Your sex</td>
<td></td>
<td>9.7%</td>
<td>14.4%</td>
<td>13.4%</td>
</tr>
<tr>
<td>4 = Disagree</td>
<td>Count</td>
<td>7</td>
<td>28</td>
<td>35</td>
</tr>
<tr>
<td>% within Your sex</td>
<td></td>
<td>22.6%</td>
<td>25.2%</td>
<td>24.6%</td>
</tr>
<tr>
<td>5 = Strongly Disagree</td>
<td>Count</td>
<td>4</td>
<td>55</td>
<td>59</td>
</tr>
<tr>
<td>% within Your sex</td>
<td></td>
<td>12.9%</td>
<td>49.5%</td>
<td>41.5%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>31</td>
<td>111</td>
<td>142</td>
</tr>
<tr>
<td>% within Your sex</td>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The mean score of homophobic attitudes was 4.5 (the maximum score of five indicating the most positive attitude and vice versa). The most negative attitudes were felt towards
homosexuality (as seen in table 5 above) and users of intravenous drugs. However, some of the background factors correlated with homophobic levels. For instance, previous experience with HIV/AIDS patients was found to correlate positively with homophobic levels. Students who knew someone with HIV/AIDS and those willing to provide care for an HIV/AIDS patient showed more positive attitudes towards homosexuals. More so, marital status was found to be associated with homophobic levels. Even though, single students expressed positive homophobic attitudes, a more positive attitudes was shown by those students who are married or living as married. In addition, a quite clear association was found between a background variable (i.e. the importance of religion in one’s life) and homophobic scores as shown in figure three below.

Figure 2: Homophobic levels
5.4 Perception of Sexual Risk Behavior

Students expressed in their response a great perception of sexual risk behaviors. Almost 70% of all the students agreed with the following:

1. Avoiding sexual intercourse with persons, who have had many sexual partners, even if they agreed to use a condom, reduces their risk for HIV/AIDS.
2. Being sexually abstinent reduces risk of HIV.
3. Always using condoms whenever involved in sexual activity reduces risk for HIV.
4. Performing oral sex on other, with or without condom increases risk for HIV.

The interpretation here could be that Joensuu University students do not only acknowledge the increasing numbers of HIV/AIDS individuals in Finland but also that they understand and are well informed about the threat of HIV infection. Second, their perception of it as a real threat could be as a result of the students’ willingness or anxiousness to know about threats to their own health, as well as to their society in general. However, it could be understood or be quite natural, and even there is a biological basis if earlier studies had reported female university students having a greater anxiety about HIV than male university students. It seems easier for a female student to contract sexually transmitted diseases than their male counterparts, partly because of the structure of their sex organs and partly as they are like always at the receiving position. They understand that HIV can affect pregnancy and be transmitted to the developing foetus.
5.5 Discussions

General Knowledge

Students have sufficient information concerning HIV/AIDS. First, a pilot study conducted among Joensuu University students revealed that they know that diagnostic methods and location of test facilities are easy to come by here in Joensuu, even though most acknowledged that they have not done it yet. More so, information concerning HIV/AIDS may have been gained from television, radio, magazines, school nurses, brochures, and government campaigns, press, mothers to their daughters, fathers to their sons – of which generally speaking they want more, Tikkanen and Koskela (1992).

Students have considerable knowledge about HIV/AIDS, presumably derived from many different information sources. They demonstrated an understanding of the consequences of HIV/AIDS, practices seeming to be more risky, mode of transmission and prevention, and the provision of primary care of individuals with HIV/AIDS. This is similar to the findings of L.W. Svenson et al. (1997) and Serlo & Aavarinne (1999).

General Attitude

The mean general attitude score of the study is same with the study of Peate et al. (2002), but slightly lower than that of the nursing students by Välimäki et al. (2000). They had been 3.74 and 3.82 respectively.

It is interesting that no difference was found of those factors that could have had the strongest predictive positive attitudes; for instance previous experience with persons with HIV/AIDS. Even though, students who knew someone with the disease and those who were willing to provide care for an HIV/AIDS patient showed clearly more positive attitudes (these findings are in line with those reported earlier by Välimaki and Peate), all of those who do not know anyone with HIV/AIDS or had never had any experience with HIV/AIDS patients still demonstrated their willingness to care for individual with
HIV/AIDS (not to mention the fact that none of the students were studying to be nurses or medical doctors, since these disciplines are not taught in Joensuu University). However, in Finland, a law exists that makes it possible for every person to report voluntarily their HIV positive status in schools, nurseries and hospitals etc. (Serlo and Aavarinne, 1999). More so, considering the fact that in the Joensuu area only a few HIV-infected or AIDS cases are registered (KTL 2008) thus, it might be very difficult for students to have many experiences concerning the meeting of HIV/AIDS patients – or to assess students’ relation to HIV/AIDS, especially if they have not met persons infected.

Homophobic Attitude

The mean score of homophobic attitudes of this study is higher than the findings in a study of Nursing Students’ attitudes towards HIV/AIDS patients among nursing students in Finland, Estonia and Lithuania (3.89) by Suominen et al (2007). It is also slightly higher than the results of the earlier findings of Välimäki et al. (2000) and Peate et al. (2002) i.e. 4.31 and 4.26 respectively. However, throughout this study some students showed negative attitudes towards homosexuality and the use of intravenous drugs. A recent study done in November 2008 by Serlo, Kaijaleena (University Students Attitudes towards HIV/AIDS in Finland and in Kenya) revealed the most negative attitudes of students towards homosexuality and intravenous drug users. The percentages of students in her study were 25.8 % and 59.5 % respectively.

Perception of Sexual Risk Behavior

Students were very aware of the fact that there are greater risk involved in unsafe sexual practices and particularly involving many sexual partners. Partly, this is informing our understanding of the increased in their knowledge of HIV/AIDS related issue, but on the other hand it is not meaning that high level of education or good knowledge is a hindrance to unsafe sex or limited sexual partners or behaviors. Tikkanen and Koskela
(1992), did not only find out that Finns’ knowledge was good concerning the modes of HIV transmission, as well as diagnostic methods and location of test facilities but rather their perception of personal threat of HIV/AIDS remaining constant over the study years.

5.6 Limitation of Study

There are some limitations in this study that are necessary to comment on. The study was carried out in one university in Finland, even though similar studies have been done in other universities in the country, generalizing the results will definitely not be the case here. The study did not include foreign students into the final sample. The instrument used in this study was originally developed in the USA, and doubts could be possibly expressed if its application in different cultural, environmental and institutional settings would yield scientifically. But in any case the instrument has been successfully used in earlier studies in other cultures, including Finland, Germany and the UK.
CHAPTER SIX: Conclusions

This study about the perception of HIV/AIDS among Joensuu university students has gathered baseline data on students’ knowledge, attitudes (including homophobic levels), and perception of sexual risk behaviors. In other words, Joensuu Students’ perception of HIV/AIDS have revealed cognitive, affective and behavior components – and are thus reported below in paragraphs of perception, knowledge, attitudes and behavior respectively.

Perception of HIV/AIDS

1. The description of students’ perception regarding the infection and the disease is been defined from the concepts of HIV/AIDS. For instance, the students had a realistic perception of risk towards HIV/AIDS – most especially if they engage in unhealthy behavior.

Knowledge of HIV/AIDS

2. Students had a good deal of knowledge about HIV/AIDS related issues even though almost all of them did not have experienced-based knowledge.
3. They understood that HIV is a virus (Human Immunodeficiency Virus) that causes AIDS (Acquired Immune Deficiency Syndrome).
4. A majority (82.4 %) of the students accepted that those who practice unprotected sex with increasing partners, sharing needles with intravenous drug (IV) users are at high risk of contracting HIV.
5. They understood also that there is no cure yet for AIDS and answered true of it being a lethal disease.
6. Even though, a few students who wrote their place of residence before admission into Joensuu University in smaller areas were not so sure about their sufficiency
in information about HIV/AIDS – a majority (62.9 %) of the students estimated their knowledge to have sufficient information concerning HIV/AIDS.

**General Attitudes towards HIV/AIDS**

7. The respondents had mainly positive towards HIV/AIDS. They demonstrated sympathy and did not feel it unpleasant to meet persons with HIV/AIDS.

8. Instead, a majority (94.4 %) did only show willingness to care for a person with HIV/AIDS but rather disagreed that health care institutions should have the right to refuse to provide care for patients with HIV/AIDS and also whether they feel it is worth while for them to expend their time and energy caring for a person with AIDS who is dying.

**Homophobic Attitudes**

9. The most negative attitudes were found towards homosexuals and intravenous (IV) drug users.

10. Only few students who knew someone with HIV/AIDS and those willing to provide care for an HIV/AIDS patient showed a bit positive attitude towards homosexuals and intravenous (IV) drug users. Also, those who were married or living as married showed a more positive attitude as well.

**Perceptions of Risk Related to Sexual Behavior**

11. The students had a strong perception of risk towards HIV/AIDS and more so, if they engage in unhealthy sexual behavior. However, the students’ knowledge had no effect on the number of sex partners or frequency of sexual activity. They understood that engaging in sexual intercourse with persons with many sexual partners even if they agree to use condoms is risky. Also, that performing oral sex on others, with or without condom is risky as well.
12. Religion was found to have no significant association with the students’ knowledge, attitudes and perception of sexual risk behavior.

The findings may have important implications in the domain of health care and health education. It may provide a sense of harmonization of health care education, a sensitive approach that may not only deepen our knowledge and awareness of students’ sexual behavior, but rather an educational planning program that might either influence the mentality of both intravenous drug users and homosexuals or of students and the general public only for the positive.
Appendix:

STUDENTS’S PERSONAL DATA

INSTRUCTIONS: Please, circle the number corresponding to your answer or fill in the information required.

A. Campus
   1. Kuopio
   2. Joensuu

B. Age _______ years

C. Your sex
   1. Male
   2. Female

D. Current marital status?
   1. Single, never married
   2. Married or living as married
   3. Widower, divorced or separated

E. Nationality ___________

F. Main subject of Study _____________

G. Do you have any children?
   1. Yes
   2. No

H. Mother Tongue
   1. Finnish
   2. Swedish
   3. Estonian
   4. Russian
   5. English
   6. Other, specify: ___________

I. The importance of religion in your life
   1. Very important
   2. Somewhat important
   3. Not so important
   4. Not at all important
   5. Don’t know

J. Have you ever known a family member, friend or another person with HIV or AIDS?
   1. Yes
   2. No

K. Have you ever been asked to care for a person with HIV or AIDS?
   1. Yes
   2. No

L. Did you ever refuse to care for a person with HIV or AIDS?
   1. Yes
   2. No

M. Did you ever care for a person with HIV or AIDS?
   1. Yes
   2. No

N. Are you willing to care for a person with HIV or AIDS?
   1. Yes
   2. No

O. Do you think you have enough information of HIV/AIDS?
   1. Yes
   2. No

P. How long have you been studying on the University level?
   _____ years _____ months

Q. Have you ever lived, worked, or studied abroad for longer than 6 months?
   1. Yes
   2. No

R. What was your place of residence before admission into Joensuu University?
   ______
INSTRUCTIONS: Please, circle one number to indicate your answer to each statement.

1. AIDS is a disease that strikes at the human immune system 1 2 3
2. There is no cure for AIDS. 1 2 3
3. Individuals at high risk for contracting HIV include intravenous drug abusers, those who practice unprotected sex and prostitutes. 1 2 3
5. A positive HIV antibody test means that the person has AIDS. 1 2 3
8. The HIV is found in high concentration in saliva, tears and urine. 1 2 3
9. AIDS is a lethal disease. 1 2 3
10. AIDS is caused by a virus similar to that which causes other venereal diseases. 1 2 3
11. People can get HIV by sharing a needle with a drug user who has AIDS. 1 2 3
12. All homosexuals have HIV. 1 2 3
13. Condoms give a person 100% protection against contracting HIV from sexual practices. 1 2 3
14. The risk of contracting HIV increases as the number of one’s sexual partners increases. 1 2 3
15. Individuals can infect others with the HIV without being ill themselves. 1 2 3
16. Symptoms of HIV occur within six months following infection with the HIV. 1 2 3
20. AIDS is more thought of as a disease related to sexual risks behaviour than sexual preferences. 1 2 3
21. HIV can be transmitted by blood and blood products. 1 2 3
22. HIV can be transmitted by causal contact with persons who have the disease. 1 2 3
23. Sexual transmission of HIV can occur in both homosexual and heterosexual relationships. 1 2 3
24. Consistent use of condoms in sexual intercourse may decrease transmission of the HIV 1 2 3
26. The need for isolation required for patients hospitalized with HIV or AIDS depends on the specific infection present 1 2 3
27. Individuals hospitalized for treatment of HIV or AIDS should be put on blood and body fluid precautions 1 2 3
28. Mask should be routinely worn when dealing with individuals with HIV or AIDS. 1 2 3
29. Pregnant women who use proper precautions are still at increased risk of contracting the HIV virus. 1 2 3
30. There is good evidence that HIV cannot be transmitted to a foetus before birth. 1 2 3
31. Eye protection should be worn with all individuals in those situations where blood and body fluids can be splashed into others’ eyes. 1 2 3
32. It is necessary to wear complete protective coverings (i.e. mask, eyewear, cap, gown, and gloves) while dealing with people who have HIV or AIDS. 1 2 3

**INSTRUCTIONS:** Please, circle one number to indicate your answer to each statement.

<table>
<thead>
<tr>
<th></th>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>UNDECIDED</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>34. I am/would be fearful of contracting HIV if I am dealing with people with HIV.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. I should have the right to refuse to deal with persons with HIV or AIDS</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. I would refuse to care for a person with HIV or AIDS.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Health care institutions should have the right to refuse to provide care to patients with HIV or AIDS.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. To care for people with HIV or AIDS should be based on voluntary basis only.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. People with HIV or AIDS should be cared for in a separate unit with specifically trained personnel.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40. The major concerns I have/would</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

63
have about dealing with a person who has HIV or AIDS are ‘Will I get HIV and will I die in AIDS?’

41. Those who care for people with HIV or AIDS should receive additional pay.

42. If I dealt with a person with HIV or AIDS, I would worry about putting my family, friends, and colleagues at risk.

43. Dealing with people with HIV or AIDS has/ could affect my relationship with significant others.

44. I would prefer not to provide care to people with HIV or AIDS because of the hopelessness of the prognosis.

45. Caring for a person who is dying is uncomfortable to me.

46. I do not feel it is worthwhile for me to expend my time and energy caring for a person with AIDS who is dying.

47. I would not want to be assigned to people with HIV or AIDS because I do not feel competent to meet their intense physical needs.

48. I would not want to be assigned to people with HIV or AIDS because I do not feel competent to deal with their intense psychological needs.

49. I feel that I have not had sufficient information or training to competently protect myself against infection when dealing with people who have HIV or AIDS.

50. I have little sympathy towards drug users who acquire HIV.

51. Free sterile syringes should not be handed out to IV (intravenous) drug users to decrease the spread of HIV.

52. Drug rehabilitation centers should not be established for drug users.
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>53.</td>
<td>I feel more sympathetic towards people who acquire HIV from blood transfusions than from the use of IV (intravenous) drugs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>54.</td>
<td>I feel more sympathetic towards people who acquire HIV from blood transfusions than from sexual intercourse.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>55.</td>
<td>I would feel uncomfortable dealing with a bisexual who has HIV or AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>56.</td>
<td>I would feel uncomfortable dealing with a child with HIV or AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>57.</td>
<td>I would feel uncomfortable dealing with a Hemophiliac (bleeding disease) who has HIV or AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>58.</td>
<td>I would feel uncomfortable dealing with a male / female prostitute with HIV or AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>59.</td>
<td>I would feel uncomfortable dealing with an IV (intravenous) drug user with HIV or AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>60.</td>
<td>I would feel uncomfortable dealing with a homosexual with HIV or AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>61.</td>
<td>Homosexuality is an alternative lifestyle that should be condemned.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>62.</td>
<td>My attitude towards homosexuals has become more negative since the HIV and AIDS crisis began.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>63.</td>
<td>With or without HIV/AIDS, I would rather not deal with gay people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>64.</td>
<td>Homosexuals who contract HIV or AIDS are getting what they deserve.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>65.</td>
<td>It would bother me to deal with someone who is homosexually orientated.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>66.</td>
<td>I do not feel as comfortable dealing with gay females as I do women who are not identified as lesbians.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>67.</td>
<td>The partner of a homosexual should not be given the same respect and</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
information as the partner of a heterosexual.

68. I would not feel comfortable establishing contract with a person known to be homosexual as a person known to be heterosexual

| 1 | 2 | 3 | 4 | 5 |

82. Refusing sexual activity with a partner who would not practice safer sex reduces my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

83. Avoiding sexual intercourse with persons who have had many sexual partners, even if they agreed to use a condom, reduces my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

84. Increasing the length of time I see/date someone before engaging in sexual intercourse reduces my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

85. Knowing the sexual history of a partner reduces my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

86. Being sexually abstinent reduces my risk of HIV.

| 1 | 2 | 3 | 4 | 5 |

87. Always using condoms whenever I have sex reduces my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

88. Performing oral sex on others, with or without condom increases my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

89. Receiving oral sex from others, with or without a condom increases my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

90. Performing anal sex on others, even using a condom increases my risk for HIV.

| 1 | 2 | 3 | 4 | 5 |

91. Because of the fear of catching HIV, I am less likely to have anal sex performed on me, even if my partner uses a condom.

| 1 | 2 | 3 | 4 | 5 |
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