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An attributional analysis of Saudi male students' reactions toward a friend with AIDS

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An attributional analysis of Saudi male students’ reactions toward a friend with AIDS

by

Abdallah Mohammed Badahdah

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of
DOCTOR OF PHILOSOPHY

Major: Sociology
Major professor: Wendy Harrod

Iowa State University
Ames, Iowa
1997
This is to certify that the doctoral dissertation of
Abdallah Mohammed Badahdah
has met the dissertation requirements of Iowa State University
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ABSTRACT

The reactions of people toward persons living with AIDS have been studied from different theoretical perspectives. Most of these studies have been conducted in the United States and Western Europe. A small number of studies, however, have been conducted in developing countries. Review of the literature reveals the absence of studies on people's reactions toward AIDS patients in Saudi Arabia. The goal of the present study was to examine Saudi students' emotional reactions and willingness to help a friend with AIDS using Weiner's theory of attribution.

Structural equation modeling was used to test several hypotheses. Several hypotheses were supported. Paths from assignment of responsibility to positive and negative affects were found to be in the predicted directions. Respondents who assigned more responsibility to the AIDS patient for his illness, reported more negative than positive affect. Also, the more positive affect expressed by the respondents' the more willing they were to help the AIDS patient. Contrary to Weiner's prediction, no path was found from negative affect to willingness to help. No path was found from assignment of responsibility to willingness to help. Degree of religiosity and belief in a just-world had no influence on assignment of responsibility. Religious respondents reported less positive affect toward a friend with AIDS than less religious respondents. Students with more knowledge about AIDS reported more willingness to help than respondents with less knowledge. No paths were found from fear of AIDS to willingness to help and expression of negative affect.
CHAPTER ONE:
INTRODUCTION

Since the Human Immunodeficiency Virus (HIV), the virus that is responsible for Acquired Immune Deficiency Syndrome (AIDS), was first identified in 1981 AIDS has become a global epidemic. AIDS is considered to be the most serious infectious disease in our modern time (Hubbs-Tait and Garmon 1995; Stine 1996). Epidemiologically speaking, it was estimated that, from the beginning of the pandemic until mid-1996, around 27.9 million people worldwide were infected with HIV. Of these, 58% were men and 42% were women (The Joint United Nations Program on HIV/AIDS 1996). It has been estimated that by the year 2000 there will be approximately 40 million people worldwide infected with HIV (Global AIDS News 1992).

As of 15 December 1995, the number of AIDS cases reported from 193 countries around the world to The World Health Organization was 1,291,810. This represents a 26% increase from the 1,025,073 cases which were reported early in January of that year. In June 1996 the number of adults and children living with AIDS increased to 1,393,649. Most of these cases were found in developing countries. In particular, more than 90% of all adults with HIV infection or AIDS live in developing countries. In Sub-Saharan Africa there are around 13.3 million people with HIV. The modes of HIV transmission in these countries are mainly heterosexual intercourse and blood transfusion. In South and South-East Asia there are more than 4.7 million adults living with HIV/AIDS with more than 90% living in India, Thailand, Myanmar, and Cambodia. The predominant routes of HIV transmission in this area are heterosexual intercourse and intravenous drug use. In Latin America, it was estimated that around 1.3 million adults live with HIV/AIDS, which accounts for 6% of the global total. Early HIV/AIDS cases in this area occurred among homosexuals and bisexuals. In North Africa and the Middle East, which consists of 22 countries ranging from Morocco to Pakistan, it was estimated that 192,000 adults are living with HIV/AIDS. The highest levels of HIV infection were found in Djibouti and Sudan. Seventy-five percent of the reported
AIDS cases are from Morocco, Sudan, Saudi Arabia, Tunisia and Djibouti. The route of transmission in these countries is mainly heterosexual intercourse and injecting drugs (Maayan et al. 1993; The Joint United Nations Program on HIV/AIDS 1996).

AIDS is incurable but preventable. Thus, behavioral scientists have a critical role in preventing the spread of the disease as well as helping people with AIDS. Investigators, among other things, have studied both the psychological and sociological impact of the disease on people’s lives (Holland et al. 1990). To illustrate, they have studied the stigmatization of people with AIDS, fear of AIDS, risk behavior, knowledge about AIDS transmission, social supports for people living with AIDS, coping with the AIDS disease, mental health of people living with AIDS, and the attitudes toward people living with AIDS (Arrinaell et al. 1989; Bloor 1995; Bouton et al. 1987; Bowman, Brown, and Eason 1994; Crandall 1991a; 1991b; Crawford 1996; Dowell, Presto and Sherman 1991; Goodwin and Rosce 1988; Herek and Glunt 1991, 1993; Horsman and Sheeran 1995; Kelly, Lawerence, Smith, Hood and Cook 1987; Larsen, Serra and Long 1990; Leasure, Hawkins and Merrill 1996; Leiker, Taub and Gast 1995; Leone and Wingate 1991; Martin and Range 1991; Oskamp and Thompson 1996; Owens 1995; Pollak 1992; Ross 1988; Trezza 1994; Yedidia, Barr and Berry 1993).

One area that has received a great deal of attention among social psychologists has to do with attitudes people have towards AIDS carriers. People living with AIDS have been stigmatized, fired from their jobs, driven from their homes, and socially isolated (Herek and Glunt 1988; Stine 1996). Two California pro-quarantine initiatives, Proposition 64 in 1986 and Proposition 69 in 1988, are examples of prejudice against people with AIDS (Winslow, Rumbaut and Hwang 1989; 1990). Stigmatization is due in part to the fact that AIDS is incurable, contagious and fatal. In addition, AIDS blemishes the appearance and impairs the patient’s ability for social interaction (Herek and Glunt 1993). Another reason for the stigmatization of people with AIDS is due to the fact that the majority of people infected with HIV in North America happen to be homosexual or bisexual males, IV drug users, or minorities (Schiller, Crystal and Lewellen 1994; Singer 1994; Stine 1996). In fact, one of the first names given to AIDS was Gay-Related Immune Deficiency (GRID). The stigma
attached to people with AIDS is layered upon a preexisting stigma attached to the aforementioned marginalized groups. In a poll in the mid-1980's, one quarter of the respondents believed that AIDS is a punishment from God to homosexuals for the way they live (Herek and Glunt 1993).

Review of the AIDS literature reveals that much of the sociological as well as the psychological research on AIDS has been conducted in the United States and Western Europe. Little, however, has been conducted in developing countries where the spread of AIDS, as has been shown above, is the highest. Studies aimed at measuring the amount of knowledge people have about AIDS transmission, reactions to AIDS patients, coping with AIDS, and other topics related to AIDS, have not been conducted in Saudi Arabia. However, review of the AIDS literature in English and Arabic reveals several articles written in journals, magazines and newspapers on these topics. To illustrate, Milder and Novelli (1992) wrote about an AIDS patient and her husband who were advised not to become pregnant again because she had AIDS. The patient did not listen and delivered her fourth child (the couple already had two infected children). The couple’s response to the clinic staff was all in God’s hands. This is an example of people’s ignorance about the seriousness of the disease and its transmission in that region of the world. Another article by Kandela (1993) quoted a Lebanese AIDS physician as saying, “Lebanese society is characterized by ignorant hostility towards AIDS patients irrespective of the cause of the disease. AIDS patients were viewed as deviants and discouraged from seeking medical help” (p.884). Tastemain and Coles (1993) wrote about a Moroccan woman whose husband’s family rejected her, and whose sisters and brothers were afraid to touch her. The woman contracted HIV from her husband who hid his infection from her before they were married.

In the case of Saudi Arabia, three studies about AIDS have been published. One of them, by Sallam, Alakija, and Al-Erian (1995) who compared the knowledge of Egyptian physicians about AIDS in Saudi Arabia and in Egypt. Mahfouz, Alakija, Al-Khozayem, and Al-Erian (1995) assessed the knowledge of AIDS among practicing physicians in Southwestern Saudi Arabia. These two studies basically dealt with the knowledge of working physicians in Saudi Arabia. The third study was conducted by Abolfotouh (1995).
who examined the knowledge and the attitudes about AIDS prevalent among high school students in Southwestern Saudi Arabia.

In other words, since the discovery of AIDS sixteen years ago and since the first reports of AIDS cases in Saudi Arabia eleven years ago (Harfi and Fakhry 1986), only one study about AIDS has been conducted in Saudi Arabia using lay persons as respondents (in that case, high school students). The lack of research is disturbing given the serious nature of the disease, and it underscores the necessity for new research about AIDS in Saudi Arabia. The present study is the first to measure Saudi college students' reactions toward people with AIDS and to test their willingness to help them. In particular, the aim of this study is to understand students' willingness to help a friend with AIDS, using Weiner's attribution-affect-action model. The findings of this study may be useful in providing the health care professionals in Saudi Arabia with systematic information about students' knowledge and attitudes regarding AIDS. This information could help professionals in planning successful informational campaigns to help stop the spread of AIDS and to help people already infected with AIDS. Moreover, this study will encourage further research on AIDS in Saudi Arabia by offering scholars a starting place for instrument design and application of a theory.

Attribution-affect-action theory by Weiner (1986) is used as a theoretical framework for this study. Briefly, this theory in the AIDS context argues that the decision to help people with AIDS is mediated by the affective reactions of pity and anger. AIDS patients who are seen as responsible for their illness elicit more anger and less pity, which results in more neglect and avoidance than help. However, AIDS patients who are seen as not responsible elicit more pity and less anger, which results in more help.

Another goal of the present study is a theoretical one. That is, this study will help to explore some of the problems surrounding Weiner's attributional theory. One such problem is the unexplained absence of a path from anger to help as found in Dooley's (1995) study.

Review of the literature on this theory revealed that almost all of the studies have been undertaken in the United States or Western Europe, with only a handful of cross-cultural studies (Fletcher and Ward 1988; Miller 1996). A test of the applicability of this theory to non-Western culture (i.e., Saudi Arabia) is one of this study's goals. The findings
of this study regarding Weiner's theory can be beneficial for the Saudi culture and for Weiner's attributional theory. As Weiner (1996) puts it, "if a culture or group or situation is found in which these relations do not hold, or are reversed, then this could serve as a springboard for much theoretical alteration and great insight into that culture, group and situation" (p. 212).
CHAPTER TWO:
LITERATURE REVIEW

The routes of AIDS transmission are well-known and documented. To illustrate, an infected mother can transmit HIV to her baby before or during birth or through breast feeding. Additionally, exposure to contaminated blood and blood products as well as transplantation of infected organs or tissues can transmit HIV. One primary route of transmission is through homosexual or heterosexual intercourse with an infected person. The HIV virus is more likely to be transmitted from men to women than from women to men. The likelihood of being infected from a single sexual exposure is relatively low. The frequent sexual exposure to an infected person (vaginal or anal) will increase the likelihood of transmission particularly when risk factors (e.g., no condom) are present (Auerbach, Wypijewska and Brodie 1994). Sharing of HIV infected injection drug equipment is another route. Among injection drug users, HIV can be transmitted directly or indirectly. Direct needle sharing involves the reuse (sharing) of needles and syringes which typically have some residual blood from the first user. The indirect route does not involve passing contaminated needles and syringe between drug users. Rather it includes the common use of the drug injection equipment (e.g., cookers, cotton) which is contaminated (Normand, Vladov and Moses 1995).

Most developing countries differ from developed countries in how HIV is transmitted. In developing countries the predominant modes of HIV transmission are heterosexual intercourse and from mothers to babies. In developed countries, however, the primary route of transmission is through injecting drug use. This is especially true in Spain and Italy (Abrams 1991). In some countries (e.g., USA), homosexual intercourse was the main route of HIV transmission. However, the proportion of new AIDS cases caused by homosexual activities was declining. The progression from initial HIV infection to the onset of AIDS is more rapid in developing countries than in industrialized countries. In the industrialized countries, the survival rate after the onset of the disease has increased from an
average of less than one year to around 3 years. In developing countries, however, it is estimated to be less than one year (The Joint United Nations Program on HIV/AIDS 1996: Normand et al. 1995).

Knowledge about how AIDS is transmitted is the first step in AIDS prevention. To prevent the spread of AIDS there must be an assessment of the amount of knowledge people have about AIDS. This includes the knowledge about likely and unlikely routes of HIV transmission. The knowledge of likely modes of transmission is assumed to be essential in reducing fear and panic about the contagiousness of AIDS. Furthermore, it helps in reducing the stigma attached to persons living with AIDS. Based on these assumptions many social scientists carried out a number of studies to assess the amount of knowledge of AIDS possessed by college students, health professionals, and the general public, as well as other population groups.

Singer, Rogers and Corcoran (1987) reviewed more than twenty nationwide surveys of public opinion about AIDS from 1983 to 1986. It was found that the percentage of people who heard or read about AIDS increased from 77% to 90% during this time period. Moreover, it was found that everyone knew that AIDS can be transmitted through sexual contact and blood transfusion. However, not all respondents knew that AIDS cannot be transmitted by sharing a drinking glass or eating food prepared by someone who has AIDS. In a similar review of the polls from 1987 to 1991, Rogers, Singer and Imperio (1993) asserted that knowledge by the public about how AIDS can and cannot be transmitted has increased over the years. Almost all of the respondents knew that AIDS can be transmitted through sexual contact (whether homosexual or heterosexual, by oral sex, or exchange of semen) and by blood and through sharing contaminated needles. With increased knowledge, the misinformation about the modes of transmission had declined. To illustrate, fifty percent of the respondents in the mid 1980’s thought that AIDS can be transmitted through shaking hands, working next to someone who has AIDS, sitting on a toilet seat, or sharing a drinking glass, compared to 24% of the respondents in 1990. Misconceptions about HIV transmission still exit, however. According to Rogers et al (1993), in 1987 and 1990 almost half of survey
respondents believed that AIDS could be transmitted by donating blood (45% and 42%, respectively).

In a study of the Arab Americans in Dearborn, Michigan, Kulwicki and Cass (1994) reported a low level of self-assessed knowledge about AIDS. Nearly-thirty-nine percent of 411 respondents said they knew “very little” about AIDS compared to 16% who said they knew “a great deal.” On the objective measure of AIDS knowledge, less than half of the respondents correctly said that AIDS cannot be acquired through donating blood (44%), by sharing a toilet seat (46%), or from mosquito bites (39%). Respondents with more education were significantly more knowledgeable about AIDS than were the less educated respondents. Also, single respondents showed a greater amount of knowledge than married respondents.

Mahfouz et al (1995) assessed AIDS-related knowledge of 361 non-Saudi primary health care physicians in Saudi Arabia. They found that 33.8% failed to identify tattooing as a mode of HIV transmission, and 49.7% erroneously considered kissing as a possible mode of transmission. Nearly 19% of the physicians said vaccines and a cure for AIDS are available. Sallam et al (1995) compared the knowledge about AIDS of Egyptian physicians in Egypt (N =330) and in Saudi Arabia (N =144). Eighty-three percent of the physicians in both locations identified kissing as a mode of HIV transmission, 41.5% said the same about mosquito bites, and 21.4% believed that there is a cure for AIDS.

Because college students have been identified as a group at higher risk of AIDS than the general public (Edgar, Freimuth and Hammond 1988), several studies were carried out to measure college students’ knowledge about what can and cannot transmit HIV. A fifteen-item scale with true/false options was used by McDermott, Hawkins, Moore and Cittadino (1987) to gauge the knowledge of 70 male and 87 female undergraduate students. The researchers found that the overall knowledge of the students about AIDS was high. To illustrate, almost 92% of the students knew that AIDS cannot be transmitted through handshaking or hugging. However, a substantial number of the students had misconceptions about AIDS transmission. Twenty-five percent did not know that fever, night sweats, persistent cough, chronic fatigue, and loss of appetite are early signs of AIDS. Another study used a 32-item scale to assess the level of knowledge concerning the transmission,
symptoms, and general information about AIDS by 495 students at a midwestern university. In this study, Goodwin and Roscoe (1988) found that two-thirds of the sample answered 21 of the 32 items correctly. However, among the misconceptions, they found that 25% believed that AIDS can be acquired through giving blood. Katzman and colleagues (1988) found more than 88% of their sample of 500 students at Arizona State University answered correctly 8 of the 9 questions about means of HIV infection. However, 38% thought that AIDS can be acquired through donating blood. In 1989, Thomas, Gilliam and Iwrey found similar misconceptions in their sample of 975 African-American students. The percentage of the students who said that AIDS can be acquired from donating blood was 27%. Moreover, 73% did not know that insects cannot transmit AIDS. Young, Gallaher, Belasco, Barr and Webber (1991) compared AIDS-related knowledge of 478 students at the University of Texas at Austin in 1989 to a sample of 528 at the same university in 1985. Their findings showed that students in the 1989 sample were better informed than those in 1985. The mean number of correct answers on the knowledge scale increased from about 29% in 1985 to 47% in 1989. Negy and Weber (1991) compared the knowledge of AIDS of whites (N = 164), blacks (N = 22) and Hispanics (N = 82). No difference in knowledge about AIDS between whites and blacks was found. However, Hispanics were less knowledgeable about AIDS than whites and blacks. One hundred and two non-traditional students ranging age from 25 to more than 50 years old at Governors State University were surveyed by Bax et al. in 1994. Results indicated that all the respondents knew that AIDS can be spread through contaminated needles or syringes, or by receiving blood transfusion, blood components, or organ transplantation. On the other hand, twenty-eight percent of those surveyed believed that AIDS can be transmitted by kissing. Trezza (1994) found that only 44% of his sample of 660 believed that mosquitoes cannot transmit AIDS. Further, 66% erroneously believed that AIDS can be acquired through giving blood. D'Augeli and Hershberger (1995) asked 513 students in 1985 and 280 in 1992 to evaluate their AIDS-related knowledge. It was found that 4% of the respondents in 1985, compared to 22% in 1992, said they knew “very much” about AIDS. The AIDS-related knowledge of 167 students from a Northeastern University was assessed with 38 questions by Donnelly et al. (1996). Overall, 7 of the 13 questions on
the possible modes of HIV transmission were answered correctly by more than 90% of the respondents. However, only 14 of the 25 nondocumented routes of HIV transmission were identified correctly by more than 85% of the respondents. Nearly one-fifth of the sample did not know that AIDS can be transmitted through oral sex.

Several studies surveyed the knowledge of AIDS transmission in non-student populations such as social workers (Peterson 1991), corporate and public service employees (Barr et al 1992), prisoners (Zimmerman et al 1991), family therapists (Green and Monte 1994), health care professionals (Dworkin, Albrecht and Cooksey 1991; Horsman and Sheeran 1995), the general public (Hardy 1990; Herek and Capitanio 1993; McCaig, Hardy and Winn 1991; Phillips 1993; Safran and Wilson 1996), and juvenile delinquents (Lanier and Sloan 1996). Others studied the knowledge of AIDS among persons who are HIV positive (Sowell, Seals and Copper 1996).

A positive relationship between AIDS-related knowledge and attitudes toward people with AIDS was found in a number of studies. Krupka and Vener (1988) surveyed the attitudes of 1,175 college students from Michigan State University. Thirty five items gauged the respondents’ knowledge about AIDS and six items measured their willingness to interact with an AIDS patient in various university settings. A positive relationship was found between the willingness to associate with an AIDS patient and level of knowledge. In particular, 53% of the low-knowledge students objected to being in the same classroom with an AIDS patient, whereas only 28% of the high-knowledge students were not willing to do so. Four hundred and ten students were sampled from Western Illinois University by Witt (1989b) to determine if knowledge of AIDS was related to affect expressed toward people with AIDS. These two variables were found to be related significantly but not strongly (r = -.14 ). That is, the more knowledgeable respondents tended to express less negative affect toward people with AIDS. Range and Starling (1991) studied the relationship between stigma attached to AIDS patients and knowledge about AIDS among 274 students from University of Southern Mississippi. Respondents were divided on the basis of their knowledge into three groups: high, medium, and low. It was found that AIDS stigma decreased significantly as the level of knowledge increased. The same relationship was
reported in Mondragon, Kirkman-Leff, and Schneller (1991), who sampled 1,204 residents from Arizona in 1987 and 1988. Respondents with more accurate knowledge about AIDS scored significantly lower in their hostility toward people living with AIDS. Lewis and Range (1992) found a weak negative correlation ($r = -.19$) between knowledge of AIDS and stigma attached to people with AIDS. A moderate positive relationship ($r = .29$) was found between knowledge and social distance maintained from the AIDS infected persons. That is, the greater the respondents' knowledge of AIDS, the less the amount of social distance. A sample of 686 students from Mississippi State University was studied by James and Frese (1993). Knowledge about AIDS transmission was the best predictor of the students' attitudes toward people with AIDS ($\beta = .31$). A positive correlation of .25 was found in a sample of 345 students between their knowledge of AIDS and attitudes toward AIDS-infected professors (Greenlee and Ridely 1993). Trezza (1994) found a positive but very weak path from AIDS knowledge to AIDS stigma ($\beta = .11$) in a sample of 596 clinical and counseling psychologists. In Australia, Connors and Heaven (1995) sampled 128 undergraduate students. They found a strong positive relationship between the belief that AIDS can be transmitted through causal contact and both the need to avoid contact with AIDS patients ($r = .72$) and tendency to blame AIDS patients for their plight ($r = .51$). A negative association was found between the belief that AIDS can be transmitted through social contact and lack of sympathy ($r = -.22$). Azaiza and Ben-Ari (1995) examined the relationship between knowledge of AIDS and attitudes toward AIDS in a sample of 132 Arab professionals in Israel. A weak positive relationship ($r = .16$) was found between these two variables.

Contrary to the above findings, in a British sample of 202 students and non-students, Furnham (1992) found no relationship between knowledge and attitude toward AIDS. In Trezza's study (1994), general knowledge of AIDS was not a significant predictor of AIDS stigma in a sample of 660 students at the State University of New York at Buffalo ($\beta = .05$). Similarly, Witt (1989a) found a nonsignificant relationship between knowledge and attitudes toward people with AIDS in a sample of 416 students at Western Illinois University. The results of another study suggested that knowledge had no influence on individuals' sympathy or willingness to work with people who have AIDS (Zagumny and Deckbar 1995).
Fear of AIDS (sometimes called AIDS phobia and AIDS hysteria) is based largely on the assumption that AIDS is a contagious disease (Bishop et al. 1991). Moreover, fear of AIDS was assumed to be greater with less knowledge about AIDS transmission. Abolfotouh (1995) compared the fear of contracting AIDS between a group of high school students in Southwestern Saudi Arabia who attended a lecture on AIDS transmission and a group who did not. He found that fear of contracting AIDS was significantly less among those who attended the lecture. Also, younger respondents had higher AIDS phobia scores. A study by Royse, Dhooper and Hatch (1987) found in a sample of 219 undergraduate and graduate social work students that knowledge of AIDS was a good predictor of fear of AIDS ($\beta = -.26$).

In contrast, Zimet (1992) compared a group of 68 senior and junior high school students who knew someone with AIDS to 68 students who knew nobody with AIDS on their knowledge, beliefs, and fear of HIV infection. Students were matched on race, gender, school grade, and school attendance. No significant differences were found between the two groups. However, students in the former group had less anxiety about interacting with people with AIDS than the later group. Kaplan and Worm (1992) studied the relationship between fear of AIDS and knowledge about AIDS in South Africa. A sample of 50 students with a mean age of 18 was used in this study. No significant relationship between knowledge and fear of AIDS was found. Temoshok, Sweet and Zich (1987) conducted three studies in New York, San Francisco, and London to study, among other things, the relationship between these two variables. They found no significant correlation between knowledge about AIDS and the perceived risk of AIDS or the desire for more information about AIDS. In the Bouton et al. study (1987) fear of AIDS and knowledge of the disease were not significantly correlated ($r = -.03$).

Two studies showed that fear of AIDS is declining among college students. D’Augelli and Hershberger (1995) studied the change in personal concern and fear of AIDS among four samples of college students from 1985 to 1992. The sample sizes in 1985, 1986, 1988, and 1992, respectively were 513, 294, 462, and 280. The percentage of the students who said they were not worried about being infected with the AIDS virus at all dropped from
25% in 1985 to 15% in 1986, 14% in 1988, and 7% in 1992. Moreover, fear of AIDS was correlated negatively with age and knowledge about AIDS ($r = -0.17$ and $r = -0.31$, respectively). Young and colleagues (1991) replicated a study conducted by Bouton et al. (1987) on a sample of 478 students from the same university. It was found that fear of AIDS decreased significantly from 1985 to 1989. In addition, in the 1989 survey, political liberals were found to be less fearful of AIDS than were conservatives.

The relationship between fear of AIDS and several demographic variables was identified by a number of studies. For example, Kunkel and Temple (1992) sampled five hundred and seven students from the University of Nevada, Las Vegas. A t-test indicated no difference between single and married individuals in their fear of AIDS, and no relationship was found between religiosity and fear of AIDS. One thousand five hundred and forty adults between the age of 18 and 60 from Chicago and the surrounding suburban counties were surveyed by Prohaska et al. (1990) in 1987. Perceived risk of AIDS was found to be associated with the absence of religious preference ($\beta = 0.89$).

Bouton et al. (1987) found in a sample of 527 students that fearful students were more conservative politically and more likely to be church-attending. In a study of Australian college students, Austin et al. (1989) found frequent church attendance to be associated with greater fear of AIDS.

Fear of contracting AIDS was found to be an important factor in predicting people's reactions toward people with AIDS. That is, fear of contagiousness was hypothesized to be correlated negatively with positive attitudes toward people with AIDS. Royse et al. (1987) examined the relationship between fear of AIDS, knowledge about AIDS, and level of empathy toward people with AIDS in a sample of undergraduate and graduate students at the University of Kentucky. They found greater empathy to be correlated with lower fear of AIDS ($\beta = -0.38$). In a survey of medical and dental students, Weyant, Bennett, Simon and Palaisa (1994) examined the perception of personal risk of contracting HIV and the desire to treat HIV-positive patients. Dental students showed more fear than medical students of contracting AIDS. Consequently, 74% of medical students expressed a desire to treat HIV-positive patients compared to 43% of the dental students. In South Africa, Kaplan and Worm
(1992) found a weak positive relationship between fear and negative attitudes toward people with AIDS ($r = .28$).

Most of the studies on the stigmatization of persons with AIDS have benefited directly or indirectly from Goffman (1963), Bobys (1980), Elliott, Ziegler, Altman and Scott (1982), and Jones et al. (1984) for theoretical work on stigma. The theoretical frameworks of these scholars were helpful in understanding how AIDS became a source of stigma and how people consequently reacted to AIDS patients.

Goffman (1963) defined stigma as "an attribute that is deeply discrediting" (p.3). Specifically, Herek (1990) defines AIDS-related stigma as "all unfavorable attitudes, beliefs, behaviors, and policies directed at persons perceived to be infected with HIV, whether or not they manifest symptoms of AIDS" (p.116). Goffman (1963) identified three basic types of stigma which make the stigmatized person unacceptable for social interaction. The first type is the physical stigma or the abomination of the body which includes all physical deformities. The second type of stigma consists of blemishes of individual character which are defined by the stigmatizer as immoral or abnormal. Finally, the third type is tribal stigma. AIDS, according to Goffman's classification, has both physical and moral dimensions which qualify it as a stigma. The physical stigma is attached to people with AIDS specially in the late stages of the disease. The social dimension of AIDS includes the fact that AIDS is associated with marginalized groups such as homosexuals and IV drug users. This dimension is what Goffman referred to as tribal stigma. Labeling drug use, promiscuity and homosexuality as socially unacceptable and immoral activities makes AIDS a stigma (Herek 1990; Herek and Glunt 1988; Tewksbury and Mcgaughey 1997).

Katz (1979) identified four dimensions of stigma: threat, responsibility, visibility and sympathy. Jones et al. (1984) argued for six dimensions: Concealment of the stigma; stability and continuity of stigma over time; disruptiveness of the stigma during social interaction; aesthetic qualities of the stigma; responsibility of the stigmatized in getting the stigma; and the danger or threat of the stigma. Jones et al. (1984) identified four possible reasons for fear of stigmatized individuals. First, the stigmatized person may remind people of their own personal vulnerability. Second, people may fear the possibility of association
with the stigmatized person. Next, is the fear that the stigmatized may encourage people to engage in a stigmatizing behavior. Finally, people fear being asked to help the stigmatized individual. Considering these six dimensions of stigma, people with AIDS are predicted to be stigmatized, avoided and discriminated against (Alonzo and Reynolds 1995; Bobys 1980; Herek 1990 Herek and Glunt 1988; Pryor and Reeder 1993).

AIDS patients are blamed and judged more harshly than people with other illnesses. Blaming according to Nelkin and Gilman (1988)

is a way to create psychological as well as social boundaries. For the individual, blame is a way to draw a boundary between the self and the diseased, and thereby to release anxiety. But disease is frequently associated with the "other," be it the other race, the other class, the other ethnic group. Inevitably the locus of blame is also tied to specific ideological, political and social concerns. Blame is in effect a social construct, a reflection of the worldwide view, social stereotypes, and political biases that prevail at a given time (p. 363).

Social psychological research showed that people with AIDS were evaluated more negatively than people with other illnesses. Moreover, they were blamed for their illness more than other diseases. For example, Triplet and Sugarman (1987) compared college students’ reactions toward people with AIDS and with other diseases. Fifty-eight students from Rhode Island College and Northern State College participated in this study. Students were found to be less willing for themselves or a close relative to share a hospital room with an AIDS patient than to share with a patient who has genital herpes, hepatitis, or Legionnaire’s diseases. A sample of 157 physicians from Columbus, Ohio, Phoenix, Arizona, and Memphis, Tennessee was studied by Kelly and his colleagues (1987) to investigate physicians’ attitudes toward people with AIDS, compared to people with leukemia. An AIDS victim was perceived to be more responsible for his illness, more deserving of what happened to him, more dangerous, less deserving of sympathy, and more in need of being quarantined than a leukemia patient. Moreover, physicians were less willing to work in the same office, to continue a past friendship, and to attend a party where an AIDS victim was present. Three hundred and fifty-eight students from the University of Northern Colorado read one of six vignettes in Sheehan and colleagues’ study (1989). The students
were asked to imagine themselves as members of a small group who interact frequently with one another. The researchers manipulated the type of illness a team member had (AIDS, cancer, or hepatitis) and the cause of the illness (controllable vs. uncontrollable). After each vignette, subjects were asked to indicate their degree of willingness to interact with the sick colleague. Students rated the AIDS patient least positively, followed by hepatitis and cancer patients. The perceived control variable had no effect on students’ reactions. Mooney et al. (1992) measured the reactions of fifty-two female students toward people with AIDS. Subjects were told that they were going to interview an AIDS patient, a college student, a cancer patient, or a homosexual for a project that the experimenter was working on. The subject then was asked to set up two chairs for the interview in any position she liked. The distance between the two chairs was measured. Subjects in the AIDS condition arranged the chairs farther apart than subjects in the homosexual, cancer patient or college student conditions. Hornung, Hattich and Helminger (1993) compared the reaction of 2,515 Swiss adults toward AIDS and cancer patients. People with AIDS were evaluated more negatively than cancer patients. AIDS patients were considered socially not acceptable and as being responsible for what happened to them. Similar findings were obtained by Martin and Range (1991) in a sample of 160 students at the University of Southern Mississippi. In a meta-analysis study of the stigma attached to people with AIDS compared to other illnesses, Crawford (1996) analyzed 21 studies. A greater degree of stigma was expressed toward people with AIDS than toward people with other illnesses such as leukemia, cancer, and herpes. Moreover, college students stigmatized AIDS patients more than did health professionals.

Since AIDS can be transmitted through several means such as sexual intercourse, intravenous drug use, or blood transfusion, and from mother to child, a number of studies examined people’s evaluation of AIDS patients based on the mode of AIDS transmission. The hypothesis was that contracting AIDS from a socially unacceptable means (e.g., drug use) leads to negative reactions toward AIDS patients.

In a study of 148 college students, Dowell et al. (1991) presented their subjects with six vignettes. Among other things, the researchers manipulated the mode of AIDS
transmission (sexual contact vs. blood transmission vs. IV drug use). Results showed that AIDS patients who contracted the disease through a blood transfusion were viewed as less responsible than those who contracted it through sexual contact or IV drug use. In Crandall's (1991a) study, three hundred and ninety-three students from the University of Florida were presented with several vignettes in which the mode of AIDS transmission (e.g., homosexual contact, IV drug use, blood transfusion) was manipulated. In addition, four types of diseases were evaluated independently. Social distance was measured by a seven-item scale. AIDS and hepatitis patients were strongly stigmatized compared to patients with other diseases. Also, IV drug users were stigmatized more than hemophiliacs. Similar findings were reported by Lewis and Range (1992). In Italy, 468 health care workers were sampled by Mannetti and Pierro (1991). Respondents read one of eight vignettes describing an AIDS patient who contracted the disease through different means (e.g., heterosexual acts, drug use, and homosexual acts). AIDS patients who contracted the disease through drug use were rated to be most responsible, followed by AIDS patients who contracted AIDS from promiscuous homosexual acts. Leiker et al. (1995) examined the amount of social distance attached to people with AIDS. The mode of transmission (IV drug use, homosexual sex, heterosexual sex, and blood transfusion) was manipulated. Two hundred and sixty three students participated in this study. The lowest social distance was found in the blood transfusion condition, followed by the heterosexual condition and the IV drug use condition. Homosexual AIDS patients received the highest amount of social distance. In another study, Zagumny and Deckbar (1995) investigated the effect of mode of transmission on students' willingness to work with and sympathize with an AIDS infected co-worker. Participants read one of four scenarios about a co-worker who contacted AIDS through heterosexual contact, homosexual contact, blood transfusion, or unknown means. Greater sympathy was expressed toward the co-worker in the unknown means condition than in the homosexual condition. The co-worker who was infected by blood transfusion received more sympathy than did the co-workers who were infected through homosexual or heterosexual activities. Other comparisons were not significant. In a qualitative study of nurses' attitudes and feelings toward AIDS patients, Breault and Polifroni (1992) found more anger was directed toward
drug users and prostitutes than toward homosexuals. One nurse said, "This is awful ... sometimes my feelings against IV drug abusers are like, you know, sometimes they deserve it" (p. 24). Another nurse expressed a positive reaction toward homosexual AIDS patients. She said, "I think I feel sorriest for the gay men because I think it just happened to their community and they seem to have done the most in the way of informing and educating themselves and changing lifestyles" (p. 25). In a study of 281 nursing students' attitudes toward AIDS patients, subjects read one of five vignettes where the mode of AIDS transmission varied (homosexually transmitted, heterosexually transmitted, through IV drug, maternal transmission, and through blood transfusion). The babies who contracted AIDS from their mothers had the lowest stigma, followed by those who contracted it through blood transfusion. The highest stigma was attached to people who contracted AIDS through IV drug use (Leasure et al. 1996). Similar findings were reported by Cole and Slocumb (1993) in a sample of 357 nurses. In a qualitative study, Tewksbury and McGaughey (1997) interviewed 63 HIV-positive individuals from Ohio, Kentucky, and Indiana. One HIV positive interviewee who contracted HIV from blood transfusion described the reaction she received from people as follows: "People have a lot of compassion for me because of the way I was infected, and that upsets me" (p. 57).

The attribution-affect-action theory by Weiner (1986) was used to examine people's reactions toward people with AIDS from an attributional perspective (McDonell 1993; Peters, Boer and Schaalma 1993). The study of AIDS from this perspective concentrated on causal controllability. That is, whether or not AIDS patients are to blame for their illnesses. Within the AIDS context, the model, briefly, argued that helping AIDS patients is mediated by the affective reactions of pity and anger. AIDS patients who are responsible for their infections will elicit anger and, in turn, receive neglect. On other hand, attribution of nonresponsibility to AIDS patients will elicit pity and help.

Weiner, Perry and Magnusson (1988) examined college students' emotional reactions and willingness to help individuals who contracted AIDS through uncontrollable (e.g., blood transfusion) or controllable (e.g., promiscuous sex) means. Their findings indicated that subjects expressed more pity and less anger along with more desire to offer help when the
cause of the AIDS was uncontrollable. Ho (1990) employed Weiner's model in his study of 286 students from Northern Territory University in Australia. Students expressed negative attitudes toward AIDS patients who were perceived to be responsible for their illnesses. On the other hand, not holding AIDS patients responsible for their illnesses led to positive attitudes. However, contrary to Weiner's predications, the majority of the respondents indicated their willingness to interact with AIDS patients at all levels of social interaction regardless of the modes of infection. In a cross-cultural study, Murphy-Berman and Berman (1993) sampled 45 students from the University of Nebraska, Lincoln and 64 from the University of Trier in Trier, West Germany. The modes (drug use vs. laboratory worker) as well as the responsibility (had taken or not taken precautions) for contracting AIDS were manipulated. Results showed that respondents in both cultures expressed less pity, warmth, and concern, along with more anger, in the controllable condition. German students felt more pity and warmth toward persons with AIDS did students from the USA regardless of how the target contracted AIDS than. Greater anger and less concern was expressed by American students toward AIDS patients who contracted AIDS through drug use.

Dooley (1995) manipulated the cause of AIDS in five vignettes (through homosexual partner, a heterosexual partner, blood transfusion, IV drug needles, or no given cause). Two hundred and fifty students participated in this study. Respondents reported more anger if the friend had contracted AIDS from IV drug use than from a blood transfusion. Similarly, more pity was expressed toward the friend in the blood transfusion vignette. Unexpectedly, anger was not a significant predicator of helping. That is, the influence of onset controllability on helping behavior was mediated by pity but not by anger. Two hundred and twenty-seven students read a description of a male or female who had contracted AIDS through unprotected heterosexual sex or IV drug use. According to Borchert and Rickabaugh (1995), regardless of the gender of the target, AIDS patients who had contracted the disease through IV drug were seen as having more control over their infection than were those who contracted it from heterosexual relations. More positive feelings were expressed toward the male target who contracted AIDS through sex than through IV drug use. AIDS patients who
contracted the disease through sex were seen as more deserving of help than were the patients who contracted it through IV drug use.

Belief in a just world (Lerner 1970, 1980; Lerner and Miller 1978; Lerner, Miller and Holmes 1976) is another theoretical framework that has been used to examine people's evaluation of AIDS patients. Briefly, the just-world hypothesis postulates that individuals have a need to believe that the world they live in is a just place where people get what they deserve and deserve what they get. This belief enables individuals to look at their world as stable, meaningful, and predictable. Recently, the belief in a just world was conceptualized as an illusion which has a positive effect on individuals' well-being (Lipkus, Dalbert and Siegler 1996). For this reason, individuals are expected to have difficulty giving up this belief when they encounter events that suggest the world is an unjust place. Thus, encountering such events forces the believers in a just world to reestablish justice through several means. One way of accomplishing this is by compensating the victim either by rewarding him/her or by punishing the victimizer. Another way is to devalue or blame the victim for his/her plight. That is, the victim has done something deserving of suffering. Denying the victim's suffering is another alternative (Lerner 1970; 1980; Zweigenhaft, Phillips, Adams, Morse and Horan 1985).

To assess the degree to which people believe that this world is a just place, Rubin and Peplau (1973; 1975) designed a 16-item just-world scale in 1973 and a 20-item scale in 1975. The 20-item scale has been used more extensively than the 16-item scale. In general, these scales often suffered from low reliability. For example, for the 16-item version, Rubin and Peplau (1973) reported a 0.79 coefficient alpha. For the 20-item version, Smith and Green (1984) reported an alpha of 0.67; Ma and Smith (1985) reported an alpha of .78 in a study of Taiwanese college students; and Caputi (1993) in a sample of Australian students reported an alpha of 0.72. Furnham (1991) administered the just-world scale to subjects from 12 different countries. The lowest Cronbach alpha reliability was 0.46 in New Zealand and the highest was 0.71 in the United States. Due to this problem with scale reliability, Furnham and Gunter (1984) suggested that if the reliability of the scale is to be increased, the reliability of just world and unjust world components should be calculated separately.
Based on the above postulation and the findings of several studies (e.g., Furnham and Procter 1989) which reported positive correlations among scales measuring belief in a just world, authoritarianism, religiousness, and negative attitudes toward the poor and disadvantaged, a number of scholars examined the relation between belief in a just world and attitudes to AIDS sufferers. It was assumed that people who believe in a just world will tend to derogate and blame AIDS victims for their misfortune, and consequently will express negative feelings toward them.

Witt (1989a) administered Rubin and Peplau's (1975) just-world scale to a sample of 136 undergraduate students. The correlation between the affect toward persons with AIDS scale and the just world scale was nonsignificant (-.03). Another study by Ambrosio and Sheehan (1991) aimed at studying the same relationship in a sample of 375 from the University of Northern Colorado. Rubin and Peplau's (1973) earlier version of the just-world scale with 16 items was used. No relationship between the just-world scale and attitudes toward people with AIDS was found. In particular, the correlation was .01 when the AIDS victim was homosexual and .03 when the AIDS victim acquired the disease through blood transfusion.

However, inconsistent with the above finding, two studies found positive correlations between these two variables. One hundred and eighty-one (101 male and 83 female) Australian undergraduate students completed Rubin and Peplau's (1975) just-world scale as well as a multidimensional attitudes toward people with AIDS scale. Connors and Heaven (1989) found a positive correlation ($r = .32$) between scores on the social distance subscale and the just-world subscale for the male students. In addition, endorsement of care for victims and research on AIDS correlated negatively with the just-world subscale ($r = -.21$). However, no significant correlation was found between the unjust-world subscale and attitudes toward AIDS victims. In the second study, Furnham and Procter (1992) constructed their own just-world scale which consists of three parts: personal just-world and unjust-world scales; interpersonal just-world and unjust-world scales; and sociopolitical just-world and unjust-world scales. Two hundred subjects from England participated in this study. The authors hypothesized that attitudes toward AIDS will be correlated positively with social and
interpersonal scales and to a lesser extent with the personal just-world scale. The attitudes scale was divided into five factors. The total just-world score was correlated weakly but positively with all five attitudinal factors (the smallest correlation coefficient was \( r = .13 \) and the largest was \( r = .19 \)).

The religious responses to AIDS and AIDS patients were by and large not positive (Jonsen and Stryker 1993; Palmer 1989). Kowalewski (1990) analyzed 66 documents on the official positions of several Judeo-Christian groups. The author classified the positions of these religious groups into three categories. The first is the group that blames AIDS patients for their plights. This group argued that AIDS is punishment from God. Failure to comply with traditional norms of sexual behavior results in death. To this group, AIDS patients were perceived as responsible for contracting HIV. The second group defined AIDS as a disease which can be prevented by avoiding certain types of behavior. However, this group distinguished between failure to comply with moral teaching and AIDS. In other words, AIDS is a medical matter. The last group used AIDS to support its position on certain moral issues. AIDS, according to this group, is a consequence of unacceptable sexual behavior such as extramarital sex. This group "rather than stating that monogamy of any kind could help curb the epidemic, heterosexual marital monogamy is said to be the best way to prevent the disease" (p. 95).

Empirically speaking, religiosity and negative attitudes toward people with AIDS was found in several studies to be correlated positively. For example, Johnson (1987), in his study of 371 residents of Muncie, Indiana, found religious fundamentalism to be a predictor of intolerant attitudes toward people with AIDS (\( \beta = .21 \)). Again, Johnson (1995), in a sample of 210 residents of Muncie, Indiana, found that respondents who agreed with the statement that AIDS is God’s punishment attributed more responsibility to AIDS victims (\( \beta = .30 \)). However, no relationship between the God’s punishment variable and the tendency to discriminate against AIDS patients was found. Leiker et al. (1995) manipulated the modes of AIDS transmission in their study (blood transfusion, heterosexual, homosexual, and IV drug use). Religiosity was found to be a predictor of the social distance from the infected persons only in the blood transfusion condition (\( \beta = -.15, -.04, .02 \) and \( -.06 \), respectively). That is,
the more religious the respondent the less the social distance was maintained, but only in the blood transfusion condition.

Contrary to the above findings, Nicholas and Durrheim (1995) found no significant correlation between religiosity and attitudes toward AIDS ($r = -.04$) in their sample of 1,817 first-year university students in South Africa.
CHAPTER THREE: THEORETICAL FRAMEWORK

Several theoretical orientations have been used in the literature to explain attitudes, fear of AIDS and reactions toward people with AIDS. Some have (e.g., Leiker et al. 1995) utilized the theoretical works of Goffman (1963) and Jones et al. (1984) on stigma. Others have used the functional approach (e.g., Leone and Wingate 1991), the neofunctional approach (e.g., Crandall et al. 1997; Pryor et al. 1989), the just-world hypothesis (e.g., Anderson 1992; Witt 1989a), the sympathetic magical law of contagion (e.g., Rozin et al. 1992), and Weiner’s attributional theory (e.g., Peters et al. 1993; Weiner 1993b). Attribution-affect-action theory by Weiner has been used in this study to help in understanding Saudi students’ reactions toward people with AIDS.

Attribution is defined as the process of linking an event to its causes. Put differently, it is an inference about why an effect (event) occurred. Thus, “attribution theory deals with the rules the average individual uses in attempting to infer the causes of observed behavior” (Jones et al. 1972, p. x). Negative, important or unexpected events are examples of the factors that motivate people to engage in attributional processes (Weiner 1986).

Kelley and Michela (1980) distinguished between attribution theories and attributional theories. The general model of attribution consists of three parts as follows:

Antecedents → Attributions → Consequences

1 2 3

Attribution theories, such as the work of Kelley (1967), have paid attention to the influence of antecedent factors such as information, beliefs, and motivation on attributions (parts 1 and 2). As Kelley and Michela (1980) put it, “there is no interest in the consequences beyond the attributions themselves” (p. 460). Attributional theories, on the other hand, such as the work of Weiner (1986), are more concerned with consequences of attributions (part 3), that is, the link between the perceived causality and the behavioral or emotional consequence is of interest. Attributional research assesses or manipulates the perceived causes, and then
measures their effects on feelings, behavior, and expectation (Kelley and Michela 1980). Regardless of the differences between these theories of attribution, Forsterling (1988) argued that there are some basic premises that all attribution theories share. All attribution theories assume that causal thinking plays an important role for behavior, affect and experiences. Furthermore, individuals in these theories are seen as motivated to search for causal explanations for events in their environment. Also, it assumed that causal understanding helps in obtaining personal goals and ensures survival.

To introduce and understand the differences between the attributional model of Weiner and the other attribution theories, summaries of theories by Heider (1958), Jones and Davis (1965), and Kelley (1967) are given below.

According to Heider, the “naive psychologist” or the untrained observer tries to make sense of people’s actions. That is, people act like scientists in the sense that they strive to understand, predict, and control events in their life. Following Ross and Fletcher (1985), the central ideas of Heider’s work (1985) can be summed up in four points:
1- People try to understand and analyze the events and behavior they encounter in their life by searching for the causes behind them. People tend to attribute actions to stable and enduring causes, rather to temporary or transitory causes.
2- Heider distinguished between personal (internal, e.g., ability and effort) and situational (external, e.g., luck or task difficulty) causes. Further, he suggested that people in their naive analysis tend to overemphasize the importance of personal causes and underemphasize the role of situational causes (attributional bias).
3- Heider suggested a negative relationship between personal and environmental factors.
4- Heider introduced the principle of covariation which says an effect is attributed to a cause(s) that is present when the effect is present, and absent when the effect is absent (Hewstone 1983; 1995; Ross and Fletcher 1985).

The work of Jones and Davis (1965) was intended to formalize some of Heider’s attributional ideas. The aim of correspondent inference theory expressed by Jones and Davis (1965), was to develop a theory which “systematically accounts for a perceiver’s inferences about what an actor was trying to achieve by a particular action” (p. 222). The goal of the
attribution process, according to this theory, is to infer that observed behavior and the
intention that produced it correspond to some underlying stable attributes in the actor
(Hewstone 1989). According to Jones and Davis (1965), there are two stages in the process
of inferring personal dispositions. First is the attribution of intention and second is the
attribution of disposition. For the perceiver to make an attribution to personality traits,
several conditions need to be satisfied. In the first stage, the observer needs to find out if the
effects of a given action are intended by the actor. Freedom of choice is a central condition,
meaning that the actor has the freedom to act in a given manner. Moreover, the observer
must believe that the actor possesses the knowledge as well as the skill to produce the
consequences. Jones and Davis (1965) limited their analysis to cases where the effects of a
given action are assumed to be intended.

The second stage deals with the dispositions. Here the observer starts the process of
attribution by using the several principles. One of them is the non-common effects principle.
According to this principle, the observer makes a correspondent inference when the chosen
action has unique consequences. Another principle is that of the social desirability. When
the consequences of a given action are socially undesirable, then a correspondent inference
by the observer is expected to be stronger. Later, Jones and McGillis (1976) replaced social
desirability with expectancies. These expectancies are derived from the observer's prior
experiences with the actor (target-based expectancies) or based on the actor's membership in
a particular group. Jones and Davis (1965) discussed the impact of personal involvement
of the perceiver (hedonic relevance and personalistic relevance) on the process of correspondent
inferences. An action has hedonic relevance to the perceiver if the consequences of the
actor's action promotes or interferes with the perceiver's goals. However, if the perceiver
believed that he/she is the target of the action, then the action has a personalistic relevance.

The process of attribution in Kelley's (1967; 1972) theory can be divided into
covariation and configuration. The covariation principle is operative if the perceiver has
information from several observations over time. Here "an effect is attributed to one of its
possible causes with which, over time, it covaries" (Kelley 1972, p.3). To make attributions
in this way, Kelley argued that the attributors need three types of information: consensus.
consistency (over time and modalities), and distinctiveness. On other hand, if the perceiver is limited to a single observation or lacked time or motivation to consider multiple observations, then the principle of configuration is used. Here the attributors follow one of several causal schemata such as the multiple sufficient cause schemata or the multiple necessary cause schemata. The former refers to the idea that an effect occurs if any of its causes act jointly or individually. The later refers to the idea that for an effect to occur, all of its causes must operate jointly. Several attributional principles were proposed by Kelley (1972) to accompany these and other causal schemata. For example, the discounting principle (or subtraction rule) suggests that, “the role of a given cause in producing a given effect is discounted if other plausible causes are also present” (p. 8). The augmentation principle is another example which states that,

if for a given effect, both a plausible inhibitory cause and a plausible facilitative cause are present, the role of the facilitative cause in producing the effect will be judged greater than if it alone were present as a plausible cause for the effect (p.12).

Weiner's (1986,1995) attribution-affect-action theory of social motivation was developed initially to explain achievement-related behavior (Weiner et al., 1971). This theory was developed as a reaction to the limited theoretical view of the causes which recognized only internal or external causation (Barnes, Ickes and Kidd 1979). Weiner (1985) suggested a multidimensional view of perceived causality as well as a link between perceived causality and emotion-related attribution. According to Weiner (1985;1986), there are three dimensions of causality: locus, stability and controllability. Each of these dimensions is conceptualized as a bipolar continuum and Weiner identifies the endpoints of these continua as follows: Locus of causality varies from internal to external; stability from stable to unstable; and controllability from controllable to uncontrollable. Another contribution of Weiner to attribution research is his distinction between two types of achievement-related emotions: outcome-dependent affects and attribution-related affects. Outcome-dependent affects refer to general emotions (Weiner called them “primitive emotions”) such as happiness following positive outcomes or sadness and frustration following negative
outcomes. These emotions are experienced independently of perceptions of the causes of these outcomes. To reiterate, these emotions are determined by the attainment or nonattainment of a desired goal, and not by the cause of the outcome (Weiner 1985). On the other hand, attribution-linked affects are influenced by the causal attributions individuals make. Outcomes which are unexpected, important or negative, motivate individuals to engage in a causal search to determine the causes of the outcomes. Different affects are experienced depending on the kind of causal attribution one makes. As indicated above, there are three causal dimensions. For each of the three causal dimensions, a unique set of feelings is experienced. Weiner (1985; 1986) proposed the following dimensions and the attribution-linked affects:

1- Locus of causality refers to the location of the cause. A cause can be internal (i.e., within the actor) such as ability and effort, or external (i.e., outside the actor) such as luck. Weiner argued that the perceived locus of causality influences self-esteem or self-worth. In particular, in achievement-related contexts successful outcomes which are attributed to the self (internal) are expected to result in greater self-esteem (pride) than success that ascribed to external factors. Similarly, failure attributed to the self is expected to result in lower self-esteem than failure externally attributed (Weiner 1986).

2- Stability of the cause refers to the temporal nature of the cause. Thus, a cause can be perceived as temporary (unstable) or permanent (stable). Weiner (1986) suggested that the emotion of hopelessness follows a failure that is attributed to stable causes. However, the emotion of hope will be experienced when a given success is attributed to a stable cause. Causal stability is assumed by Weiner to determine in part expectancies regarding future success and failure.

3- Controllability refers to the degree of control one exerts over a cause. That is, it refers to whether or not a cause is under one’s personal volition. Guilt, shame, anger and pity are the four emotions suggested by Weiner (1986) to be related to this dimension of perceived causality. Guilt and shame are self-related affects. It was hypothesized that self-related and uncontrollable failure will result in shame, whereas self-related and controllable failure (e.g., lack of effort) is expected to result in guilt. Anger and pity are other-related affects.
A student who fails due to lack of effort is expected, as indicated above, to experience guilt. However, an observer such as a teacher, as an outsider will experience anger toward the student. On the other hand, the teacher is expected to experience the emotion of pity if the cause of the student failure is uncontrollable (e.g., low IQ). According to Weiner (1993a) causal controllability is a major determinant of perceptions of responsibility. Intention, free will and freedom to act are linked closely to the assignment of responsibility. As Weiner put it:

Responsibility differs from causal controllability in that there are circumstances in which a cause is controllable and the act intentional, but responsibility is not inferred because of a moral justification (e.g., a student may not put forth effort in school because of the need to care for a sick parent) or because of other mitigating circumstances (e.g., an inability to distinguish right from wrong) (p. 959).

From the above three dimensions of causality several causal cells can be generated. For example, a cause can be perceived as an internal-stable-uncontrollable (e.g., low aptitude) or internal-stable-controllable (e.g., never studies). Several studies tested the applicability of this theory in various contexts, including achievement, mental health, interpersonal conflict, helping behavior (Barnes et al. 1979; Graham and Folkes 1990), and clinical psychology (Forsterling 1988).

In general, helping behavior as a consequence of attribution has received a great deal of attention from attribution theorists. Several studies were conducted by Weiner and his colleagues to examine the influence of the three dimensions of causality on help giving. In one study, Weiner (1980b) presented his subjects with eight possible causal conditions (locus X stability X controllability). The subjects were asked to indicate their likelihood of help-giving. It was found that subjects were less likely to help when the cause was internal and controllable (lack of effort). Stability had no effect on help-giving. In another study, Weiner et al. (1982) asked 35 college students at the University of California, Los Angeles, to recall events in their life when the feelings of anger, pity, and guilt were experienced. Ninety-four percent of the subjects who recalled situations where the emotion of anger was experienced said that the reason was under the control of the transgressor. Concerning the emotion of pity, 71% of the causes were rated by the subjects as a stable and uncontrollable cause.
These findings, as well as others which indicate the robustness of the controllability
dimension, led Weiner recently (1993a, 1995a) to concentrate more on this dimension of
perceived causality. Weiner (1986) argued that:

Causes perceived as subject to personal control by the individual in need give rise to
neglect, whereas causes perceived as uncontrollable by that person generate help.
Hence, there is an association between a dimension of causality (controllability) and a
behavioral consequence (help versus neglect) (p. 195).

Moreover, he suggested that help is mediated by affective reactions of pity and anger.
To link the dimension of controllability and these affects, Weiner (1986, 1995a, 1995b)
proposed that the more controllable the cause of the other’s need is perceived to be, the less
pity and the more anger will be experienced. These emotions in turn influence help giving.
That is, the more pity and the less anger one feels, the more likely help will be given. Weiner
(1986) wrote:

Common sense dictates that individuals with needs due to controllable factors are
responsible (able-to-respond) and thus must take personal blame, or be
accountable, for their plight. We do not feel sorry for those who fail and are in
control of their destiny. On the contrary their failures tend to generate anger. But
we do feel pity and sympathy for those who fail and are unable to help themselves.
Thus, the reason we neglect those with controllable needs may be that this causal
perception elicits anger, which in turn evokes neglect. Conversely, we may help
those with uncontrollable needs because this perception elicits pity (sympathy),
which in turn evokes approach behavior and help (p. 196).

A simplified version of Weiner’s theory is shown in Figure 1. These hypotheses were
examined and largely supported by Weiner (1980a, 1980b, 1993, 1995a, 1995b, 1996) and
others (e.g., Betancourt 1990; Betancourt and Blair 1992; Betancourt, Hardin and Manzi

Weiner (1980a) presented his subjects with a vignette and asked them to indicate the
degree to which the cause of the need was perceived as personally controllable. Their
emotional reactions of pity, sympathy, disgust, and distaste as well as their likelihood of
helping the person in the vignette were assessed. The correlations found between perception
of control and sympathy, and between perception of control and disgust were \( r = -0.77 \) and
Figure 1. Weiner’s theory of attribution-affect-action.
The correlations of sympathy and disgust with help were \( r = .46 \) and \( r = -.71 \), respectively. Finally, the correlation between control and help was \( r = -.37 \). These correlations indicated that the more controllable the cause of the need (for example, a vignette about drunkenness), the less sympathy was expressed toward the target in the vignette. Also, the more disgust expressed by the subjects toward the target, the less help the target will receive. Weiner (1980a) computed a partial correlation between perceived control and helping judgments, holding sympathy and disgust constant, and found that the correlation between control and judgments of help reduced to \( r = -.02 \) and \( r = .04 \), respectively. The partial correlation between disgust and help and between sympathy and help, holding control constant, led to slight reduction in the correlations (from \( r = -.71 \) to \( r = -.66 \) and from \( r = .46 \) to \( r = .30 \), respectively).

Weiner (1980b) replicated the above study using the same vignettes. The subjects were 116 students from the University of California, Los Angeles. Following each scenario, the subjects were asked to rate the degree to which the cause was perceived as personally controllable, to rate their feelings of sympathy and anger, and to indicate their likelihood of giving help to the person in the vignette. The correlation between control and help was \( r = -.54 \), between sympathy and help was \( r = .36 \), and between anger and help was \( r = -.40 \). Help was correlated with sympathy positively (\( r = .59 \)) and with anger negatively (\( r = -.49 \)).

Meyer and Mulherin (1980) presented 80 students with a questionnaire describing eight hypothetical situations in which the subjects were asked to imagine that they were approached by an acquaintance who needed financial aid. The cause of the need was manipulated, along with the three dimensions of causality (i.e., locus, stability, and controllability). The findings of this study were consistent with Weiner's mediation hypothesis. In particular, the path coefficients from control to anger and to sympathy were \( \beta = .64 \) and \( \beta = -.37 \), respectively. The coefficient from anger to help was \( \beta = -.56 \) and from sympathy to help was \( \beta = .32 \). A modest path between controllability and help was found (\( \beta = -.14 \)).

Betancourt (1983, 1990) integrated the helping behavior approach with Weiner's attribution-affect-action model. The correlations between controllability and sympathy, and
between controllability and help were, $r = -.40$ and $r = -.43$, respectively. Using structural equation modeling, Betancourt found the paths from controllability to help, and from sympathy to help to be $\beta = -.30$ (t-value = -2.32) and $\beta = .34$ (t-value = 2.64), respectively.

Reisenzein (1986) asked 138 students to read two vignettes (one regarding a subway and the other regarding class notes) where the cause of the need for help was manipulated. For example, in the subway scenario the person in need of help was depicted as either drunk (controllable) or ill (uncontrollable). The subjects were asked to report their emotional reactions of anger and pity, as well as their likelihood of help giving. Five models related to Weiner's theory were tested using structural equation modeling. The first model is the same as the model in Figure 1. In the second model, a path from perceived controllability to help was added. The error terms of anger and sympathy were correlated in the third model. In the fourth model, the path from perceived controllability to help was freed, and the error terms between anger and sympathy were correlated (i.e., all the paths in model 2 and 3 were included). A path from eliciting situation to help was added. This path was added to account for nonattributional factors that might influence help giving. A nonsignificant chi-square ($\chi^2 = 61, N = 138$) = 86.58, $p < .02$, GFI = .94) indicated that Weiner's basic theoretical model (the first model) fit the data. Nonsignificant chi-square difference tests were found when the first model was compared to models 2, 3, and 4. In other words, the addition of the paths in model 2, 3, and 4 did not increase the fit. However, adding a path to the first model from the eliciting situation to help (which results in a model 5) increased the fit ($\chi^2 = 1, N = 138$) = 4.33, $p < .05$, GFI = .94).

Schmidt and Weiner (1988) conducted a study to find out if the instructions given to subjects before reading the vignette would influence the relationship between controllability, anger, sympathy and help. Three types of instruction were used in this study. In one condition, the subjects were asked to imagine themselves in the situation described in the vignette. In the second condition, the subjects were given a standard empathy manipulation. In the third condition, the subjects were asked to be as objective as possible. In the fourth condition, the subjects were not given any particular instruction (the control condition). Four hundred and ninety-six students then were asked to read a vignette where the cause of the
need for help was manipulated (i.e., controllable or uncontrollable). Their emotional reactions of anger and sympathy as well as their degree of willingness to help were assessed. No significant path was found between perceived controllability and help in any of the conditions. However, a path from eliciting situation (i.e., vignette) to help was found ($\beta = .25$).

Schwarzer and Weiner (1991) studied the affective reactions of 84 students toward eight diseases-related stigmas (AIDS, cancer, obesity, anorexia, depression, heart disease, child abuse, and drug abuse). The target person in the vignettes was described as a roommate. The researchers found no correlation between perception of responsibility and anger for all eight diseases. Pity, however, was found to be correlated negatively ($r = -.40$) with perception of responsibility only in AIDS and heart disease conditions. No correlation was found between feelings of anger and support in the case of AIDS and five other diseases. In another study, Dooley (1995) found no significant path between anger and helping judgments in her study of students’ reactions toward a friend with AIDS. These results were inconsistent with Weiner’s hypothesis that help giving is mediated by the affects of anger and pity. In particular, it is inconsistent with the idea that the more anger the less help is given.

Other findings that were inconsistent with Weiner’s predications were his finding (Weiner 1980b) of correlation between controllability and help after partialing out the effect of affects. Moreover, Betnacourt (1983, 1990) and Meyer and Mulherin (1980) found a path from controllability to help in their studies. Other studies reviewed by Weiner (1996) reported similar findings (e.g., Weiner et al. 1988; Zucker and Weiner 1993). Due to this inconsistency, further studies are needed to solve uncertainty regarding the existence of a direct path between perceived controllability and help. Moreover, a direct path from eliciting situation (i.e., vignette) to help needs to be addressed. One suggestion came from Weiner (1986), who wrote:

I suggest that amount of variance in helping behavior (and helping judgment) that is directly accounted for by thought (attributions) as opposed to emotions will in part depend on the emotion-arousing properties of the situations. It is hypothesized that, as one becomes increasingly involved in a situation, perceptions of controllability will have a lessening direct influence on the decision to help or neglect. On the other hand, as situation becomes increasingly remote or trivial to an actor, “cold” thoughts
will play a large, direct part in helping, with emotions relegated to a less important role. In addition, it appears quite likely that a direct path from the situation to helping is needed. This path captures the many nonattributational determinants of help giving and embrace concerns such as costs and benefits (p. 204-205).

In another place, Weiner (1996) downplayed the importance of some findings and considered them as “only scattered suggestive evidence that causal and/or responsibility inferences have an independent influence on helping intentions (p. 209).

Research hypotheses

Based on the theoretical framework and the literature reviewed above, two sets of hypotheses were formulated. The first six hypotheses were formulated to examine Weiner's attribution-affects-action model. These hypotheses were:

1- The greater the perceived level of responsibility for the onset of AIDS, the greater the amount of negative affect.
2- The less the perceived level of responsibility for the onset of AIDS, the greater the amount of positive affect.
3- The greater the amount of negative affect, the less the degree of willingness to help.
4- The greater the amount of positive affect, the greater the degree of willingness to help.
5- The perception of responsibility for the onset of AIDS does not directly influence the degree of willingness to help.
6- The eliciting situation does not directly influence the degree of willingness to help.

Hypotheses 7 through 12 were formulated to examine the emotional reactions of the Saudi students toward a friend with AIDS as well as their willingness to give help. Several factors have been shown in the literature of AIDS to influence people’s emotional reactions and willingness to help AIDS patients. Among these factors were fear of AIDS, degree of religiosity, belief in a just-world, and knowledge about AIDS transmission. In this study, these nonattributational variables were hypothesized to exert influence on students’ perception of responsibility, emotional reactions and willingness to help a friend with AIDS (Figure 2).

7- The greater the amount of fear of AIDS, the greater the amount of negative affect.
8- The greater the amount of fear of AIDS, the less the degree of willingness to help.
9- The greater the degree of religiosity, the greater the perception of responsibility.
10- The greater the amount of knowledge about AIDS, the greater the degree of willingness to help.
11- The greater the belief in a just-world, the greater the perception of responsibility.
12- The greater the degree of religiosity, the less the amount of positive affect.
Figure 2. The theoretical model of willingness to help a friend with AIDS.
CHAPTER FOUR:
METHODS

Population and sample

The population of this study was Saudi male students who attended classes at the Institute of Public Administration in Spring 1997. Two hundred and ninety-nine subjects were recruited from a variety of classes. The department of public relations and the researcher solicited instructors to allow the research materials to be administered in their classes. Participation in this study was voluntary; no course credit was given or taken for participation or refusal. Respondents were given the whole lecture's time to fill out the questionnaires.

Research design and procedure

This study followed a between-subjects experimental design. The subjects were given a self-report questionnaire that contained instructions, several scales, a vignette describing a friend with AIDS, and a set of dependent measures. The cover page of the questionnaire contained information describing the general instructions, the assurance of confidentiality and the freedom to choose not to be part of the sample. Moreover, the subjects were told that there were no right or wrong answers, and that they should simply give their opinions in response to each statement. The questionnaires were distributed to the subjects randomly. Subjects were debriefed about the purpose of the study.

The booklet consisted of three parts. The first part of the questionnaire included a just-world scale, a fear of AIDS scale, and the knowledge of AIDS scale, presented in that order. The vignettes and the rating scales made up the second part. The last part contained the background questions. The study was reviewed and approved by the Human Subjects Review Committee at Iowa State University (see appendix C). The questionnaire was translated to Arabic by the researcher with the assistance of two Saudis (one male journalist and one female pharmacist). To assure the accuracy of the translation, a professor in the
sociology department at a Saudi university was asked to check the translation. Comments from those reviewers were incorporated in the final version of this questionnaire.

**Measures**

**Just-World scale**

Belief in a just-world was measured by Rubin and Peplau’s (1975) twenty items just-world scale. Nine items measured belief in a just-world (e.g., “Basically, the world is a just place”) and the remaining items measured belief in an unjust-world (e.g., “Good deeds often go unnoticed and underrewarded”). Three items from this scale were not included in study. These items measured the belief in an unjust-world (two items) and a just world (one item) in political and judicial spheres. These items were not included in this study because they were not suitable to the Saudi culture:

1- The political candidate who sticks up for his principles rarely gets elected.
2- Although evil men hold political power for a while, in the general course of history good wins out.
3- It is often impossible for a person to receive a fair trial in the USA.

The respondents were asked to indicate their degree of agreement or disagreement on a 7-point continuum, with 1= strongly disagree and 7= strongly agree and 4= uncertain.

**Fear of AIDS scale**

Fear of AIDS was assessed by six items. These items gauged personal fear of AIDS (e.g., “I am afraid I will get AIDS”). Respondents were asked to circle the statement that best described their level of agreement or disagreement with each item. Responses to these items were recorded on a seven point Likert-type scale with 1= strongly disagree and 7= strongly agree.

**Knowledge of AIDS scale**

The AIDS knowledge scale was derived from several publications (e.g., Goodwin and Roscoe 1988; Trezza 1994; The Joint United Nations Program on HIV/AIDS 1996). The items for this scale were selected to measure students’ knowledge of AIDS transmission.
This scale consisted of 16 items. Four items measured the respondent’s general knowledge about AIDS (e.g., “There is a cure for AIDS”). Knowledge about the proven routes of HIV transmission was gauged by seven items (e.g., “One can get AIDS by having sex with a person who has the AIDS virus”). Knowledge about the unlikely routes of HIV transmission (e.g., “One can get the AIDS virus just by being near someone who has the AIDS virus”) were assessed by 5 items. The items in this scale were answered by indicating true, false, or do not know. A score of 1 was assigned to the correct answer and zero to the incorrect answer. The “do not know” answer was counted as incorrect and given zero, since lack of knowledge may be as risky as incorrect knowledge. On this scale, the maximum possible score one could get is 16 and the minimum is zero. Higher scores on this scale indicated greater knowledge about AIDS.

**Vignettes**

Two vignettes were constructed for this study. These vignettes were identical except for the cause of AIDS. The vignette was written as a conversation that took place between two male friends. In one vignette the cause of AIDS was presented as controllable. That is, the target contracted the AIDS virus through repeated unprotected heterosexual encounters. The frequency of unprotected sexual encounters suggested that the AIDS patient did not contract the AIDS virus accidentally. This is in accordance with Weiner’s conceptualization of responsibility. In the second vignette the cause of AIDS was presented as uncontrollable. Here the AIDS patient contracted the AIDS virus through a blood transfusion.

The vignette was followed by 28 items. Four of these items were used as indicators for the latent factor assignment of responsibility. For responsibility, the questions measured the perceived controllability, responsibility, avoidance, and assignment of personal fault. The respondents were asked to indicate their assessment of the situation by choosing a number that corresponds to their opinion. To illustrate, one of these question read, “To what degree do you think that your friend had personal control over being infected with the AIDS virus?” A seven-point rating scale followed each question ranging from 1= definitely not under his personal control to 7= completely under his personal control.
The negative affect toward the AIDS patient was assessed by four items. These items were written in a question format. These questions tapped the level of anger, irritation, madness, and aggravation (e.g., "How much anger do you feel toward your friend?"). Again, a seven-point rating scale followed each question, with 1 corresponding to "absolutely none" and 7 corresponding to "a great deal." Positive emotions, on the other hand, were measured by six indicators having to do with sympathy, pity, concern, sorry, sad, and upset. "How much sympathy do you feel for your friend?" is an example of these measures.

Fourteen items were constructed to assessed the respondents' willingness to help. The items that composed this scale tapped support for the AIDS patient in a variety of situations. Some of these items required the respondent to be in a close contact with the AIDS patient, such as helping him up and down stairs. Other items required a minimal contact (i.e., no physical contact) between the respondents and the AIDS patient such as calling the AIDS patient by phone. Each item was scored on a seven-point scale, with 1 equal to "definitely not willing to help" to 7 equal to "definitely willing to help."

**Demographic questions**

A set of questions was given at the end of the questionnaire to elicit information about the respondent's demographic background. The respondent's age, marital status, sources of information about AIDS, and educational level were assessed. Respondents' degree of religiosity was gauged by three questions (e.g., "How much influence do you think Islamic teaching has on your life?"). A four-point response scale was used for each question (see appendix).

**Statistical analysis**

To test the models proposed, structural equation modeling (SEM) was used. In structural equation modeling the null hypotheses suggests that the difference between the sample covariance matrix and the model implied covariance is zero. The SEM is said to fit if the relationships suggested by the model generates an estimated covariance matrix that closely matches the covariance matrix in the observed data.
Two types of fit measures are important to researchers. The first set of fit indicators deals with the overall fit of the model to the observed data. These indicators measure the departure of $\Sigma$ from $S$. The second set of measures is concerned with the fit of specific parameters (component fit measures).

The $\chi^2$ test was employed to test the null hypothesis that the proposed model does fit the data. Here we do not want to reject the null hypothesis. If the $\chi^2$ is significant then the estimated covariance matrix is found to be different from the sample matrix and the null hypothesis is rejected. This means that the proposed model did not represent the relationships in the observed data. The value of $\chi^2$, however, is affected by several factors, such as the sample size and the number of the variables (Bollen 1989). Other measures of the overall fit are the Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI). According to Joreskog and Sorbom (1989), these indices are independent of the sample size and are robust against departures from normality. These indices measure the overall fit. They indicate the relative amount of variance and covariance in the data ($S$) accounted for the proposed model ($\Sigma$). The AGFI is equivalent to the GFI, except that the AGFI is adjusted for the degrees of freedom of the model relative to the number of variables. The maximum value of these indices is one when $S = \Sigma$. The $\chi^2$ test and the GFI were used in evaluating the proposed models.

Two methods are available to evaluate a single parameter. One way is to compare the difference in the chi-square test between two models, one including the parameter and the other without it (nested models). If the difference is significant then the parameter improved the fit of the model (Newcomb 1990). Another way is to examine the $t$-value for the parameter, which is defined as the parameter estimate divided by its standard error. Parameters whose $t$-values are greater than 2.00 are significant with a two-tailed test, and they are judged to be different from zero (Joreskog and Sorbom 1989).

A series of nested models can be compared using several incremental fit indices such as normed fit index, non-normed fit index (Bentler and Bonnett 1980), comparative fit index, incremental fit index as well as $\chi^2$ (Bollen 1989). The normed fit index ($\Delta_1$) measures the improvement in fit between a series of nested models which are ordered from the most
restricted model (null model) to the least restricted. Another way to compare nested models is through chi-square. The difference in the chi-squares between two models is itself distributed as chi-square, with degrees of freedom equal to the difference in the degrees of freedom between the two models. The tested hypothesis here is that the two models are equivalent. If the difference in the chi-square is significant, then the model with the freed parameter explains the relationships in the data better than the nested model (Coover, Penner and MacCallum 1990). The chi-square and the normed fit index were used here.
CHAPTER FIVE:
RESULTS

The findings of this study are presented in two parts. The first is devoted to the presentation of the respondents’ backgrounds and the descriptive statistics related to the variables in this study. This is followed by a presentation of the results regarding the hypotheses testing and model evaluation.

The subjects’ ages ranged from 18 to 35 with a mean of 26 (Table 1). Roughly, half (48 %) of the subjects were 26 years or older. The educational level of the sample ranged from less than high school to beyond the undergraduate level (Table 2). Only one respondent had less than a high school degree.

Table 1. Age of the respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>2</td>
<td>0.7</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>20</td>
<td>15</td>
<td>5.0</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>7.4</td>
</tr>
<tr>
<td>22</td>
<td>28</td>
<td>9.4</td>
</tr>
<tr>
<td>23</td>
<td>23</td>
<td>7.7</td>
</tr>
<tr>
<td>24</td>
<td>21</td>
<td>7.0</td>
</tr>
<tr>
<td>25</td>
<td>41</td>
<td>13.7</td>
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<tr>
<td>26</td>
<td>21</td>
<td>7.0</td>
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<tr>
<td>27</td>
<td>25</td>
<td>8.4</td>
</tr>
<tr>
<td>28</td>
<td>15</td>
<td>5.0</td>
</tr>
<tr>
<td>29</td>
<td>9</td>
<td>3.0</td>
</tr>
<tr>
<td>30</td>
<td>21</td>
<td>7.0</td>
</tr>
<tr>
<td>31</td>
<td>12</td>
<td>4.0</td>
</tr>
<tr>
<td>32</td>
<td>9</td>
<td>3.0</td>
</tr>
<tr>
<td>33</td>
<td>10</td>
<td>3.3</td>
</tr>
<tr>
<td>34</td>
<td>13</td>
<td>4.3</td>
</tr>
<tr>
<td>35</td>
<td>9</td>
<td>3.0</td>
</tr>
</tbody>
</table>

_sample size = 299
Table 2. Educational level of the respondents*

<table>
<thead>
<tr>
<th>Degree</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate or less</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>High school</td>
<td>86</td>
<td>28.8</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>140</td>
<td>46.8</td>
</tr>
<tr>
<td>More than bachelor's degree</td>
<td>72</td>
<td>24.1</td>
</tr>
</tbody>
</table>

*Sample size = 299

Table 3. Marital status of the respondents*

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>185</td>
<td>61.9</td>
</tr>
<tr>
<td>Married</td>
<td>114</td>
<td>38.1</td>
</tr>
</tbody>
</table>

*Sample size = 299

The majority (47%) of the sample had an undergraduate degree. Table 3 shows the marital status of the subjects who participated in this study. One hundred eighty-five of the respondents were single (62%) and the remaining were married (38%). No divorced or widowed individuals were found in this sample. Table 4 shows that the majority of the respondents (90%) indicated that Islam, in general, is very important in their lives (M = 3.88, SD = .40). When the respondents were asked, how much influence Islam had on their daily lives, 32.4% choose the response category “very great” (M = 3.05, SD = .82). Finally, 42% of the sample said that they “always attend the worship services in the mosque” (M =3.13, SD = .89). The Cronbach alpha for this scale was .64. An index was constructed from these three items called religion.

The respondents’ self-assessment of the amount of knowledge they had about AIDS is presented in Table 5. A large percentage of the sample (69%) believed that they had sufficient information about AIDS. Only six respondents thought they knew nothing about AIDS.
Table 4. Responses to the items on degree of religiosity*  

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much influence do you think Islamic teaching has on your life?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Minimal</td>
<td>10</td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Moderate</td>
<td>63</td>
<td>21.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Quite great</td>
<td>129</td>
<td>43.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Very great</td>
<td>97</td>
<td>32.4</td>
<td>3.05</td>
<td>.82</td>
</tr>
<tr>
<td>2- How frequently do you attend the worship services in the mosque?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1- Rarely</td>
<td>13</td>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- Sometimes</td>
<td>61</td>
<td>20.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3- Most of the times</td>
<td>100</td>
<td>33.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- Always</td>
<td>125</td>
<td>41.8</td>
<td>3.13</td>
<td>.89</td>
</tr>
<tr>
<td>3- In general, how important is Islam in your life?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Slightly important</td>
<td>1</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Important</td>
<td>4</td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Somewhat important</td>
<td>26</td>
<td>8.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Very important</td>
<td>268</td>
<td>89.6</td>
<td>3.88</td>
<td>.40</td>
</tr>
</tbody>
</table>

*Sample size = 299

Table 5. Respondents self-assessment of AIDS knowledge*  

<table>
<thead>
<tr>
<th>Amount of knowledge</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing at all</td>
<td>6</td>
<td>2.0</td>
</tr>
<tr>
<td>A little bit</td>
<td>53</td>
<td>17.7</td>
</tr>
<tr>
<td>Enough</td>
<td>206</td>
<td>68.9</td>
</tr>
<tr>
<td>Very much</td>
<td>34</td>
<td>11.4</td>
</tr>
</tbody>
</table>

*Sample size = 299
Table 6 shows the respondent’s answers to the knowledge of AIDS scale. The Cronbach alpha reliability for this scale was .67. Confirming Table 5, it seemed that most respondents had a good knowledge of AIDS. Put differently, 13 out of 16 knowledge items were answered correctly by at least 61% of the sample. The percentages for these 13 items ranged from a low of 61.2% correct for item 7 to a high of 97% correct for the first item. A large number of the respondents knew that AIDS can be contracted through sex and sharing contaminated needles (93.3% and 93.3%, respectively). However, there were three knowledge items which the respondents were not able to answer correctly. Only 26.8% of the sample knew that AIDS cannot be acquired by donating blood. Less than 27% of the sample knew that AIDS cannot be transmitted through mosquitoes and insects. Only 39% of the sample knew that AIDS can be passed from mother to infant through breast feeding.

The just-world scale (Rubin and Peplau 1975), as indicated in the literature review chapter, often suffers from low reliability. One suggestion to increase the reliability of the scale was to calculate the reliability for the just-world items and the unjust-world items separately (Furnham and Gunter 1984). The Cronbach alpha for the just-world scale was .53. Deleting one item from the scale increased its reliability only to .54. When the scale was divided into two subscales, the reliability of the just-world subscale was .62 and .52 for the unjust-world subscale (Table 7). Because of its higher reliability in comparison to the total scale and the unjust-world subscale, the just-world subscale has been used. An index was constructed from these 10 items for use in the analysis.

The reliability for the six items making up the fear of AIDS scale was \( \alpha = .57 \). Two items (i.e., item 4 and 6) were deleted to increase the reliability of the scale to \( \alpha = .71 \). An index of the remaining four items was constructed.

The four indicators of the assignment of responsibility were subjected to exploratory factor analysis. Principal components analysis with varimax rotation was performed on these items. All the items loaded high on one factor, which explained 88.4% percent of the variance in the indicators (Table 8). The Cronbach alpha for this scale was .96 (see appendix A for means and standard deviations).
Table 6. Responses to statements in AIDS knowledge scale

<table>
<thead>
<tr>
<th>Statement</th>
<th>Correct answer</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. One can get AIDS by having sex with a person who has the AIDS virus.</td>
<td>T</td>
<td>290</td>
<td>97.0</td>
</tr>
<tr>
<td>2. Looking at a person is enough to tell if he or she has the AIDS virus.</td>
<td>F</td>
<td>200</td>
<td>66.9</td>
</tr>
<tr>
<td>3. Only homosexuals get AIDS.</td>
<td>F</td>
<td>243</td>
<td>81.3</td>
</tr>
<tr>
<td>4. One can get AIDS by kissing a person who has AIDS on the cheek.</td>
<td>F</td>
<td>237</td>
<td>79.3</td>
</tr>
<tr>
<td>5. AIDS virus may live in the human body for years before symptoms appear.</td>
<td>T</td>
<td>254</td>
<td>84.9</td>
</tr>
<tr>
<td>6. One can get AIDS from receiving blood from a donor who has AIDS.</td>
<td>T</td>
<td>293</td>
<td>98.0</td>
</tr>
<tr>
<td>7. There is a no cure for AIDS.</td>
<td>T</td>
<td>183</td>
<td>61.2</td>
</tr>
<tr>
<td>8. An infected mother can give the AIDS virus to the baby during pregnancy.</td>
<td>T</td>
<td>273</td>
<td>91.3</td>
</tr>
<tr>
<td>9. Homosexual activity is the most risky type of sexual contact between an HIV-infected and non-infected person.</td>
<td>T</td>
<td>194</td>
<td>64.9</td>
</tr>
<tr>
<td>10. You can get AIDS by touching someone with AIDS.</td>
<td>F</td>
<td>246</td>
<td>82.3</td>
</tr>
<tr>
<td>11. The AIDS virus can be contracted through giving blood to a blood bank.</td>
<td>F</td>
<td>80</td>
<td>26.8</td>
</tr>
<tr>
<td>12. A person can get the AIDS virus by using a public telephone after someone who has the AIDS virus.</td>
<td>F</td>
<td>242</td>
<td>80.9</td>
</tr>
<tr>
<td>13. An infected mother can give the AIDS virus to the baby through breast feeding.</td>
<td>T</td>
<td>115</td>
<td>38.5</td>
</tr>
<tr>
<td>14. Mosquitoes and insects bites can transmit the AIDS virus.</td>
<td>F</td>
<td>80</td>
<td>26.8</td>
</tr>
<tr>
<td>15. AIDS virus can be transmitted through semen.</td>
<td>T</td>
<td>205</td>
<td>68.6</td>
</tr>
<tr>
<td>16. AIDS virus can be contracted through sharing contaminated needles with intravenous drug users.</td>
<td>T</td>
<td>279</td>
<td>93.3</td>
</tr>
</tbody>
</table>

aSample size = 299
Table 7. Reliability analysis for just-world subscale^a

<table>
<thead>
<tr>
<th>Item</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Basically, the world is a just place.</td>
<td>.60</td>
</tr>
<tr>
<td>4. People who get “lucky breaks” have usually earned their good fortune.</td>
<td>.57</td>
</tr>
<tr>
<td>6. Students almost always deserve the grades they receive in school.</td>
<td>.59</td>
</tr>
<tr>
<td>7. Men who keep in shape have little chance of suffering a heart attack.</td>
<td>.62</td>
</tr>
<tr>
<td>8. It is rare for an innocent man to be wrongly sent to jail.</td>
<td>.57</td>
</tr>
<tr>
<td>10. By and large, people deserve what they get.</td>
<td>.60</td>
</tr>
<tr>
<td>11. When parents punish their children, it is almost always for good reasons.</td>
<td>.59</td>
</tr>
<tr>
<td>13. In almost any business or profession, people who do their job well rise to the top.</td>
<td>.58</td>
</tr>
<tr>
<td>15. People who meet with misfortune have often brought it on themselves.</td>
<td>.61</td>
</tr>
<tr>
<td>16. Crime does not pay.</td>
<td>.60</td>
</tr>
</tbody>
</table>

Cronbach alpha = .62
^aSample size = 299

Table 8. Factor loading for the assignment of responsibility items^a

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent do you think that your friend had personal control over being infected with the AIDS virus?</td>
<td>.93</td>
</tr>
<tr>
<td>2. To what extent do you believe that your friend is responsible for what happened to him?</td>
<td>.91</td>
</tr>
<tr>
<td>3. To what extent do you think that it is your friend’s own fault that he is in the present condition?</td>
<td>.96</td>
</tr>
<tr>
<td>4. I think my friend could have avoided contracting the AIDS virus.</td>
<td>.95</td>
</tr>
</tbody>
</table>

^aSample size = 299

The six indicators of positive affect were subjected to exploratory factor analysis (see appendix A for means and standard deviations). A principal component analysis with varimax rotation was used. One factor which explained 66.4% of the variance in these items was extracted. Table 9 shows the loading of sympathy, pity, concern, sorry, sad and upset on this factor. The Cronbach alpha for these items was .90. An index named positive affect was constructed from these items for future analysis.
Table 9. Factor loading for positive affect items

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much sympathy do you feel for your friend?</td>
<td>.84</td>
</tr>
<tr>
<td>2. How much pity do you feel for your friend?</td>
<td>.87</td>
</tr>
<tr>
<td>3. How much concern do you feel for your friend?</td>
<td>.89</td>
</tr>
<tr>
<td>4. How sorry do you feel for your friend?</td>
<td>.80</td>
</tr>
<tr>
<td>5. How sad do you feel for your friend?</td>
<td>.77</td>
</tr>
<tr>
<td>6. How much does your friend upset you?</td>
<td>.72</td>
</tr>
</tbody>
</table>

Sample size = 299

A principal components analysis with varimax rotation was performed on the four indicators of negative affect (see appendix for means and standard deviations). One factor was extracted which accounted for 58.4% of the variance in these items. Table 10 shows the loading of anger, aggravation, madness, and irritation on this factor. The Cronbach alpha for these items was .74. An index was constructed from these items called negative affect.

Table 10. Factor loading for negative affect items

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much anger do you feel toward your friend?</td>
<td>.63</td>
</tr>
<tr>
<td>2. How aggravated do you feel by your friend?</td>
<td>.74</td>
</tr>
<tr>
<td>3. How much does your friend make you mad?</td>
<td>.80</td>
</tr>
<tr>
<td>4. How irritated do you feel by your friend?</td>
<td>.86</td>
</tr>
</tbody>
</table>

Sample size = 299

An exploratory factor analysis was performed on the fourteen items of willingness to help. Principal components extractions with orthogonal and oblique rotations were used. Two factors were extracted using orthogonal rotation. The factor loadings on the first factor ranged from .67 to .85, and from .63 to .87 on the second factor. However, five items loaded high on the two factors. Item 3, 6, 10, 13, and 14 loaded .44, .75, .73, .67 and .51 on the first factor, respectively. On the second factor they loaded .68, .49, .46, .52, and .63, respectively.
Examining these loading conceptually led the researcher to decide that items 3, and 14 belong to the second factor (loaded .68 and .63, respectively) and items 6, 10, and 13 (loaded .75, .73, .67, respectively) to the first factor. That is, all items on the first factor related to direct contact with the AIDS patient. On the other hand, items on the second factor related to indirect contact with the friend. The principle component analysis with oblique rotation gave a clearer picture of these factors. The results of this rotation are presented in Table 11. Items 4, 6, 7, 8, 9, 10, 11, 12, and 13 loaded on the first factor strongly ranging from .62 to .92. The remaining items, that is, 1, 2, 3, 5 and 14, loaded on the second factor with item 1 being the strongest and item 14 the weakest (.95 and .51, respectively). The first factor (items 4, 6, 7, 8, 9, 10, 11, 12, and 13) was conceptualized as direct help. The second factor (items 1, 2, 3, 5, and 14) was conceptualized as indirect help. The correlation between these two factors was .78. The Cronbach alphas for the first and the second factor were .95 and .87 respectively.

Table 11. Pattern matrix for helping behavior items

<table>
<thead>
<tr>
<th>Item</th>
<th>First factor</th>
<th>Second factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Go to the pharmacy to pick up a prescription for him.</td>
<td>-.09</td>
<td>.95</td>
</tr>
<tr>
<td>2. Help him find the best doctor.</td>
<td>-.03</td>
<td>.86</td>
</tr>
<tr>
<td>3. Give him money to help pay for his medical treatments.</td>
<td>.27</td>
<td>.61</td>
</tr>
<tr>
<td>4. Drive him to school.</td>
<td>.79</td>
<td>.08</td>
</tr>
<tr>
<td>5. Call him at home to see how he feels.</td>
<td>.22</td>
<td>.64</td>
</tr>
<tr>
<td>6. Visit with him to see how he feels.</td>
<td>.73</td>
<td>.23</td>
</tr>
<tr>
<td>7. Assisting him in walking across campus.</td>
<td>.92</td>
<td>-.00</td>
</tr>
<tr>
<td>8. Accompany him to his doctor's office.</td>
<td>.91</td>
<td>.01</td>
</tr>
<tr>
<td>9. Help him up and down stairs.</td>
<td>.92</td>
<td>-.01</td>
</tr>
<tr>
<td>10. Visit him in the hospital.</td>
<td>.72</td>
<td>.21</td>
</tr>
<tr>
<td>11. Travel with him for treatment outside Saudi Arabia for several weeks.</td>
<td>.73</td>
<td>.03</td>
</tr>
<tr>
<td>12. Stay at his bedside at the moment of his dying.</td>
<td>.75</td>
<td>-.16</td>
</tr>
<tr>
<td>13. Doing things with him to distract his mind from the illness.</td>
<td>.62</td>
<td>.30</td>
</tr>
<tr>
<td>14. Help to protect him from people's mistreatment.</td>
<td>.38</td>
<td>.51</td>
</tr>
</tbody>
</table>
Two indices were created to be included in the future analysis (see appendix A for means and standard deviations).

A path from eliciting situation (having read the vignette about sexual relations or blood transfusion) to perception of responsibility was estimated to check for the effectiveness of the experimental manipulation. The path from eliciting situation to perception of responsibility was .85. This finding indicates that the manipulation was effective. In other words, the AIDS patient who contracted AIDS from sex is perceived as more responsible. Moreover, a path from eliciting situation to willingness to help was tested. This hypothesis was introduced to capture the non-attributional influence on helping giving. It was not supported. The standardized coefficient for this path was zero which means the path from the vignette had no direct influence on help giving without the mediation of attribution-affect link.

Hypothesis testing and model comparisons

The results of hypothesis testing, model evaluation, and comparisons are presented below. The five hypotheses related to Weiner’s theory were tested first, followed by a test of the remaining hypotheses. Next, three models related to Weiner’s attribution-affect-action theory were evaluated and compared. Finally, a model was evaluated in which several variables were hypothesized to influence responsibility, positive affect, negative affect, and willingness to help in Weiner’s theory. AMOS 3.6 was used to estimate the models.

In accordance with Weiner’s theory, the path from perception of responsibility to willingness to help was not significant ($\gamma_{31} = .04$). Moreover, the paths from perception of responsibility to positive and negative affects were significant and in the predicted directions ($-.41$ and $.25$, respectively). The path from positive affect to willingness to help was $.65$ and from negative affect to willingness to help was $.04$.

Based on the findings presented above, the following hypotheses were supported:

1. The perception of responsibility for the onset of AIDS does not directly influence the degree of willingness to help.
2- The greater the perceived level of responsibility for the onset of AIDS, the greater the amount of negative affect.
3- The less the perceived level of responsibility for the onset of AIDS, the greater the amount of positive affect.
4- The greater the amount of positive affect, the greater the degree of willingness to help.

However, the hypothesis that the greater the amount of negative affect, the less the degree of willingness to help was not supported (β32 = .04). Table 12 presents these paths with their t-ratios.

### Table 12. The standardized solution of the path coefficients and t-ratios*

<table>
<thead>
<tr>
<th>Paths</th>
<th>Standardized coefficients</th>
<th>t-ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>γ11: Responsibility to positive affect</td>
<td>-0.41</td>
<td>7.77*</td>
</tr>
<tr>
<td>γ21: Responsibility to negative affect</td>
<td>0.25</td>
<td>4.43*</td>
</tr>
<tr>
<td>γ31: Responsibility to willingness to help</td>
<td>0.04</td>
<td>0.79</td>
</tr>
<tr>
<td>β31: Positive affect to willingness to help</td>
<td>0.65</td>
<td>12.07*</td>
</tr>
<tr>
<td>β32: Negative affect to willingness to help</td>
<td>0.04</td>
<td>0.53</td>
</tr>
</tbody>
</table>

* Significant at .01 level

To test hypotheses 7 through 12, a model was run that included degree of religiosity, just-world belief, knowledge about AIDS, and fear of AIDS as exogenous variables. The influence of religiosity on positive affect was found to be significantly negative (γ21 = -.10). That is, religious respondents had less positive feeling toward the friend with AIDS than the less religious ones. However, religiosity had no influence on perception of responsibility (γ11 = .03, ns). Belief in a just-world had no effect on respondents' perception of responsibility (γ12 = -.04). Knowledge about AIDS and HIV transmission had a weak positive effect on willingness to help (γ43 = .11). That is to say, respondents who knew more about AIDS and HIV transmission reported more willingness to give help. Fear of
Table 13. The standardized solution of the path coefficients and t-ratios

<table>
<thead>
<tr>
<th>Paths</th>
<th>Standardized coefficients</th>
<th>t-ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>y21: Religiosity to positive affect</td>
<td>-.10</td>
<td>2.03*</td>
</tr>
<tr>
<td>y11: Religiosity to responsibility</td>
<td>.03</td>
<td>.52</td>
</tr>
<tr>
<td>y12: Just-world to responsibility</td>
<td>-.04</td>
<td>.73</td>
</tr>
<tr>
<td>y43: Knowledge to willingness to help</td>
<td>.11</td>
<td>2.22*</td>
</tr>
<tr>
<td>y44: Fear of AIDS to willingness to help</td>
<td>.05</td>
<td>1.01</td>
</tr>
<tr>
<td>y34: Fear of AIDS to negative affect</td>
<td>.04</td>
<td>.39</td>
</tr>
</tbody>
</table>

* Significant at .05 level

Fear of AIDS had no effect on either willingness to help or negative affect (y 44 = .05 and y 34 = .04, respectively). Table 13 presents the standardized path coefficients and their t-ratios.

To summarize the above findings in relation to the hypotheses presented earlier, only the following two hypotheses were supported:

1- The greater the amount of knowledge about AIDS, the greater the degree of willingness to help.

2- The greater the degree of religiosity, the less the amount of positive affect.

On the other hand, the following four hypotheses were not supported:

1- The greater the amount of fear of AIDS, the greater the amount of negative affect.

2- The greater the amount of fear of AIDS, the less the degree of willingness to help.

3- The greater the degree of religiosity, the greater the perception of responsibility for the onset of AIDS.

4- The greater the belief in a just-world, the greater the perception of responsibility for the onset of AIDS.

Three models related to Weiner's attribution-affect-action theory were examined. The first model is presented in Figure 3. The chi-square value for this model was 23.57, with 4 degrees of freedom and p = .000. This indicated a lack of fit between the model and the data according to the chi-square. However, the goodness of fit index was .97, which indicted
a good fit. The second model (Figure 4) depicts the basic argument of Weiner's attribution-affect-action theory. The chi-square for this model was 23.02 with 3 degree of freedom and $p = .000$. According to the chi-square this is an indication of a lack of fit. The goodness of fit index, however, remained the same, .97. Comparing the chi-square value of the first model to the chi-square value of the second model, no significant difference was found (chi-square difference with 1 df = .55). Thus, fixing the path from perception of responsibility to willingness to help to zero did not improve the fit. Next, a third model was examined. In this model the positive and negative affects error terms were correlated, as suggested by the modification index. The chi-square value for this model dropped to 6.53 with 2 degree of freedom. The goodness of fit index was .99. The difference in the chi-square value between the second model and the third model was significant, which indicated that the third model fit the data better than the second model. These results are presented in Table 14.

Table 14. Model comparisons

<table>
<thead>
<tr>
<th>Models</th>
<th>$\chi^2$</th>
<th>df</th>
<th>P</th>
<th>Change in $\chi^2$</th>
<th>Change in df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null model</td>
<td>513.51</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First model</td>
<td>23.57</td>
<td>4</td>
<td>.00</td>
<td>490.49*</td>
<td>6</td>
</tr>
<tr>
<td>GFI = .97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second model</td>
<td>23.02</td>
<td>3</td>
<td>.00</td>
<td>.55</td>
<td>1</td>
</tr>
<tr>
<td>GFI = .97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third model</td>
<td>6.53</td>
<td>2</td>
<td>.04</td>
<td>17.04*</td>
<td>1</td>
</tr>
<tr>
<td>GFI = .99</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at .01 level
GFI= Goodness of fit index

As argued above, the change in chi-square test that results from comparing nested models suffers from sensitivity to sample size, as any chi-square test does. Comparing the difference between nested models using incremental fit indices is one way to avoid the sensitivity problem associated with chi-square. The normed fit index (Bentler and Bonett 1980) was used.
Figure 3. Standardized path coefficients for Weiner's model.
Figure 4. Standardized path coefficients for the second model.
Fitting the first model to the data produced a chi-square of 23.57, which led to a reduction of .96, or 96%, in the chi-square value (Table 15) when compared to the null model. When the second model was compared to the first model with the null model as the baseline, the reduction in the chi-square value was trivial (.001). Finally, comparing the third model to the second model, the reduction in the chi-square was 3.3%. Next, a model was examined that contained degree of religiosity, belief in a just world, knowledge about AIDS and HIV transmission, and fear of AIDS as exogenous variables to attributional theory. This model is depicted in Figure 5. The chi-square value for this model was 44.54, with 18 degrees of freedom at $p = .00$. The goodness of fit index was .97. In the second model, the error terms of the positive and negative affects were correlated, as suggested by the modification index. This resulted in a chi-square value of 28.09 with 17 degrees of freedom and $p = .04$. The goodness of fit index was .98. The difference between these two chi-squares was significant (16.45 with 1 degree of freedom). Table 16 shows these results.

Next, the first model was compared to the null model and the two models were compared to each other using the normed fit index. Comparing the first model to the null model resulted in a reduction of 92% in the chi-square value. A three percent reduction in the chi-square was obtained by comparing the second model to the first model. Table 17 presents these results.

Table 15. Model comparisons using normed incremental fit index.

<table>
<thead>
<tr>
<th>Model comparisons</th>
<th>Reeducation in chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparing the first model to the null model</td>
<td>$\Delta_{0,1,0} = .96$</td>
</tr>
<tr>
<td>Comparing the second model to the first model</td>
<td>$\Delta_{1,2,0} = .001$</td>
</tr>
<tr>
<td>Comparing the third model to the second model</td>
<td>$\Delta_{2,3,0} = .033$</td>
</tr>
<tr>
<td>$\Delta_{0,3,0} = .99$</td>
<td></td>
</tr>
</tbody>
</table>
Table 16. Model comparisons

<table>
<thead>
<tr>
<th>Models</th>
<th>$\chi^2$</th>
<th>df</th>
<th>P</th>
<th>Change in $\chi^2$</th>
<th>Change in df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null model</td>
<td>568.89</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First model</td>
<td>44.54</td>
<td>18</td>
<td>.00</td>
<td>524.35*</td>
<td>18</td>
</tr>
<tr>
<td>GFI = .97</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second model</td>
<td>28.09</td>
<td>17</td>
<td>.04</td>
<td>16.45*</td>
<td>1</td>
</tr>
<tr>
<td>GFI = .98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at .01 level

GFI = Goodness of fit index

Table 17. Model comparisons using normed incremental fit index

<table>
<thead>
<tr>
<th>Model comparisons</th>
<th>Reeducation in chi-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparing the first model to the null model</td>
<td>$\Delta_{01.0} = .92$</td>
</tr>
<tr>
<td>Comparing the second model to the first model</td>
<td>$\Delta_{12.0} = .03$</td>
</tr>
<tr>
<td></td>
<td>$\Delta_{03.0} = .95$</td>
</tr>
</tbody>
</table>
Figure 5. Standardized path coefficients for the theoretical model of willingness to help a friend with AIDS.
CHAPTER SIX:
DISCUSSION

The discussion chapter is divided into two sections. The first section deals with the major findings of this study and their relation to Weiner's theory of attribution-affect-action. Next, limitations of the present study and suggestions for future studies are given.

The theoretical importance of this research can be viewed from two levels. At the general level, this research demonstrates the fruitfulness and applicability of attribution theory. Attribution theory, a general theory about causal thinking developed from a mostly Western perspective, proved itself to be very useful in the context of the AIDS epidemic and in the context of Saudi Arabian culture.

On a more specific level, this research demonstrates support for Weiner's attribution-affect-action theory. In particular, only one hypothesis derived from this theory was not supported in this research. Attribution theory's most basic claim is that people think about causality. People pay attention to causal information, reason about various possible causes, and eventually draw conclusions about the most likely causes of events. According to attribution theory, people have a need to determine causality in order to predict future events and know how to most appropriately behave. In the research reported here, respondents did indeed pay attention to causality. How the target contracted AIDS made a big difference in how the respondents felt about the target. In other words, the emotional reactions of the respondents in this study were influenced by the causal information in the vignettes, and were influenced in the direction predicted by the attribution theory. In general, attribution theory was useful in predicting and explaining the emotional reactions of people in Saudi Arabia toward an AIDS patient based on the information given in the vignettes about the means of infection with the AIDS virus.

In particular, four of the five hypotheses derived from Weiner's theory were supported in this research: (1) The more responsibility respondents assigned to the target for getting AIDS, the more negative they felt about him. (2) The less responsibility respondents
assigned to the target for getting AIDS, the more positive they felt about him. (4) The more positive they felt about the target, the more willing respondents were to help him. (5) Perception of the target's responsibility for getting AIDS did not directly influence respondents' willingness to help (i.e., the effect of responsibility on helping was mediated by affect). The last hypothesis (6) which says, the eliciting situation (i.e., the vignettes) did not directly influence the respondents' willingness to help the target (i.e., the influence of the vignettes on helping was mediated by responsibility and affect) was supported in this study.

The only hypothesis in relation to Weiner's theory was not supported by this research was the prediction that (3) the more negative respondents felt about the target, the less willing they would be to help him. As Table 19 shows, respondents who read about the target who contracted AIDS from sex (rather than from a blood transfusion) reported significantly more negative affect and significantly less willingness to help the victim (directly or indirectly). Nevertheless, the path coefficient from negative affect to willingness to help was small and nonsignificant. This means that respondents in this study were willing to help a friend with AIDS regardless of the negative affect they felt toward him. This result is inconsistent with Weiner's predication but in accordance with the findings by Schwarzer and Weiner (1991) and by Dooley (1995). The AIDS patient in Dooley's (1995) study was presented as a friend, and in Schwarzer and Weiner's (1991) study as a roommate. The AIDS patient in these studies and the present study was not a stranger. Solano (1986) argued that willingness to give help has been recognized as one of the main characteristics of a friend. Moreover, neglecting friends' needs in Arabic culture has a serious consequence for one's reputation. Hence, one explanation for the absence of a path from negative emotion to help-giving is that the person in need of help was a friend.

The other hypotheses, not related to Weiner's attribution-affect-action theory, received less support in this research. As expected, a negative relationship, albeit weak, was found between degree of religiosity and positive emotion ($r = -.10$). This finding is in line with findings of other studies such as those by Johnson (1987, 1995). However, the hypothesis that degree of religiosity is correlated positively with responsibility was not supported in this study. This result can be interpreted in a number of ways. One is that the
period of indiscriminate blaming of all AIDS patients for their plight is in decline. Said another way, in the beginning of the AIDS epidemic the majority of the infected were homosexual males and drug users. In response to these kinds of victims, the majority of religious people reacted to AIDS and AIDS patients negatively.

As reported earlier in the literature review chapter, AIDS was viewed as a punishment from God. Years later, HIV was found to be acquired through other means such as heterosexual intercourse and blood transfusion. Because of this discovery, some religious people may have modified or changed their approach to AIDS and AIDS victims. That is, the association between AIDS and stigmatized groups has been weakened. Another reason may be that in Saudi Arabia AIDS was never associated with homosexuality, and thus religious people react differently toward AIDS patients than religious people in the United States, where AIDS was associated with gay men. However, it is difficult to test any of these interpretations due to the absence of data on the reactions of religious people in Saudi Arabia toward the AIDS epidemic. Another hypothesis that was not supported in this study was the absence of a significant path from belief in a just-world and assignment of responsibility. This result is supported by the findings of other studies such as Witt (1989b) and Ambrisio and Sheehan (1991). However, the absence of this path can be interpreted to mean that the respondents in this study based their judgment of responsibility on other frames of reference than just-world beliefs. The absence of significant paths from religiosity and belief in a just-world may be due to the power of the experimental manipulation. That is, the manipulation of responsibility was so powerful that respondents' degree of religiosity and belief in a just-world were not important in affecting their assignment of responsibility.

As predicated and in accordance with previous research (e.g., Krupka and Vener 1988) knowledge of AIDS positively influenced the willingness to help. The hypotheses that fear of AIDS would be positively correlated with negative feelings and negatively correlated with willingness to help were not supported. One reason for these nonsignificant paths is that this study had to do with a friend rather than a stranger. Fear of AIDS may be associated more with a stranger than a friend. That is, the behavior of strangers with AIDS may be less predictable and may lead to fear of infection with the AIDS virus. Thus, more negative
feelings and less willingness to help are expected to be associated with strangers. This interpretation is supported by Dijker and colleagues (1997), who found that students were more hesitant to have physical contact with an AIDS patient who displayed unpredictable and impulsive behavior than with a healthy person who manifested similar behavior. However, no difference was found in the students' reactions when both persons (the infected and the healthy) were depicted as having self-control and predictable behavior.

**Limitation, theoretical implications, and future studies**

The generalizability of the findings of this study is limited due to the fact that the data for this study were collected only from male students. However, two findings are important in their contribution to Weiner's attribution-affect-action model. First, the path from negative emotion (e.g., anger) to help needs to be reconsidered. The influence of anger on willingness to help may depend on the helper's involvement in the situation. Helping a friend, as indicated above, is different from helping a stranger. Another possibility is the seriousness of the situation. In the present study, as well as Schwarz and Weiner's (1991) and Dooley's (1995) studies, the friend who needed help had AIDS. Thus, it might be hypothesized that, the more serious the consequences of not helping, the less important the influence of negative affect in determining help-giving. Second, the attribution-affect-action model should pay attention to the relationship between positive and negative emotions. In this study, the data best fit the model that correlates the error terms of both emotions. This relationship might exist when one or both of the above conditions are satisfied. That is to say, we can react angrily toward a person who contracted AIDS through controllable means (such as sex) and at the same time, due to the seriousness of the disease or the type of the relationship we have with the AIDS victim, feel pity and sympathy for that person's plight. In other words, we will experience emotional ambivalence. This feeling of emotional ambivalence might influence the relationship between affect and willingness to help. To illustrate, in Sparks, Hedderley and Shepherd's study (1992) of biscuit consumption, the correlation between attitudes and intentions regarding the biscuit consumption were lower
among respondents who experienced higher attitudinal ambivalence than among the
respondents who experienced lower attitudinal ambivalence.

Further studies are needed to examine these hypotheses by varying the seriousness of
the need and the type of relationship portrayed between the respondents and the AIDS victim.
The relationship between pity and anger needs to be tested under various conditions. The
present study as well as the Schwarzer and Weiner (1991) and Dooley (1995) studies were
based on role-playing using a vignette. Although a vignette experiment is considered a
strong research design, it has been criticized for several reasons. Neff (1979), from an
interactionist perspective, argued that, an individual's responses to a hypothetical situation
may differ from his/her actual behavior in real life. Parkinson and Manstead (1993) noted
that emotions generated by reading about a potentially emotional story are different, at least
in degree, from those which arise in the natural course of events. Stolte (1994) argued that
contextual factors such as noisy classroom settings and pressure of time to complete the
questionnaire can affect the performance of the respondents. These and other contextual
factors may lead the respondents to process vignette information less carefully and
effectively. Moreover, the respondents of these studies were students. Thus, a different
population of respondents and different methods, besides the simulation method as used in
this study, should be employed.

Two findings of this study are very important for designing educational campaigns in
Saudi Arabia. First, the finding that knowledge about AIDS had a positive impact on
respondents' willingness to help AIDS victim is good news. Educational campaigns planners
in Saudi Arabia should continue their effort in educating people about AIDS transmission
and risk reduction. This will help reduce the number of new AIDS cases and eliminate or at
least lessen the negative and hostile attitudes toward AIDS patients. Because the AIDS
patient in this study was a friend, more research on the relationships between knowledge
about AIDS and reactions to people with AIDS is needed to plan useful educational
campaigns. Second, the finding that people's reactions to AIDS patients could be influenced
by the type of information given to them about responsibility is useful in designing attitudinal
change campaigns. Contracting AIDS from controllable means such as sex evokes more
negative affect than contracting AIDS from uncontrollable means such as blood transfusion. In Saudi Arabia where pre or extra-marital sex is prohibited, individuals who contract AIDS from sex are expected to encounter negative and hostile reactions. To reduce or overcome the AIDS-related stigma in Saudi Arabia, educational campaigns planners could emphasize that blood transfusion is the main factor responsible for the AIDS cases in Saudi Arabia. However, this strategy has two possible negative outcomes. First, leading people to believe that blood transfusion is the major factor behind AIDS cases might lead people to downplay the seriousness of other means such as unsafe sex in transmitting AIDS. Second, this strategy might result in more negative reactions toward people found to have contracted AIDS through sex.

To conclude, Saudi Arabia is in need for any social or psychological study of AIDS. As indicated in the introductory chapter, only one study had previously been conducted to examine students' knowledge and attitudes toward AIDS. This shortage of studies indicates the need to conduct studies on all topics related to AIDS, from assessing knowledge to examining how people cope with AIDS. The attitudes of social workers, nurses, physicians, the general public, etc., toward people with AIDS should be assessed. These findings, also, can be utilized in educational campaigns to reduce negative reactions that AIDS patients often have faced.
APPENDIX A
ADDITIONAL DATA

Table 18. Means and standard deviations for the attribution variables

<table>
<thead>
<tr>
<th>Items</th>
<th>Sex condition</th>
<th>Blood condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Had personal control</td>
<td>5.87</td>
<td>1.58</td>
</tr>
<tr>
<td>2. Responsible for what happened to him</td>
<td>6.13</td>
<td>1.40</td>
</tr>
<tr>
<td>3. Your friend’s own fault</td>
<td>6.16</td>
<td>1.25</td>
</tr>
<tr>
<td>4. Could have avoided contracting the AIDS virus.</td>
<td>6.09</td>
<td>1.38</td>
</tr>
<tr>
<td>Positive affect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sympathy</td>
<td>5.15</td>
<td>1.85</td>
</tr>
<tr>
<td>2. Pity</td>
<td>5.66</td>
<td>1.71</td>
</tr>
<tr>
<td>3. Concern</td>
<td>5.72</td>
<td>1.73</td>
</tr>
<tr>
<td>4. Sorry</td>
<td>6.01</td>
<td>1.58</td>
</tr>
<tr>
<td>5. Sad</td>
<td>6.03</td>
<td>1.40</td>
</tr>
<tr>
<td>6. Upset</td>
<td>5.99</td>
<td>1.35</td>
</tr>
<tr>
<td>Negative affect</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Anger</td>
<td>5.38</td>
<td>1.56</td>
</tr>
<tr>
<td>2. Aggravation</td>
<td>5.86</td>
<td>1.38</td>
</tr>
<tr>
<td>3. Madness</td>
<td>4.80</td>
<td>1.65</td>
</tr>
<tr>
<td>4. Irritation</td>
<td>5.13</td>
<td>1.49</td>
</tr>
<tr>
<td>Willingness to help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Indirect help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Help 1</td>
<td>6.34</td>
<td>1.28</td>
</tr>
<tr>
<td>2. Help 2</td>
<td>6.50</td>
<td>1.04</td>
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<tr>
<td>3. Help 3</td>
<td>5.71</td>
<td>1.55</td>
</tr>
<tr>
<td>4. Help 5</td>
<td>6.23</td>
<td>1.33</td>
</tr>
<tr>
<td>5. Help 14</td>
<td>5.94</td>
<td>1.49</td>
</tr>
<tr>
<td>B. Direct Help</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Help 4</td>
<td>5.10</td>
<td>1.83</td>
</tr>
<tr>
<td>2. Help 6</td>
<td>5.44</td>
<td>1.74</td>
</tr>
<tr>
<td>3. Help 7</td>
<td>4.86</td>
<td>1.83</td>
</tr>
<tr>
<td>4. Help 8</td>
<td>5.01</td>
<td>1.91</td>
</tr>
<tr>
<td>5. Help 9</td>
<td>4.98</td>
<td>1.84</td>
</tr>
<tr>
<td>6. Help 10</td>
<td>5.72</td>
<td>1.59</td>
</tr>
<tr>
<td>7. Help 11</td>
<td>3.98</td>
<td>1.72</td>
</tr>
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</table>
Table 18. (continued)

<table>
<thead>
<tr>
<th>Items</th>
<th>Sex condition</th>
<th>Blood condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>8. Help 12</td>
<td>5.24</td>
<td>1.78</td>
</tr>
<tr>
<td>9. Help 13</td>
<td>5.60</td>
<td>1.53</td>
</tr>
</tbody>
</table>

\(^a\)Sample size = 149
\(^b\)Sample size = 150

Table 19. t-test for sex and blood conditions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sex condition Mean</th>
<th>Blood condition Mean</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>6.06</td>
<td>2.14</td>
<td>27.49</td>
<td>.00</td>
</tr>
<tr>
<td>Negative affect</td>
<td>5.29</td>
<td>4.58</td>
<td>4.75</td>
<td>.00</td>
</tr>
<tr>
<td>Positive affect</td>
<td>5.76</td>
<td>6.56</td>
<td>-6.69</td>
<td>.00</td>
</tr>
<tr>
<td>Direct help</td>
<td>5.10</td>
<td>5.75</td>
<td>-4.17</td>
<td>.00</td>
</tr>
<tr>
<td>Indirect help</td>
<td>6.15</td>
<td>6.45</td>
<td>-2.70</td>
<td>.01</td>
</tr>
</tbody>
</table>

\(^a\)Sample size = 149
\(^b\)Sample size = 150

Table 20. Correlation matrix for the attribution items

<table>
<thead>
<tr>
<th></th>
<th>Responsibility</th>
<th>Positive</th>
<th>Negative</th>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive</td>
<td>-.41**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>.25**</td>
<td>.10</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct</td>
<td>-.25**</td>
<td>.55**</td>
<td>.08</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Indirect</td>
<td>-.18**</td>
<td>.60**</td>
<td>.10</td>
<td>.78**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

\(^a\)Sample size = 299
** Significant at the .01 level.
APPENDIX B
MEASURES USED IN THE STUDY

Modified Informed Consent

The purpose of this study is to understand students’ attitudes toward people with medical problems. Your participation in this study is entirely voluntary. You may discontinue participation at any time. Non participation will not jeopardize you in any way.

If you choose to participate, we will ask you to spend approximately 30 minutes answering a questionnaire. The purpose and significance of this study will be explained at the end of this session.

Please do not put your name on the questionnaire. Your answers will be anonymous and confidential.
General instructions

Shortly you are going to read a description of a person with a medical problem. The event will describe what happened to this person and why he is seeking help. After you read the description, you are going to answer a set of questions. There are no wrong or right answers, just choose the answer that best reflects your real feelings and opinions.

If you have any questions, please feel free to ask. Thank you very much for your participation in this study.
JUST-WORLD SCALE

Please circle the number that best describes your degree of agreement or disagreement with each statement according to the following scale:

1- Strongly disagree
2- Disagree
3- Somewhat disagree
4- Uncertain
5- Somewhat agree
6- Agree
7- Strongly agree

1- I have found that a person rarely deserves the reputation he has.
   1  2  3  4  5  6  7

2- Basically, the world is a just place.
   1  2  3  4  5  6  7

3- Careful drivers are just as likely to get hurt in traffic accidents as careless ones.
   1  2  3  4  5  6  7

4- People who get "lucky breaks" have usually earned their good fortune.
   1  2  3  4  5  6  7

5- It is a common occurrence for a guilty person to get off free.
   1  2  3  4  5  6  7

6- Students almost always deserve the grades they receive in school.
   1  2  3  4  5  6  7

7- Men who keep in shape have little chance of suffering a heart attack.
   1  2  3  4  5  6  7

8- It is rare for an innocent man to be wrongly sent to jail.
   1  2  3  4  5  6  7

9- In professional sports, many fouls and infractions never get called by the referee.
   1  2  3  4  5  6  7

10- By and large, people deserve what they get.
   1  2  3  4  5  6  7
11- When parents punish their children, it is almost always for good reasons.

12- Good deeds often go unnoticed and unrewarded.

13- In almost any business or profession, people who do their job well rise to the top.

14- Saudi parents tend to overlook the things most to be admired in their children.

15- People who meet with misfortune have often brought it on themselves.

16- Crime does not pay.

17- Many people suffer through absolutely no fault of their own.
FEAR OF AIDS SCALE

Please circle the number that best describes your degree of agreement or disagreement with each statement according to the following scale:

1- Strongly disagree
2- Disagree
3- Somewhat disagree
4- Uncertain
5- Somewhat agree
6- Agree
7- Strongly agree

1- I am afraid I will get AIDS.
   1  2  3  4  5  6  7

2- Of all the diseases, I am least concerned about AIDS.
   1  2  3  4  5  6  7

3- I have been more concerned about my health since learning about AIDS.
   1  2  3  4  5  6  7

4- I am not worried about interacting socially with people who have AIDS.
   1  2  3  4  5  6  7

5- Every time I hear about AIDS I get scared.
   1  2  3  4  5  6  7

6- I am less likely than most people to get AIDS.
   1  2  3  4  5  6  7
KNOWLEDGE ABOUT AIDS AND HIV TRANSMISSION SCALE

Please circle TRUE or FALSE to indicate whether you believe each of the following statements is true or false. If you are not sure please circle I DO NOT KNOW.

1. One can get AIDS by having sex with a person who has the AIDS virus.
   True  False  Do not know

2. Looking at a person is enough to tell if he or she has the AIDS virus.
   True  False  Do not know

3. Only homosexuals get AIDS.
   True  False  Do not know

4. One can get AIDS by kissing a person who has AIDS on the cheek.
   True  False  Do not know

5. AIDS virus may live in the human body for years before symptoms appear.
   True  False  Do not know

6. One can get AIDS from receiving blood from a donor who has AIDS.
   True  False  Do not know

7. There is a no cure for AIDS.
   True  False  Do not know

8. An infected mother can give the AIDS virus to the baby during pregnancy.
   True  False  Do not know

9. Homosexual activity is the most risky type of sexual contact between an HIV-infected and non-infected person.
   True  False  Do not know

10. You can get AIDS by touching someone with AIDS.
    True  False  Do not know

11. The AIDS virus can be contracted through giving blood to a blood bank.
    True  False  Do not know

12. A person can get the AIDS virus by using a public telephone after someone who has the AIDS virus.
    True  False  Do not know
13. An infected mother can give the AIDS virus to the baby through breast feeding.
   True     False     Do not know

14. Mosquitoes and insects bites can transmit the AIDS virus.
   True     False     Do not know

15. AIDS virus can be transmitted through semen.
   True     False     Do not know

16. AIDS virus can be contracted through sharing contaminated needles with intravenous drug users.
   True     False     Do not know
The Vignettes

1- Controllable Condition

The following conversation concerns a student with a medical problem. The conversation will describe what happened to this person and why he needs your help. Please try to imagine you had this conversation with your friend. Try to imagine as much as possible yourself as the one who asked the questions and your friend as the one with the medical problem. Afterward you will be asked to relate your thoughts and feelings and what you might do for this friend.

Lately, you have noticed that your friend has been losing weight. When you ask him what is wrong with him, he confides in you that he has AIDS. Then you ask him how it happened and how he found out. He tells you:

"A few months ago I started developing a variety of physical symptoms. For no apparent reason, I was feeling weak and persistently tired. I was running a fever, off and on, for about a month. I lost almost 15 lbs. over a period of 6 weeks without dieting. After suffering from all these symptoms, I decided to see a physician. The physician ran a blood test and discovered that I have AIDS.

The physician asked me a few questions about my past to determine the cause of AIDS-you know—like have I had a serious accident requiring surgery and blood transfusion in the past several years. I told him no, that is not possible because I never had surgery or a blood transfusion. Then he asked about sex. I told him that I have traveled outside Saudi Arabia many times, and I had unprotected sex on several occasions and I refuse to use condoms.

After some further testing, my physician has determined that I contracted AIDS from sex".
2- Uncontrollable condition

The following conversation concerns a student with a medical problem. The conversation will describe what happened to this person and why he needs your help. Please try to imagine you had this conversation with your friend. Try to imagine as much as possible yourself as the one who asked the questions and your friend as the one with the medical problem. Afterward you will be asked to relate your thoughts and feelings and what you might do for this friend.

Lately, you have noticed that your friend has been losing weight. When you ask him what is wrong with him, he confides in you that he has AIDS. Then you ask him how it happened and how he found out. He tells you:

"A few months ago I started developing a variety of physical symptoms. For no apparent reason, I was feeling weak and persistently tired. I was running a fever, off and on, for about a month. I lost almost 15 lbs. over a period of 6 weeks without dieting. After suffering from all these symptoms, I decided to see a physician. The physician ran a blood test and discovered that I have AIDS.

The physician asked me a few questions about my past to determine the cause of AIDS -you know- like have I traveled outside Saudi Arabia, have I had unprotected sex on several occasions. I told him no, that is not possible because I have never traveled outside Saudi Arabia and I have never had sex. Then he asked about blood transfusions. I told him that I had a serious car accident several years ago. I required surgery and a blood transfusion.

After some further testing, my physician has determined that I contracted AIDS from a blood transfusion".
Assignment of responsibility

Below are some questions about your reactions toward your friend. Please read carefully the following questions and choose the answer that best describes your opinion. Please circle the number that best reflects your choice.

1. To what extent do you think that your friend had personal control over being infected with the AIDS virus?

1- Definitely not under his personal control
2- Not under his personal control
3- Somewhat not under his personal control
4- Uncertain
5- Somewhat under his personal control
6- Under his personal control
7- Completely under his personal control

2- To what extent do you believe that your friend is responsible for what happened to him?

1- Not at all responsible
2- Not responsible
3- Somewhat not responsible
4- Uncertain
5- Somewhat responsible
6- Responsible
7- Very much responsible

3- To what extent do you think that it is your friend’s own fault that he is in the present condition?

1- Not at all his fault
2- Not his fault
3- Somewhat not his fault
4- Uncertain
5- Somewhat his fault
6- His fault
7- Absolutely his fault
4. I think my friend could have avoided contracting the AIDS virus.

1. Strongly disagree
2. Disagree
3. Somewhat disagree
4. Uncertain
5. Somewhat agree
6. Agree
7. Strongly agree
Emotional reactions

In this section we have some questions about your feelings toward your friend. Please circle the number that corresponds to your reactions.

1- How much sympathy do you feel for your friend?
   1- A great deal
   2- Sympathetic
   3- A fair amount
   4- Uncertain
   5- Not very much
   6- No sympathy
   7- Absolutely none

2- How much pity do you feel for your friend?
   1- A great deal
   2- Pity
   3- A fair amount
   4- Uncertain
   5- Not very much
   6- No pity
   7- Absolutely none

3- How much concern do you feel for your friend?
   1- A great deal
   2- Concern
   3- A fair amount
   4- Uncertain
   5- Not very much
   6- No concern
   7- Absolutely none
4- How sorry do you feel for your friend?

1- Very sorry
2- Sorry
3- Somewhat sorry
4- Uncertain
5- Somewhat not sorry
6- Not sorry
7- Absolutely not sorry

5- How sad do you feel for your friend?

1- Very sad
2- Sad
3- Somewhat sad
4- Uncertain
5- Somewhat not sad
6- Not sad
7- Absolutely not sad

6- How much anger do you feel toward your friend?

1- A great deal
2- Anger
3- A fair amount
4- Uncertain
5- Not very much
6- No anger
7- Absolutely none

7- How irritated do you feel by your friend?

1- A great deal
2- Irritated
3- A fair amount
4- Uncertain
5- Not very much
6- Not irritated
7- Absolutely none
8- How aggravated do you feel by your friend?

1- Very much
2- Aggravated
3- Somewhat aggravated
4- Uncertain
5- Somewhat not aggravated
6- Not aggravated
7- Not at all

9- How much does your friend upset you?

1- Very much
2- Upset
3- Somewhat upset
4- Uncertain
5- Somewhat not upset
6- Not upset
7- Not upset at all

10- How much does your friend make you mad?

1- Very much
2- Mad
3- Somewhat mad
4- Uncertain
5- Somewhat not mad
6- Not mad
7- Not mad at all
Willingness to help

Below are some questions about how much are your willing to help your friend. Please circle the number that corresponds to your degree of willingness to help by using the following scale:

1- Definitely not willing to help
2- Most likely would not help
3- Probably would not help
4- Uncertain
5- Probably would help
6- Most likely would help
7- Definitely willing to help

1- Go to the pharmacy to pick up a prescription for him.
   1 2 3 4 5 6 7

2- Help him find the best doctor.
   1 2 3 4 5 6 7

3- Give him money to help pay for his medical treatments.
   1 2 3 4 5 6 7

4- Drive him to school.
   1 2 3 4 5 6 7

5- Call him at home to see how he feels
   1 2 3 4 5 6 7

6- Visit with him to see how he feels.
   1 2 3 4 5 6 7

7- Assisting him in walking across campus.
   1 2 3 4 5 6 7

8- Accompany him to his doctor's office.
   1 2 3 4 5 6 7

9- Help him up and down stairs.
   1 2 3 4 5 6 7
10- Visit him in the hospital.

11- Travel with him for treatment outside Saudi Arabia for several weeks.

12- Stay at his bedside at the moment of his dying.

13- Doing things with him to distract his mind from the illness.

14- Help to protect him from people’s mistreatment.
Background Questions

At the end of this questionnaire we have some general questions we would like to ask you. Please try to answer all the questions. Please circle the appropriate number when applicable.

1. What is your age? _______ years.

2. What is your current marital status?
   1. Single
   2. Married
   3. Divorced
   4. Widowed

3. How much influence do you think Islamic teaching has on your life?
   1. Minimal
   2. Moderate
   3. Quite great
   4. Very great

4. How frequently do you attend the worship services in the mosque?
   1. Rarely
   2. Sometimes
   3. Most of the times
   4. Always

5. In general, how important is Islam in your life?
   1. Slightly important
   2. Important
   3. Somewhat important
   4. Very important

6. If a blood test was available to see if you have AIDS, would you take it?
   1- Yes    2- No
7. I think AIDS is a serious problem in Saudi Arabia.
   1- Yes  2- No

8. Do you know anybody with AIDS?
   1- Yes  2- No
   **IF YES, what is your relationship with him?**
   1- A friend
   2- A member of my immediate family
   3- A close relative
   4- Others ____________ please specify.

9. How much do you know about AIDS?
   1. Nothing at all
   2. A little bit
   3. Enough
   4. Very much

10. From where do you get most of your information about AIDS?
    1. TV
    2. Radio
    3. Newspapers and magazines
    4. Friends
    5. Others___________ please specify

11. What would you like to know about AIDS? Please write whatever you want in the space below.

________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________
________________________________________________________
Debriefing

You have participated in a study on how much students know about AIDS and their emotional reactions and desire to help people with AIDS. This is an insightful study because it provides us with previously unknown information concerning students.

We hope that you learned some new information, or that we confirmed what you already knew about AIDS. If you have any questions about this study you may contact the researcher.

Again, we wish to thank you very much for taking part in this study.
بسم الله الرحمن الرحيم

عزيزي الطالب

السلام عليكم ورحمة الله وبركاته وبعد:

أرجو منك التكرم بمساعدتي وذلك بتبعية هذه الاستبانة بكل عناية واهتمام واجتهاد.

سوف تستغرق تشييدها مدة ثلاثون دقيقة. إن مشاركتك بهذه الدراسة تعتبر عامل هام.

لتعرف على اتجاهات الطلبة نحو الأشخاص المصابين بمشكلات صحية.

نؤكد لك عزيزي الطالب أن كافة المعلومات الموجودة في هذه الاستبانة ستكون موضع سرية تامة وسوف تستخدم لأغراض هذا البحث فقط.

الرجاء عدم كتابة اسمك على الاستبانة.

شكراً لك على تعاونك.

الباحث

عبد الله محمد باحدث
ضع من فضلك دائرة حول الرقم الذي يتوافق مع اجابة وذلك باستخدام المقياس الآتي:

1 - موافق بشدة
2 - موافق
3 - إلى حد ما موافق
4 - غير متأكد
5 - إلى حد ما غير موافق
6 - غير موافق
7 - غير موافق بشدة

1 - نادةً ما يستحق الشخص السمعة التي يتمتع بها.
2 - أعترف أن هذا العالم مكتناً عادلاً.
3 - يصاب السائقون الحذر دروم بالأذى في الحوادث المرورية مثل السائقين غير حذر.
4 - الأشخاص الذين يحصلون على فرص موافقة هم جديرون بها.
5 - إنها ظاهرة شائعة أن الشخص المنتبه ينجو من العقاب.
6 - الطلبة دائماً يستحقون الدرجات التي يحصلون عليها.
7 - كثير من الناس يعانون بلا ريب من أخطاء ليست من صنع أنفسهم.
8 - قليلاً ما يتعرض الأشخاص الذين يحافظون على صمتهم للذبح الصدرية.
9 - الجريمة لا تعود بالفعلة على مرتكبها. المتقدمين على الوظيفة.
10 - إنه نادر أن يسجن الشخص البريء.
11 - كثير من الأخطاء والإهتمامات لا يحسبها الحكم في المباريات الرياضية.
12- بشكل عام يستحق الناس ما يحصل لهم.
13- دائماً تكون هناك أسباب وجيزة عندما يعاقب الوالدان أبناؤهم.
14- الأعمال الجيدة في العادة تتحمل ولا تكافئ.
15- غالباً في أي وظيفة أو مهنة، الأشخاص الذي يؤديون وظائفهم على الوجه المطلوب يتركون إلى مرتب عساهم.
16- يتفاضل الوالدان عن أعمال أبنائهم التي من المفترض أن يعجبوا بها.
17- الأشخاص الذين يواجهون المحن في الغالب هم الذين جلبوا لأنفسهم.
مضم من فضلك دائرة حول الرقم الذي يتوافق مع اتجاهك وذلك باستخدام المقياس الآتي:

1 - مواقف بشدة
2 - مواقف
3 - إلى حد ما مواقف
4 - غير متأكد
5 - إلى حد ما غير مواقف
6 - غير مواقف
7 - غير مواقف بشدة

1 - أخطأ أن أصاب بالإيدز.
2 - من كل الأمراض المعروفة، الإيدز هو المرمى الذي لا أعتبره أي أهمية.
3 - أصبحت أكثر إهتماماً بصحتي منذ أن عرفت عن مرض الإيدز.
4 - أنا لا أخشى من التعامل أو الاختلاط الاجتماعي مع المصابين بالإيدز.
5 - أشعر بالخوف في كل مرة أسمع عن مرض الإيدز.
6 - احتمال أصابتي بالإيدز أقل من غالبية الناس.
من فضلكي ضع دائرة حول كلمة "صحيح" أو كلمة "خطأ" للدلالة على ما تعتقد، حول صحة
أو خطأ العبادات الأثرية. إذا كنت لا تعرف الإجابة فضع دائرة حول كلمة "لا أعرف".

1 - من الممكن أن يصاب الشخص بالابدز عن طريق الاتصال الجنسي بشخص حامل لفيروس
الابدز.
لا أعرف
خطأ

2 - يكتي النظر إلى شخص ما لمعرفة إذا كان مصاباً بفيروس الابدز أم لا.
لا أعرف
خطأ

3 - فقط الرجال الشانون جنسيًا هم الذين يصابون بالابدز.
لا أعرف
خطأ

4 - من الممكن أن يصاب شخص ما بالابدز إذا قبل شخصًا مصابًا بالابدز على خده.
لا أعرف
خطأ

5 - يمكن الفيروس الابدز أن يعيش في جسم الإنسان عدة سنوات بدون ظهور أي أعراض.
لا أعرف
خطأ

6 - من الممكن أن يصاب شخص بالابدز عن طريق نقل الدم له من شخص مصاب بالابدز.
لا أعرف
خطأ

7 - لا يوجد هناك علاج للايبدز.
لا أعرف
خطأ

8 - الأم المصابة بالابدز من الممكن أن تنقل فيروس الابدز إلى جنونها أثناء الحمل.
لا أعرف
خطأ

9 - للروطن أكثر أنواع الاتصالات الجنسية خطورة لنقل فيروس الابدز بين المصاب والغير
مصاب.
لا أعرف
خطأ

10 - من الممكن الإصابة بالابدز عن طريق ملمسة شخص مصاب بالابدز.
لا أعرف
خطأ

11 - من الممكن الإصابة بالابدز عن طريق الصرع بالدم.
لا أعرف
خطأ

12 - يمكن أن يصاب الشخص بفيروس الابدز عن طريق استخدام أجهزة الهاتف العامة.
لا أعرف
خطأ
13 - الأم المصابة بالإيدز يمكن أن تنقل فيروس الإيدز لأبنها عن طريق الرضاعة.
 صح خطا لا أعرف

14 - فيروس الإيدز يمكن أن ينتقل عن طريق قروص البعوض والحشرات.
 صح خطا لا أعرف

15 - فيروس الإيدز يمكن أن ينتقل عن طريق المني.
 صح خطا لا أعرف

16 - فيروس الإيدز يمكن أن يتقل عن طريق تبادل الحقن الملوثة بالدم بين متعاطي المخدرات.
 صح خطا لا أعرف
فيما يلي مثال محادثة تخص طالب لديه مشكلة صحية. هذه المحادثة تصف ما أصاب هذا الشخص وما سبب هذه المشكلة. بقدر ما تستطيع حاول أن تخيل أن هذه المحادثة حصلت بينك وبين صديقك، حاول أن تخيل أن صديقك هو الشخص المريض.

بعد الأنتهاء من قراءة المحادثة سوف تجد بعض الأسئلة نوجو الإجابة عليها لمعرفة رأيك وشعورك تجاه صديقك.

لاحظت في الأونة الأخيرة أن صديقك بدأ ينقص وزنه، وعندما سألته عن السبب في ذلك أخبرك أنه مصاب بالإيدز. ثم سألته ماذا حدث، وكيف اكتشف أنه مصاب بالإيدز فقال لك:

- منذ شهر مضت، بدأت تظهر عليّ العديد من الأعراض الجسدية، وبدون سبب واضح بدأت أشعر بمشكل مستمر بالضعف والإرهاق الجسدي، وحمى تعاونوني من فترة لآخر، وذلك لمدة شهر. وفي هذه الأثناء فقدت ما يقارب 7 كيلو مزي زمي خلال 6 أسابيع.

وبعد معايتي من تلك الأعراض، قررت الذهاب إلى الطبيب الذي أجري لي فحصاً للدم اكتشف من خلاله أنني مصاب بالإيدز. وقد سألتني عدة أسئلة عن تصرفاتي في الماضي لتحديد السبب في اصابتي بالإيدز. مثل: هل تعرضت لحادث سير قبل عدة سنوات تطلب إجراء عملية جراحية ونقل دم لك؟ أجبته ببساطة.

ثم سألتني عن سلوكي الجنسي؟ فأخبرته أنني قد سافرت عدة مرات للخارج ومارست الجنس عدة مرات وفي كل مرة كنت أرفض استخدام الواقي الذكري (الكيوب). وبعد اجراء المزيد من الفحوصات الطبية توصل الطبيب إلى أنني أصيب بالإيدز عن طريق الاتصال الجنسي.
فيما يلي سوف تقرأ محادثة تخص طالب لديه مشكلة صحية. هذه المحادثة تصف ما أصاب هذا الشخص وما أسباب هذه المشكلة. بقدر ما تستطيع حاول أن تتخيل أن هذه المحادثة حصلت بينك وبين صديق لك، حاول أن تتخيل أن صديقك هو الشخص المريض.

بعد الانتهاء من قراءة المحادثة سوف تجد بعض الأسئلة نرجو الإجابة عليها لمعرفة Rai"k وشكورك تجاه صديقك.

لاحتظ في الأزمة الأخيرة أن صديقك بدأ ينقسم وزنه، وعندما سألته عن السبب في ذلك أخبرك أنه مصاب بالاليدز. ثم سألته ماذا حدث، وكيف اكتشف أنه مصاب بالاليدز فقال لك:

منذ شهر مضت، بدأت تظهر على العديد من الأعراض الجسدية، وبدون سبب واضح بدأت أشعر في الشرد مستمر بالضعف والانهيار الجسدي، وبحثت تعاونعني من فترة أخرى وذلك لمدة شهر. وفي هذه الأثناء فقدت ما يقارب 7 كيلو من وزني خلال 6 أسابيع.

وبعد ملاحظتي من تلك الأعراض، قررت الذهاب إلى الطبيب الذي أجريت فحصا للدم اكتشف من خلاله أنه مصاب بالاليدز. وقد سألتني عدة أسئلة عن تصرفاتي في الماضي لتحديد السبب في اصابتي بالإيدز. مثل: هل سافرت للخارج؟ وهل مارست الجنس بدون استخدام الواقي الذكري؟ (الكوب) أجيبته بـلا.

ثم سألتني هل أجريت لك عملية نقل الدم؟ فأخبرته أنني قد تعرضت لحادث سير قبل عدة سنوات تتطلب مني إجراء عملية جراحية ونقل الدم.

وبعد إجراء المزيد من الفحوصات الطبية توصل الطبيب لي أنني أصيبت بالإيدز عن طريق نقل دم ملوث لمفيروس الإيدز.
1 - إلى أي مدى تعتقد أن صديقك كان بإمكانه التحكم في إصابته بالايدز؟

- 1 - قطعاً كان بإمكانه التحكم.
- 2 - كان بإمكانه التحكم.
- 3 - إلى حد ما كان بإمكانه التحكم.
- 4 - غير متأكد.
- 5 - إلى حد ما لم يكن بإمكانه التحكم.
- 6 - لم يكن بإمكانه التحكم.
- 7 - قطعاً لم يكن بإمكانه التحكم.

2 - إلى أي مدى تعتقد أن صديقك مسؤول عما حدث له؟

- 1 - بالتأكيد ليس مسؤول عما حدث له.
- 2 - ليس مسؤول عما حدث له.
- 3 - إلى حد ما ليس مسؤول عما حدث له.
- 4 - غير متأكد.
- 5 - إلى حد ما مسؤول عما حدث له.
- 6 - مسؤول عما حدث له.
- 7 - بالتأكيد مسؤول عما حدث له.

3 - إلى أي مدى تعتقد أن غلطته صديقك هي السبب في وضعه الحالي؟

- 1 - بالتأكيد ليست غلطته.
- 2 - ليست غلطته.
- 3 - إلى حد ما ليست غلطته.
- 4 - غير متأكد.
- 5 - إلى حد ما غلطته.
- 6 - غلطته.
- 7 - بالتأكيد غلطته.

4 - هل تعتقد أن صديقك كان بإمكانه أن يتفادي الإصابة بفيروس الإيدز؟

- 1 - غير موافق بشدة.
- 2 - غير موافق.
- 3 - إلى حد ما غير موافق.
- 4 - است متأكد.
- 5 - إلى حد ما موافق.
- 6 - موافق.
- 7 - موافق./br>
8 - ི་ཚིགས་མཐོན་དུ་རིགས།
5 - ཨ་མི་གཏོང་།
0 - ི་ཚིགས་མཐོན་དུ་རིགས།
3 - དབུ་མཐོང་བས་སེམས་དངོས།
1 - ི་ཚིགས་མཐོན་དུ་རིགས།
1 - རང་བ་
1 - ི་ཚིགས་མཐོན་དུ་རིགས།

3 - གནས། བཀྲམ་དང་པོའི་དབང་པོ་ལྗོངས་སུ་

1 - གནས། བཀྲམ་དང་པོའི་དབང་པོ་ལྗོངས་སུ་

1 - གནས། བཀྲམ་དང་པོའི་དབང་པོ་ལྗོངས་སུ་

1 - གནས། བཀྲམ་དང་པོའི་དབང་པོ་ལྗོངས་སུ་
5 - ما مقدار الحزن الذي تشعر به تجاه صديقك؟

<table>
<thead>
<tr>
<th>رقم</th>
<th>توضيح</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>إلى حد كبير حزين</td>
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<td>2</td>
<td>حزين</td>
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<td>3</td>
<td>إلى حد ما حزين</td>
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<td>4</td>
<td>لا أستطيع وصف شعوري</td>
</tr>
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<td>5</td>
<td>غير حزين</td>
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<td>6</td>
<td>غير حزين إلى حد ما</td>
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<tr>
<td>7</td>
<td>على الأطلاق غير حزين</td>
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</tbody>
</table>

6 - ما مقدار الغضب الذي تشعر به تجاه صديقك؟

<table>
<thead>
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<tbody>
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<td>غاضب إلى حد كبير</td>
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<td>2</td>
<td>غاضب إلى حد ما</td>
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<td>3</td>
<td>غاضب</td>
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<td>4</td>
<td>لا أستطيع وصف شعوري</td>
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<td>5</td>
<td>غير غاضب</td>
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<td>6</td>
<td>غير غاضب إلى حد ما</td>
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<tr>
<td>7</td>
<td>لذا غير غاضب</td>
</tr>
</tbody>
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7 - إلى أي مدى أنت مهتم لما حدث لصديقك؟

<table>
<thead>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
<td>مهتم</td>
</tr>
<tr>
<td>3</td>
<td>إلى حد ما مهتم</td>
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<tr>
<td>4</td>
<td>لا أستطيع وصف شعوري</td>
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<tr>
<td>5</td>
<td>إلى حد ما غير مهتم</td>
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<tr>
<td>6</td>
<td>غير مهتم</td>
</tr>
<tr>
<td>7</td>
<td>إلى حد كبير غير مهتم</td>
</tr>
</tbody>
</table>

8 - إلى أي مدى جعلك صديقك فقد صوابي من الغضب؟

<table>
<thead>
<tr>
<th>رقم</th>
<th>توضيح</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>إلى حد كبير فقدت صوابي</td>
</tr>
<tr>
<td>2</td>
<td>فقدت صوابي</td>
</tr>
<tr>
<td>3</td>
<td>إلى حد ما فقدت صوابي</td>
</tr>
<tr>
<td>4</td>
<td>لا أستطيع وصف شعوري</td>
</tr>
<tr>
<td>5</td>
<td>إلى حد ما لم أفقد صوابي</td>
</tr>
<tr>
<td>6</td>
<td>لم أفقد صوابي</td>
</tr>
<tr>
<td>7</td>
<td>إلى حد كبير لم أفقد صوابي</td>
</tr>
</tbody>
</table>
9 - إلى أي مدى جعلك صديقك مترفزا؟

1 - إلى حد كبير مترفزا.
2 - مترفزا.
3 - إلى حد ما مترفزا.
4 - لا أستطيع وصف شعوري.
5 - إلى حد ما غير مترفزا.
6 - غير مترفزا.
7 - إلى حد كبير غير مترفزا.

10 - إلى أي مدى جعلك صديقك زعلان؟

1 - إلى حد كبير زعلان.
2 - زعلان.
3 - إلى حد ما زعلان.
4 - لا أستطيع وصف شعوري.
5 - إلى حد ما غير زعلان.
6 - غير زعلان.
7 - إلى حد كبير غير زعلان.
في هذا الجزء من الاستبانة سوف نقرأ بعض العبارات التي تتعلق بعدم استعدادك لخدمة صديق:

ضع درجة حول الرقم الذي تراه مناسبا باستخدام المقياس التالي:

1 - مستعد تمامًا لمساعدته.
2 - من الغالب أن أساعد.
3 - من المحتمل أن أساعد.
4 - غير متأكد.
5 - من المحتمل لا أساعد.
6 - غالبًا لن أساعد.
7 - قطعا لن أساعد.

1 - تذهب إلى الصيدلية لأحضار دواء له.
2 - تساهم في الحصول على أفضل طبيب.
3 - تساهم ماديا لدفع تكاليف العلاج.
4 - توصله بسيارتك إلى الجامعة.
5 - تصل به هاتفيا للسؤال عنه.
6 - تزوره في منزله للإطمئنان عليه.
7 - تساهم في المشي في ساحات الجامعة.
8 - تراققه في زيارة طبية.
9 - تساهم في صعود ونزول الدرج.
10 - تزوره في المستشفى.
11 - تراققه للعلاج خارج المملكة لعدة أسابيع.
12 - تحل بجوار سريره عند احتضارها.
13 - تسليه لصرف إثباته عن التفكير في مرضه.
14 - تحريه من إساءة الآخرين له.
في نهاية الاستمارة نرجو منك التكرم بالإجابة على الأسئلة التالية وذلك بوضع دائرة حول الرقم المناسب.

العمر __________ سنة

الحالة الاجتماعية:
1 - أعزب
2 - متزوج
3 - مطلق
4 - أرمل

3 - ما مدى تأثير تعاليم الدين الإسلامي على حياتك اليومية؟

- 1 - تأثيرها قليل
- 2 - متوسط
- 3 - تأثيرها كبير
- 4 - تأثيرها كبير جدا

4 - ما مدى التزامتك باداء الصلاوات في المسجد؟

- 1 - دائما
- 2 - غالبا
- 3 - أحيانا
- 4 - نادرا

5 - ما هي أهمية الإسلام في حياتك بشكل عام؟

- 1 - مهم جدا
- 2 - مهم
- 3 - مهم إلى حد ما
- 4 - قليل الأهمية

6 - لو ابتاحت لك الفرصة لمعرفة إذا ما كنت مصاباً بالايديز عن طريق تحليل الدم فهل من الممكن أن تجريه؟

لا

7 - أنا لا أعتقد أن الايديز مشكلة خطيرة في السعودية؟

لا

8 - هل تعرف شخصاً مصاباً بالايديز؟

لا
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9 - إذا كانت إجابتك (نعم) ما هي علاقة هذا الشخص؟

1 - صديق.
2 - فرد من العائلة.
3 - قريب لك.
4 - علاقة أخرى (حدد نوعية العلاقة) ________________________

10 - ماهو مستوى التعليم:

1 - متوسط أو أقل
2 - ثانوي
3 - جامعي
4 - ما بعد الجامعي

11 - لماذا تعرف عن مرض الأيدز؟

1 - لا أعرف شيئاً.
2 - أعرف القليل جداً.
3 - أعرف إلى حد ما.
4 - أعرف الكثير جداً.

12 - ماهو المصدر الأصلي لمعلوماتك عن الأيدز؟ (اختير واحداً فقط)

1 - تلفزيون
2 - راديو
3 - الجرائد والمجلات
4 - أصدقاء
5 - مدونات ومصادر
6 - مصادر أخرى (حددها من فضلك) ________________________

هل لديك أي تعليق؟

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________

________________________________________________________
APPENDIX C
HUMAN SUBJECTS REVIEW COMMITTEE

Checklist for Attachments and Time Schedule

The following are attached (please check):

12. ☑ Letter or written statement to subjects indicating clearly:
   a) purpose of the research
   b) the use of any identifier codes (names, #’s), how they will be used, and when they will be
      removed (see Item 17)
   c) an estimate of time needed for participation in the research and the place
   d) if applicable, location of the research activity
   e) how you will ensure confidentiality
   f) in a longitudinal study, note when and how you will contact subjects later
   g) participation is voluntary; nonparticipation will not affect evaluations of the subject

13. □ Consent form (if applicable)

14. □ Letter of approval for research from cooperating organizations or institutions (if applicable)

15. ☑ Data-gathering instruments

16. Anticipated dates for contact with subjects:
   First Contact
   Last Contact
   May/12/1997
   May/15/1997
   Month / Day / Year
   Month / Day / Year

17. If applicable: anticipated date that identifiers will be removed from completed survey instruments and/or audio or visual
    tapes will be erased:

   Month / Day / Year

18. Signature of Departmental Executive Officer
    Date
    Department or Administrative Unit

19. Decision of University Human Subjects Review Committee:
    ☑ Project Approved
    □ Project Not Approved
    □ No Action Required

   Patricia M. Keith
   Name of Committee Chairperson
   5/11/97
   Date
   Signature of Committee Chairperson
REFERENCES


Caroll, Leo. 1990. “Gender Differences in AIDS Knowledge Among Students in an Eastern University.” *Sociology and Social Research* 74:212-220.


ACKNOWLEDGMENTS

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