



Published as:

**Author:** Connors, John; Hely, Alan

**Email:** [jconnors@csu.edu.au](mailto:jconnors@csu.edu.au)

[Alan.Hely@health.gov.au](mailto:Alan.Hely@health.gov.au)

**Year:** 2007

**Title:** Attitudes toward people living with HIV/AIDS: A model of attitudes to illness

**Journal** Journal of Applied Social Psychology

**Volume:** 37

**Issue:** 1

**Pages:** pp124-130

**ISSN:** 0021-9029

**URL:** <http://www.blackwell-synergy.com/doi/pdf/10.1111/j.0021-9029.2007.00151.x>

**Abstract:** This study examined attitudes toward people living with HIV/AIDS within a sample of 220 young men and women. As predicted, a multiple regression analysis revealed that the fear of contracting HIV/AIDS through casual contact was a significant predictor of both men and women's willingness to interact with people living with HIV/AIDS. Attitudes to homosexuality were also a significant predictor of attitudes toward people living with HIV/AIDS among women, who generally have a low risk of contracting the disease in western societies. These results indicate that attitudes toward people with a serious illness may be strongly related to the perceived risk of contracting the disease.

CSU Research Output

<http://researchoutput.csu.edu.au>

Running head: ATTITUDES TOWARD PEOPLE LIVING WITH HIV/AIDS

Attitudes toward People Living with HIV/AIDS: A Model of Attitudes to Illness

John Connors and Alan Hely

Department of Psychology

Charles Sturt University, Australia

### Abstract

This study examined attitudes toward people living with HIV/AIDS within a sample of 220 young men and women. As predicted, a multiple regression analysis revealed that the fear of contracting HIV/AIDS through casual contact was a significant predictor of both men and women's willingness to interact with people living with HIV/AIDS.

Attitudes to homosexuality were also a significant predictor of attitudes toward people living with HIV/AIDS among women, who generally have a low risk of contracting the disease in western societies. These results indicate that attitudes toward people with a serious illness may be strongly related to the perceived risk of contracting the disease.

### Attitudes toward people living with HIV/AIDS: A model of attitudes to illness

This study was designed to examine the psychological bases of attitudes to people living with HIV/AIDS. Unfavorable attitudes may lead to discrimination in education and employment, and affect public support for health programs. Two possible explanations for such attitudes have been explored: fear of contagion and social stigma. Thus, unfavorable attitudes toward people living with HIV/AIDS may be the result of a concern about contracting the disease or the association of HIV/AIDS with homosexuality (Bishop, Alva, Cantu & Rittiman, 1991; Pryor, Reeder, Vinacco & Knott, 1989).

Initially, these explanations were seen as competing hypotheses, and early studies found evidence to support both of them. For example, Pryor et al. (1989) concluded that attitudes toward people living with HIV/AIDS were largely a function of its association with homosexuality. In contrast, Bishop et al. (1991) argued that such attitudes are primarily determined by the fear of contracting the disease.

More recently, a number of researchers (e.g., Crandall, Glor & Britt, 1997; Dijker, Kok, & Koomen, 1996; Herek & Glunt, 1993) have proposed that both factors may affect attitudes toward people living with HIV/AIDS. They have proposed a general model of attitudes toward people with an illness that may help to reconcile these conflicting findings. In this model, attitudes toward a person with an illness may be based on the perceived characteristics of the *disease* or the perceived characteristics of the *people* who

are affected by it. Some of the perceived characteristics of the disease that may be important are whether people believe that the disease has serious physical consequences, and whether there is a treatment available for it. Another factor that may influence attitudes toward people with an illness is beliefs about the transmission of the disease. In the case of HIV/AIDS, previous studies have found that many people tend to overestimate the risk of contracting it through casual contact (Herek & Glunt, 1993).

Some of the perceived characteristics of the people affected by an illness include whether people appear to be responsible for contracting the disease, and whether they belong to a particular group. For example, people tend to be less sympathetic toward people with an illness, if they are believed to have been responsible for its occurrence. In the case of HIV/AIDS, the disease has become associated with homosexuality and sexual promiscuity in western societies (Pryor et al., 1989).

Crandall and his colleagues (1997) have argued that in the case of a serious disease, such as HIV/AIDS, attitudes toward people with the illness will be largely based on concerns about the disease, such as the perceived risk of contracting it. With a mild illness, however, the extent to which the disease is associated with deviant social groups will increase negative attitudes toward people with the illness. For example, Bishop et al. (1991) reported that the stated willingness of the participants in their study to interact with a person with a fictitious illness was strongly related to the perceived contagiousness of the disease. The association of the disease with homosexuality only affected the participants' willingness to interact when the disease was described as not being contagious.

The present study aimed to investigate whether investigate whether Crandall et al.'s (1997) model could provide a framework for understanding the psychological bases of attitudes toward people living with HIV/AIDS. On the basis of the model, it was expected that the fear of contracting HIV/AIDS would predict attitudes toward people living with HIV/AIDS more strongly than attitudes toward homosexuality, because of the serious nature of the disease. As previous studies have found that men tend to report less favorable attitudes than women toward people living with HIV/AIDS (Heaven, Connors & Kellhear, 1990), as well as a greater fear of contracting HIV/AIDS (Young, Gallaher, Marriott, & Kelly, 1993) and less favorable attitudes toward homosexuality (Bouton et al., 1987; Kunkel & Temple, 1992; Young et al., 1993), it was decided to test the hypothesis separately among men and women.

### Method

The participants in the study were 220 undergraduate students from a regional university in Australia (43 men and 177 women, with a mean age of 22.86 and 21.63 years respectively). The students were enrolled in courses in liberal arts (55), nursing (52), radiography (41), social welfare (40) and a range of other programs (32). Each participant was provided with a questionnaire, which contained the following scales:

1. *Fear of AIDS Scale* (Bouton et al., 1987). This scale was developed to measure fear of the disease. In the present study, a principal components analysis with varimax

rotation produced five factors with eigen values greater than one. A scree test indicated a two-factor solution, which differed slightly from Bouton et al.'s initial three-factor solution. The first factor (fear of contact) contained 9 items such as "If I found out a friend had AIDS, I would be afraid to hug him/her", and explained 26.0% of the variance. The second factor (public health risk) explained a further 12% of the variance, and included 3 items such as "AIDS will become a severe and widespread epidemic".

2. *Homophobia Scale* (Bouton et al., 1987). This 7-item scale was developed to measure negative attitudes toward homosexuality (e.g., "Homosexuality is disgusting"). In the present study, the single factor within the scale explained 64.5% of the variance.

3. *Attitudes to people with HIV/AIDS* (Heaven et al., 1990). This is a 21-item measure with the following three sub-scales: social distance (e.g., "People who have AIDS should be isolated from the rest of the community"), sympathy (e.g., "People who have AIDS are just innocent victims"), and the view that more research into the disease is necessary (e.g., "We should invest more money in trying to find a cure for AIDS"). In the present study, the three factors explained 29.5%, 10.2% and 8.3% of the variance respectively.

The participants were asked to complete the questionnaire without discussing their answers with other people. They were assured that their responses would be confidential, and that they could withdraw from the study at any time.

## Results

Table 1 presents the means and standard deviations for the participants on the various measures. (All of the scales were scored so that a high score represents a high level of the variable being measured.) Comparisons of the means with the mid-points of the sub-scales indicated that both men and women considered that HIV/AIDS posed a major health risk, but they reported relatively little fear of contracting it through causal contact. Both men and women also expressed sympathetic attitudes toward people living with HIV/AIDS, a willingness to have social contact with them, and strong support for research into the disease.

Insert Table 1 about here

A multivariate analysis of variance revealed significant gender differences on many of the scales ( $df = 1, 213$  in all cases). Men reported a greater fear of contracting HIV/AIDS through casual contact ( $F = 8.77, p < .05$ ; partial  $\eta^2 = .04$ ), and less favorable attitudes to homosexuality than women ( $F = 23.77, p < .01$ ; partial  $\eta^2 = .10$ ). Men were also less willing to have social contact with people living with HIV/AIDS ( $F = 15.75, p < .01$ ; partial  $\eta^2 = .07$ ), while women expressed more sympathetic attitudes toward them ( $F = 20.43, p < .01$ ; partial  $\eta^2 = .09$ ). (A Bonferroni adjustment was used to determine the levels of significance.)



Finally, separate multiple regression analyses were performed on the data to determine the unique predictors of attitudes toward people living with HIV/AIDS among men and women. A summary of the significant predictors of these attitudes is presented in Table 2. The fear of contracting HIV/AIDS through casual contact was a significant predictor of both men and women's willingness to interact with people living with HIV/AIDS. The fear that HIV/AIDS represented a major health risk was also a significant predictor of support for research into the disease among both men and women.

Insert Table 2 about here

Among women, attitudes to homosexuality were a significant predictor of their willingness to have social contact with people living with HIV/AIDS, as well as their feelings of sympathy toward them, and their support for research into HIV/AIDS.

## Discussion

As predicted, the fear of contracting HIV/AIDS through casual contact was a significant predictor of both men and women's willingness to interact with people living with HIV/AIDS. The fear that HIV/AIDS posed a major health risk was also a significant predictor of support for research into the disease among both men and women. In contrast, attitudes to homosexuality were a significant predictor of these two attitudes toward people living with HIV/AIDS only among women, who generally have a lower

risk of contracting the disease in western societies. Attitudes to homosexuality were also a significant predictor among women of their feelings of sympathy for people living with HIV/AIDS.

These results are consistent with Crandall et al.'s (1997) hypothesis that attitudes toward people with a serious illness will be strongly related to the perceived risk of contracting the disease. But their model further proposed that the characteristics of the people affected by the disease would only influence attitudes toward them in the case of mild illnesses. The results of the present study suggest that attitudes toward people with a serious illness may also be linked to their perceived characteristics, when the risk of contracting the disease is low. Both these sets of results are consistent with the findings of Bishop et al.'s (1991) earlier study of the willingness of participants to interact with a person with a fictitious illness.

In line with previous studies that have used the same measures, men reported a greater fear of contracting HIV/AIDS and less favorable attitudes toward homosexuality than women (Bouton et al., 1987; Kunkel & Temple, 1992; Young, Gallaher, Marriott, & Kelly, 1993). Men also expressed less favorable attitudes to people living with HIV/AIDS in terms of expressions of sympathy and their willingness to have social contact with them (Heaven et al., 1990). These findings are also consistent with the perception that they face a greater risk of contracting HIV/AIDS than women do. However, it should be noted that the effect sizes of these differences were small (.04 to .10).

In summary, the results of the present study indicate that attitudes toward people with a serious illness may be strongly related to the perceived risk of contracting the disease. If the risk of contracting the disease is regarded as high, attitudes toward people with the illness may be largely based on the fear of contracting it. When the disease does not appear to be contagious, the characteristics of the people affected by the illness may also influence attitudes toward them. These findings represent a refinement of Crandall et al.'s (1997) model, which may provide a more comprehensive framework for understanding public attitudes toward people with a serious illness, such as those affected by the recent outbreak of the SARS virus, and allow health professionals to develop intervention programs that are appropriate to the perceived risk of contracting a disease within the community. At the same time, support for the model would be strengthened by a replication of this study with a sample of the population that was more broadly based, particularly in terms of their age and educational background.

## References

- Bishop, G.D., Alva, A.L., Cantu, L., & Rittiman, T.K. (1991). Responses to persons with AIDS: Fear of contagion or stigma? *Journal of Applied Social Psychology, 21*, 1877-1888.
- Bouton, R.A., Gallaher, P.E., Garlinghouse, P.A., Leal, T., Rosenstein, L.D., & Young, R.K. (1987). Scales for measuring fear of AIDS and homophobia. *Journal of Personality Assessment, 51*, 606-614.
- Crandall, C.S., Glor, J., & Britt, T.W. (1997). AIDS-related stigmatization: Instrumental and symbolic attitudes. *Journal of Applied Social Psychology, 27*, 95-123.
- Dijker, A.J., Kok, G., & Koomen, W. (1996). Emotional reactions to people with AIDS. *Journal of Applied Social Psychology, 26*, 731-748.
- Heaven, P.C.L., Connors, J., & Kellehear, A. (1990). Structure and demographic correlates of attitudes toward AIDS sufferers. *Journal of Psychology, 124*, 245-252.
- Herek, G.M., & Glunt, E.K. (1993). Public attitudes toward AIDS-related issues in the United States. In J.B. Pryor & G.D. Reeder (Eds.), *The social psychology of HIV infection* (pp. 229-261). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Kunkel, L.E., & Temple, L.L. (1992). Attitudes towards AIDS and homosexuals: Gender, marital status, and religion. *Journal of Applied Social Psychology, 22*, 1030-1040.

- Pryor, J.B., Reeder, G.D., & Vinacco, R. (1989). The instrumental and symbolic functions of attitudes toward persons with AIDS. *Journal of Applied Social Psychology, 19*, 377-404.
- Young, R.K., Gallaher, P.E., Marriott, S., & Kelly, J. (1993). Reading about AIDS and cognitive coping style: Their effects on fear of AIDS and homophobia. *Journal of Applied Social Psychology, 23*, 911-924.

Author Note

John Connors and Alan Hely, Department of Psychology, Charles Sturt University, Australia.

This article is based on an earlier paper presented at the 32nd Annual Meeting of the Society for Australasian Social Psychologists, Sydney, Australia (April 2003).

Correspondence concerning this article should be addressed to John Connors, Department of Psychology, Charles Sturt University, Locked Bag 678, Wagga Wagga, Australia 2678. Email: [jconnors@csu.edu.au](mailto:jconnors@csu.edu.au)

Table 1

*Means and Standard Deviations on the Measures of Fear of AIDS, Homophobia and Attitudes to People Living with AIDS*

Variables	Men		Women		Mid-point of scale	Alpha
	Mean	Standard deviation	Mean	Standard deviation		
<u>Fear of AIDS</u>						
Fear of contact	19.09	6.24	16.61	4.61	27	.77
Public health risk	11.72	2.49	11.99	1.95	9	.57
<u>Homophobia</u>	19.44	7.86	14.43	5.67	21	.90
<u>Attitudes</u>						
Social distance	17.60	6.50	14.43	4.20	30	.84
Sympathy	25.56	3.87	28.56	3.86	21	.77
Research & care	12.28	2.95	12.70	2.18	9	.81

Table 2

*Summary of Simultaneous Multiple Regression of Predictor Variables on Attitudes to People Living with AIDS*

Variables	<i>B</i>	<i>SE B</i>	$\beta$	<i>t</i>	<i>p</i>
<i>Social distance</i>					
<u>Men</u>					
Fear of AIDS (Fear of contact)	.84	.10	.80	8.59	.00
<u>Women</u>					
Fear of AIDS (Fear of contact)	.53	.06	.58	8.50	.00
Homophobia	.14	.05	.19	2.73	.01
<i>Sympathy</i>					
<u>Women</u>					
Fear of AIDS (Fear of contact)	-.29	.07	-.35	-4.45	.00
Homophobia	-.21	.05	-.31	-3.98	.00
<i>Research &amp; care</i>					
<u>Men</u>					
Fear of AIDS (Public health risk)	.65	.16	.55	4.15	.00



Women

Fear of AIDS (Public health risk)	.28	.08	.25	3.51	.00
Homophobia	-.08	.03	-.20	-2.27	.02