Attitudes toward HIV-positives in dependence on their sexual orientation

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Homosexual HIV-positives suffer under a double stigma. Moreover, many heterosexuals still associate HIV/AIDS with homosexuality (Herek & Capitanio, 1999). This study examined the connection between belief in a just world, sexual morality and values on the one hand and attitudes towards HIV-positives on the other. Hundred and ninety-nine subjects evaluated an HIV-positive target (homosexual for half of the subjects, heterosexual for the other half) by means of a semantic differential. Results: in general, homosexual HIV-positives were evaluated more negatively than heterosexual HIV-positives. A moderated regression analysis showed a significant effect of values on the rating of the target.

Keywords: AIDS, just-world belief, attitudes, sexual morality, values

Introduction

According to estimates made by the WHO (2000), there are currently 36.1 million people worldwide who have HIV (Human immunodeficiency virus)/AIDS. Since the discovery of AIDS (acquired immune deficiency syndrome) in 1981 (U.S. Department of Health and Human Services, 2001), 21.8 million people have already died of it. AIDS is currently the most common cause of death in Africa and the fourth most common world-wide. In Europe the number of HIV-positive people at the end of 2000 has been estimated to be about 540,000 (WHO, 2000).

This article deals with the attitudes towards persons who are HIV-positive. Research work in the past years has repeatedly shown that AIDS-patients or HIV-positives are discriminated against and stigmatized (Herek, 2000; Sheehan, Lennon, & McDevitt, 1989). The stigma of AIDS-patients or HIV-positives is reflected in that responsibility or guilt for the illness is increasingly attributed to those affected. As if that were not enough, social interactions with these people are avoided (Crawford, 1996). The underlying negative attitude towards HIV/AIDS is caused by the fact that HIV/AIDS is associated with promiscuity (McCann, 1999), drugs, homosexuality and death (Pryor, Reeder, & Landau, 1999).

Generally, attitudes towards homosexual HIV-positives are much more negative than attitudes towards heterosexual HIV-positives (e.g. Fish & Rye, 1991; Kunkel & Temple, 1992). In several studies it was found that homosexual persons infected with HIV are doubly devaluated. This is due to their sexual orientation on the one hand and their infection on the other (Leiker, Taub, & Gast, 1995). In addition, connections have been found between the fear of AIDS and homophobia. Homophobia refers to a wide complex of negative attitudes, feelings and behavior towards homosexuality (McDevitt, Sheehan, Lennon, & Ambrosia, 1989). In fact it has been observed that homophobic persons feel less sympathy for HIV-positives (Walters, 1997).

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Belief in a just world

This study examined the connection between belief in a just world (BJW; for an overview of this area of research see Montada & Lerner, 1998) and a negative evaluation of HIV-positives. It has already been assumed that just-world belief (Lerner 1980; Lerner & Miller, 1978) leads to both a devaluation of HIV-positives and attribution of guilt – especially when the persons affected are homosexual (Anderson, 1992). The Just-World Theory states that people have a basic need to live in what seems to be a just world. People like to believe that everyone gets what they deserve or that everything a person gets is due to them (Dalbert, 1996). The belief in a just world (BJW) reflects, according to Lipkus, Dalbert, and Siegler (1996) the human need to keep up the illusion of a well-ordered and secure environment.

Studies have revealed great inter-individual differences with respect to the BJW (Hafer & Olson, 1998). The greater a person’s BJW, the more they admire winners, the successful and the powerful, while looking down upon losers, the unsuccessful and powerless.

When people with a greater BJW witness injustice or observe a person being harmed, this can challenge their assumption of a just world. People react to this in different ways:

1. People with BJW can restore justice by helping the victim of the injustice or compensating for the damage. In fact it has been established that people with greater BJW are more helpful than people with less BJW (Bierhoff, Klein, & Kramp, 1991; Miller, 1977).

2. If help or some other form of compensation for harm is not possible (e.g. because the person was killed), justice can be generated cognitively. This happens when the victim of the injustice is devaluated. Behind this psychologic hides, according to Montada (1992) a reverse inference: if the observer decides that the victim deserved their fate, the observed harm no longer contradicts the assumption of a just world.

The results of the just-world-theory show that exactly those people to whom less responsibility is attributed are devaluated most (Lerner & Miller, 1978). Victims who are regarded as partially responsible are devaluated less (Jones & Aronson, 1973). The results of Lerner and colleagues also showed that victims who in the opinion of outsiders are partially responsible for their misfortune are not devaluated as much. Ford, Liwag-McLamb, and Foley (1998) examined the relationship between BJW and gender as well as sexual orientation – both for the observer and the victim. They found that participants in the experiment tended to place the blame for a rape on a woman if the woman is heterosexual. Conversely, male victims are blamed for a rape, if they are homosexual.

For our study we assumed that persons who believe in a just world tend to devalue HIV-positives more than do people who exhibit a comparatively lower BJW. However, persons with greater BJW should devalue homosexual targets less than heterosexual targets, since according to the logic of the just-world-theory, the homosexual, who due to his higher risk can be blamed more, has already received his “just punishment” by becoming infected (Schellenberg & Lipsitz-Bem, 1998). The higher risk which homosexuals face of becoming infected with the AIDS virus results from the fact that a disproportionately high number of homosexual men engage in sexual practices which either must be rated as risky (such as anal intercourse without a condom) or have consequences which cannot yet be fully assessed (Halkitis & Parsons, 2000).

Values and sexual morality

In addition to the BJW we also examined the connection between values and attitudes towards HIV-positives. Generally values act as guiding principles that shape one’s attitudes, beliefs and behavior in various ways (Feather, 1984; Rokeach, 1973). In some studies relationships between homophobia and comparable values have already been discovered. According to Larsen, Reed, and Hoffman (1980), heterosexual persons who are dismissive of homosexuals exhibit more authoritarianism. Generally, authoritarianism is connected with more negative attitudes towards demographic minorities (Altemeyer, 1996), which especially applies to homosexuals (Hunsberger, Owusu, & Duck, 1999). Persons with politically conservative attitudes (Whitley, 1987) and persons with rigid views on gender roles (Newman, 1989) also exhibit distinct homophobia (Heaven & Oxman, 1999) or have strong negative prejudices against homosexuals (Kite & Whitley, 1996). In this study it was assumed that similar attitudes also apply to HIV-positives. It was expected that “more traditional” attitudes are connected with a devaluation of HIV-positives, while self-realization values are associated with less devaluation of HIV-positives.

In addition to belief in a just world and values, the sexual morality of the evaluators was taken into account. An indicator of a possible influence on the evaluation of HIV-positives is provided by a study done by Ficarroto (1990), according to which individuals with a restrictive sexual morality exhibit greater homophobia. Considering that for a long time not much attention was paid to the sexual orientation of the affected (see Ford et al., 1998), it is not surprising that the sexual orientation of the evaluators them-
Hypotheses

In summary, the following hypotheses were tested:
1. Subjects confronted with a homosexual HIV-positive target, devalue the person more than do subjects with the condition heterosexual HIV-positive target.
2. a) Subjects who possess a greater belief in a just world (BJW), devalue HIV-positives more than do subjects with lower BJW.
   b) In the case of homosexual targets, this effect should be weaker than for heterosexuals.
3. a) Values have an effect on attitudes towards HIV-positives. It is especially assumed that traditional values are related to a more negative attitude towards HIV-positives.
   b) The effect of values is stronger for homosexual targets than for heterosexuals.
4. a) Subjects with a more permissive sexual morality exhibit a more positive attitude towards HIV-positives than do subjects with a more restrictive sexual morality.
   b) The effect is more evident for homosexual targets than for heterosexuals.

Methods

Sample

The sample first comprised 205 students from Viennese Universities. In the final analysis only those 199 subjects were taken into account who had reported their sexual orientation as heterosexual. From the sample, 41.7% were students at the University of Economics, 16.6% at the Technical University and 41.7% were majors in other courses of study. The average age was 23.1 years with a standard deviation of 2.4 years. A hundred and three of the subjects were female (51.8%), 96 (48.2%) were male. The gender ratio was almost the same in the experimental group and the control group, whereby the control group (heterosexual targets) was somewhat older (M = 23.5 years) than was the experimental group (M = 22.6), t(197) = 2.47, p < .05.

Of the subjects 56.6% (n = 116) reported being in a steady relationship. The vast majority desired a sexually faithful relationship (81.5%). Seventy-eight percent of the sample stated that at the time the study was carried out they had no “casual” sexual contacts. Seventy-one percent of the subjects had heterosexual contact with only one partner in the year before the interview. The attitudes towards sexual contacts outside of the relationship was in the range of taboo (see Clement, 1986; Clement defines an attitude as taboo, when it is affirmed by less than one-fifth of those questioned). The attitudes towards the sexual practices presented show that all behavior patterns presented are seen as relatively admissible. Only sexual contacts outside of the relationship were clearly rejected.

Design of the experiment

All subjects received a questionnaire which first asked for socio-demographic data. They were then asked about values and just-world belief. In accordance with earlier studies (Berger & O’Brien, 1998; Schellenberg & Lipsitz-Bem, 1998), the instructions contained a short description/vignette of the target. The subjects were asked to imagine the target based on the short description. The short description was, depending on the experimental condition, varied as follows:
1. Experimental group (homosexual target):
   “Please imagine a homosexual student. S/he has become infected with the AIDS virus through sexual contact.”
2. Control group (heterosexual target):
   “Now please imagine a heterosexual student. S/he has become infected with the AIDS virus through sexual contact.”

Half of the women and half of the men were randomly assigned to either the experimental group or the control group. For the experimental group the target was of the same gender and homosexual. For the control group the target was of the same gender and heterosexual.

Following the short description the subject was asked...
to state their attitude towards the fictional target by means of a semantic differential, as well as the extent of responsibility which the subject attributes to the target for the HIV-infection. After this there were questions on sexual behavior and attitudes towards sexual morality.

Measurements

In order to analyze just-world belief (BJW), the German version of the scale of Rubin and Peplau (1975) was administered. This scale is still the most widely used instrument in research on belief in a just world, although there are concerns about the psychometric properties. However, the validity of other measures for just-world belief is not clear (see Furnham, 1998, for a discussion on this issue). This scale comprises the original 20 items, which were answered on a six-point continuum. Due to low discriminative power, 11 of the items were eliminated. The internal consistency of the scale (Cronbach’s Alpha) was .78. Some sample items were: “The world is basically just”, “People who have luck in life usually deserve it”, “School students deserve the marks they receive in school” or “It is rare that an innocent person goes to jail because of a judicial error”.

The measurement of attitude towards the target was carried out by means of a semantic differential (Bergler, 1975). The subjects used a seven-point rating scale to make evaluations of the target with respect to 14 different trait pairs. For the following calculations only the answers to the evaluation factor of the semantic differential were scored. This factor exhibited an internal consistency of .72 (Cronbach’s Alpha) and comprised the following four trait pairs: “bad-good”, “pleasant-unpleasant”, “attractive-repulsive” and “worthless-valuable”. The answer scale had seven points. Ratings of negatively worded trait pairs were re-coded.

Sexual morality was analyzed using eight items from the questionnaires of Clement (1986) and Reimann and Bardeleben (1992). The subjects evaluated the subjective admissibility of various sexual behavior patterns on four-point rating scales. The reliability of the scale (Cronbach’s Alpha) was .82 (see Table 1).

To analyze values, 17 items of the original 23-item scale of Herbert (1992) were administered. The items comprised statements on the following values: conformity, conservatism, national pride, religiousness, adherence to laws, orientation towards safety, justice, conventional performance ethic, standard of living, power, emotionality, hedonism, individualism, self-realization, social helpfulness, tolerance and political commitment. The subjects rated the importance of these values with respect to their own values on the rating scales (seven-point). In addition to the 17 items of Herbert, 14 terminal values (goals such as e.g. “A peaceful world” or “Happiness”) were used from the value inventory of Rokeach (1973), in the translation by Günther (1975).

In accordance with Herbert (1992), a main component analysis with a varimax-rotation was calculated over these 31 items. The results of a Scree-test provided a 3-factor solution, which explained a total of 34.2% of the variance. The factors which resulted were harmony and safety (Harmony) (12.7% of explained variance; sample items: “Safety for the family”, “A peaceful world”); conventional conformity and performance (Conformity) (12.4% of explained variance; sample items: “Respect law and order”, “Be hard-working and ambitious”) as well as self-realization and individual life planning (Self-realization) (9.2% of explained variance; sample items: “Develop own fantasy and creativity”, “Lead an exciting life”). The internal consistencies (Cronbach’s Alpha) of the three scales were .78 for the scale harmony (consisting of 9 items), .78 for the scale conformity (Cronbach’s Alpha) of the three scales and .54 for the scale self-realization (11 items).

Results

First we calculated bivariate correlations between just-world belief, values, and sexual morality with the evaluation for the total sample and separately for both targets (Table 2). As can be seen, most of the coefficients were negative, indicating a negative relationship between evaluation of the target and the variables of interest. One notable exception was the value-factor Self-realization, which correlates to .28 with a positive evaluation of the heterosexual target. As expected, the correlations for the homosexual target with exception of Self-realization were negative, indicating a negative relationship between the interesting variables and the evaluation of the target.

A moderated multiple regression analysis was calculated to test the hypotheses (cf. Aiken & West, 1991). This

Table 1

<table>
<thead>
<tr>
<th>Items</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual contacts outside of a relation</td>
<td>.65</td>
</tr>
<tr>
<td>Masturbation</td>
<td>.50</td>
</tr>
<tr>
<td>Homosexuality</td>
<td>.50</td>
</tr>
<tr>
<td>Sex with casual partners</td>
<td>.59</td>
</tr>
<tr>
<td>Penis oral sex</td>
<td>.51</td>
</tr>
<tr>
<td>Vaginal oral sex</td>
<td>.56</td>
</tr>
<tr>
<td>Penis anal sex</td>
<td>.74</td>
</tr>
<tr>
<td>Anal oral sex</td>
<td>.65</td>
</tr>
<tr>
<td>Cronbach’s Alpha = .82</td>
<td></td>
</tr>
</tbody>
</table>
The final results showed significant effects of the predictors target, harmony, conformity and self-realization as well as a significant interaction between target and harmony (see Table 3). As was expected (see Hypothesis 1) varying the target significantly is linked with their evaluation. A homosexual target received a significantly lower rating in the semantic differential than did the heterosexual target. For the values (see Hypothesis 3) it was found that high scores on the factor conformity led to a more negative rating of the target, while high scores on the factors harmony and self-realization were connected with a positive influence on the evaluation of the target.

With respect to the value factor Harmony, a significant interaction with the target was found (B = -.40). For the heterosexual target it was apparent that the greater the desire for harmony and safety, the more positive was the evaluation of the HIV-positive target. This can be seen from the slope of .29 in Figure 1 (higher values indicate a more positive evaluation of the target). For the homosex-

Table 2

Bivariate correlations between evaluation of the target and just-world belief, values and sexual morality

<table>
<thead>
<tr>
<th></th>
<th>Total sample</th>
<th>Homosexual target</th>
<th>Heterosexual target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just-world belief</td>
<td>-.18***</td>
<td>-.20***</td>
<td>-.15</td>
</tr>
<tr>
<td>Harmony</td>
<td>-.02</td>
<td>-.19*</td>
<td>.16</td>
</tr>
<tr>
<td>Conformity</td>
<td>-.24***</td>
<td>-.35***</td>
<td>-.13</td>
</tr>
<tr>
<td>Self-realization</td>
<td>.19**</td>
<td>.06</td>
<td>.28**</td>
</tr>
<tr>
<td>Sexual morality</td>
<td>-.12</td>
<td>-.23*</td>
<td>.00</td>
</tr>
</tbody>
</table>

***p < .001, **p < .01, *p < .05

The independent variables (predictors) of the regression analysis were

- target (homosexual/ heterosexual),
- sexual morality,
- just-world belief,
- the values harmony, conformity and self-realization as well as

the double interactions between

- target and sexual morality,
- target and just-world belief,
- target and harmony, conformity and self-realization.

During the stepwise analysis the following variables were eliminated: sexual morality (initial β = .10), just-world-belief (initial β = -.12), the interactions between target and sexual morality (initial β = -.19), target and just-world-belief (initial β = -.02), target and conformity (initial β = .05) and target and self-realization (initial β = -.22).

With respect to the value factor Harmony, a significant interaction with the target was found (B = -.40). For the heterosexual target it was apparent that the greater the desire for harmony and safety, the more positive was the evaluation of the HIV-positive target. This can be seen from the slope of .29 in Figure 1 (higher values indicate a more positive evaluation of the target). For the homosex-

![Figure 1. Interaction between target and self-realization.](image-url)

Table 3

Moderated regression analysis with the criterion evaluation of the target

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>R</th>
<th>β</th>
<th>Tol</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Target</td>
<td>-.27</td>
<td>-.16</td>
<td>-.30</td>
<td>.99</td>
<td>-2.21*</td>
</tr>
<tr>
<td>HarmonyC</td>
<td>.29</td>
<td>-.02</td>
<td>.26</td>
<td>.43</td>
<td>2.25*</td>
</tr>
<tr>
<td>ConformityC</td>
<td>-.29</td>
<td>-.24</td>
<td>-.28</td>
<td>.79</td>
<td>-3.34**</td>
</tr>
<tr>
<td>Self-realizationC</td>
<td>.31</td>
<td>.19</td>
<td>.35</td>
<td>.93</td>
<td>2.33*</td>
</tr>
<tr>
<td>Target × harmonyC</td>
<td>-.40</td>
<td>-.14</td>
<td>-.34</td>
<td>.49</td>
<td>-2.33*</td>
</tr>
</tbody>
</table>

R² = .14, F(5, 198) = 6.46, p < .001 Durbin-Watson = 1.81

Note. c centered values
Non-standardized (B) and standardized (β) regression parameters, Zero-Correlations (R), Tolerance (Tol).

**p < .01, *p < .05 (one-sided significances).
ual target the slope of the regression line was $-0.11$. This means that the evaluation of the homosexual target becomes more negative to some extent with an increasing wish for Harmony and Safety.

For the hypotheses formulated this means that Hypothesis 1 (effect of the target), and Hypothesis 3a (values) were confirmed (Hypothesis 3b was not confirmed, though Harmony indicates a positive relationship only for the heterosexual target). Hypothesis 2, which assumes a relationship with just-world-belief, was not confirmed. An existing belief in a just world had no significant influence on the evaluation of the target and there was no interaction with the target. Hypothesis 4 was also not confirmed. Sexual morality had no significant influence on the rating of the target. The interactions between target and sexual morality were as well not significant.

Discussion

The results indicate a definite influence of sexual orientation of a target as well as, on the part of the subject variables, the influence of values on the evaluation of the HIV-positive person. Homosexual HIV-positives were devaluated as compared to heterosexual HIV-positives. This corresponds to a series of data (e.g. Fish & Rye, 1991; Kunkel & Temple, 1992). Possible reasons for the devaluation of homosexual HIV-positives might be that homosexuals are in general evaluated more negatively (McDevitt et al., 1989) or that homosexuals, because they have a higher risk of becoming HIV-positive (U.S. Department of Health and Human Services, 2001), are attributed with greater responsibility. This last assumption would be plausible if the belief in a just world was connected with a weaker devaluation of homosexual HIV-positives, as it was shown (e.g. Jones & Aronson, 1973) that those persons who bear more responsibility are devaluated less. This was not confirmed by this study, however. Contrary to the assumption that the belief in a just world acts as a mediator of attitudes towards hetero- vs. homosexual targets, no interaction could be found between target and just-world-belief. Just-world-belief only correlates slightly negative with the evaluation of HIV-positives, independently of sexual orientation. This tendency may be explained by the relationship between just-world-belief and traditional values. For example, in our study, just-world belief correlates to $r = 0.21, p < 0.01$ with the value-factor Conformity, which corresponds to earlier findings (Dalbert, 1992; Lamberts, Burroughs, & Chasteen, 1998).

All value-factors exercised significant influence on the evaluation of targets, but in different ways. Conformity, i.e. orientation towards traditional values, leads to a devaluation of HIV-positive targets, independently of whether they are homo- or heterosexual. This is confirmed by the results of studies according to which traditional values (law and order-values) represented the basis for negative stereotypes of minorities (Braithwaite, 1997; Duckett, 1993). The desire for self-realization, on the other hand, is linked to a better evaluation of heterosexual HIV-positives. One can only speculate about the reasons of this result. It may be that subjects with higher desire for self-realization in our sample have more positive attitudes toward HIV-positives, because they both identify themselves with people who strive for self-realization and they also see HIV as one possible tragic consequence of self-realization (at least with regard to sexual self-realization). Differences in the evaluation of heterosexual and homosexual targets are found with respect to the value harmony and safety. Striving for harmony and safety influences the evaluation of a heterosexual target in a clearly positive way as compared to evaluation of a homosexual target, who is evaluated slightly more negatively. This might be explained by the fact that homosexual HIV-positives as far as they consciously take greater sexual risks (Halkitis & Parson, 2000), in this aspect take lesser care for safety.

From the sexual morality of the evaluators we could not predict the evaluation of the target, although there were significant relations between sexual morality and the value factor conformity, $r = 0.35, p < 0.001$. The more rigid sexual morality is (i.e. few sexual behavior patterns are considered admissible), the higher are the values in the factor conformity.

The study was unique insofar as just-world belief, values and sexual morality were examined together. The data indicate that values have the greatest influence on the evaluation of HIV-positive persons. As a qualification, it must be said that the description of the targets was very short, so that in a real situation, stronger effects are to be expected, which possibly also comprise just-world belief and sexual morality. Therefore, future studies are needed to clarify this issue.

References


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