Causal Versus Existential Attributions: Different Perspectives on Highly Negative Events

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In this article, we examine attributions of extremely negative events such as an HIV infection, both from the perspective of the infected person as well as from the perspective of noninfected observers. The impetus for these studies is the observation that victims of highly negative events often refer to attributions such as "poetic justice" or "personal destiny." These attributions are distinguished from causal attributions and are labeled existential attributions. In Study 1, we analyze whether existential attributions are indeed prevalent among persons infected with HIV. In Studies 2, 3, and 4, we examine the evaluation of such existential attributions from the perspective of an outside observer. Results show that persons infected with HIV indeed refer to existential attributions to explain their infection, whereas uninvolved observers predominantly reject these attributions. Moreover, Studies 2 and 3 reveal that perspective-taking ability, when measured as a stable person disposition, does not foster an understanding of existential attributions. However, as is shown in Study 4, situational determinants of the observer's perspective taking—such as the perception of one's own risk of becoming infected with HIV—promotes an understanding of the possible functions of existential attributions. Results are discussed with respect to the veridicality and functionality of existential attributions as well as their therapeutic implications.

According to Weiner's (1994) attributional theory of motivation and emotion, emotional and behavioral reactions toward an event are determined by their perceived causes. Similarly, a number of conceptions in clinical psychology stress the important role of cognitions and, in particular, attributions for the personal well-being of the individual (Beck, 1991). The psychological impact of attributions has been applied to a wide range of clinical disorders, such as depression (Seligman, 1975, 1991), drug abuse (Ellis, 1994), loneliness (Peplau, Russell, & Heim, 1979), and feelings of inferiority or low self-esteem (Weiner, 1986), among others. Moreover, it has been shown that a change in causal perception—labeled attributional retraining—provides a powerful tool in dealing with these kinds of clinical symptoms (for a summary, see Försterling, 1988). In this article, we will highlight some of the mechanisms that determine attributions in the context of HIV infection. Our research is based on three main assumptions. First, we distinguish between causal and existential attributions. Second, we assume that existential attributions are only prevalent among "actors," that is, persons actually affected by a highly negative event. Third, we assume that existential attributions are difficult to comprehend from the perspective of an outside observer.

CAUSAL VERSUS EXISTENTIAL ATTRIBUTIONS

As evidence from different research areas suggests, victims of highly negative events try to find an answer to questions...
such as "Why me?" or "To what end?" For example, Rosenman (1956) reported that victims of natural disasters tend to attribute their misfortune to higher order reasons such as "personal destiny" or "poetic justice." Janoff-Bulman and Wortman (1977) reported convergent findings for victims of severe accidents. Similarly, we found preliminary evidence that persons infected with HIV also seek existential attributions: In a series of interviews with HIV-infected persons published in a German news magazine ("Liebe," 1992), all the interviewed persons mentioned causal as well as existential attributions. Specifically, the existential attributions mentioned in these interviews were poetic justice, punishment, and personal fate or destiny. One person, for example, reported that soon after being diagnosed HIV-positive, he engaged in a causal search and arrived at the conclusion that "I was extremely thoughtless concerning the risk of being infected [by unsafe heterosexual contacts]. Nevertheless, I had extremely bad luck in meeting someone who—at that time—was already infected" (p. 125). Later, however, the same person was primarily concerned with the question "Why me?"—an existential search—and reported:

I was never a bad person; this cannot be a form of punishment. However, I have always had a good fortune: with my childhood, my parents, my profession. Maybe this infection is a kind of poetic justice, because I was too fortunate. (p. 116)

Although little research has been conducted as to how and why individuals engage in causal and existential searches, the distinction between cause and reason has a long tradition in the philosophy of mind. For example, Aristotle distinguished the efficient cause (the entity that brings about an event or a change) versus the final cause (the end or purpose for which an event has happened or a change has been produced). D. M. Taylor (1970), Toulmin (1979), and, most recently, Dretske (1988), among others, have elaborated these concepts. In social psychology, Buss (1978, 1979) has proposed a similar distinction, assuming that actors refer exclusively to reasons (existential attributions) to explain their own behavior, whereas observers should ascribe the actor's behavior to causal attributions.¹

Wong (1991) proposed that, when seeking causal attributions, the social perceiver acts as a naive scientist who is mainly concerned with explanation and control (Heider, 1958; Kelley, 1973). In this case, the individual focuses on the past to extract the possible causes of an event. When seeking existential attributions, in contrast, the social perceiver acts as a lay philosopher and is mainly concerned with a search for purpose. Furthermore, the individual is guided by cultural and individual values and focuses on the future. Finally, an existential search "is successfully completed only when an individual finds a positive explanation for a bad event as well as a worthy goal for living" (Wong, 1991, p. 113). We found this last point illustrated in another statement by an HIV-infected person who reported that she attributed the infection to personal destiny, an attribution that helped me to develop an acceptance of being infected with HIV. I have built a great part of my new, positive identity on the fact that I am infected—it would be a crisis for me if I heard that there were a vaccination against AIDS. It would be difficult for me to live without the virus, because it has become an important part of my self. ("Liebe," 1992, p. 121).

To summarize, existential attributions or reasons represent a search for subjective meaning; they serve the aim of finding the purpose or meaning inherent in an event. In contrast to causal explanations, which focus on the necessary preconditions of an event in the past, existential attributions typically focus on the purpose or aim an event may serve with regard to the future.

The question arises under which conditions the search for existential attributions takes place. First, as D. M. Taylor (1970) pointed out and as is evident in the previous examples, there seems to be no reason why a particular event or action should not receive both kinds of explanation. Second, it is assumed that it is the high severity of a negative event that elicits the existential search for purpose and meaning beyond the causal search for the sufficient cause of the event. For example, a person who became accidentally infected with HIV (e.g., by means of a blood transfusion) might attribute this event—quite realistically—to bad luck. In addition, vis-à-vis a highly negative event that otherwise would seem unbearable, the person might seek an existential attribution (such as personal destiny) to make the infection subjectively meaningful. In summary, we assume that extremely negative events trigger an additional kind of attributional search in order to answer questions such as "Why me?" or "To what end?" and that this kind of attributional search should be distinguished from causal search. These assumptions are tested in Study 1.

STUDY 1

The aim of this study was to compare the causal perceptions of persons actually infected with HIV with those of persons not infected with HIV. We contacted several German counseling centers to obtain data from HIV-infected individuals. Eventually, we had the opportunity to contact 21 participants. As control groups, we asked heterosexual noninfected participants as well as homosexual noninfected participants to imagine becoming infected with HIV; these participants were required to answer a questionnaire that paralleled the one for the infected persons as closely as possible. We analyzed whether infected versus noninfected persons differed with regard to their causal attributions of an—actual versus hypo-

¹Buss's (1978, 1979) conceptualization of causes and reasons was closely tied to the distinction between actions and occurrences (for a critique of Buss's considerations, see Harvey & Tucker, 1979; Kruglanski, 1979).
theical—infection with HIV. However, according to the considerations outlined previously, existential attributions should be prevalent only among persons actually infected with HIV and should not be considered by individuals who imagine such an infection as a mere possibility.

Method

Participants. This study consists of three different groups of participants. In one group, 3 women and 18 men infected with HIV, participating on a voluntary basis, filled out a brief questionnaire that was distributed by counseling centers in Bielefeld and Frankfurt (Germany). Great care was taken that participants felt sure of the anonymity of their data. The average age of the sample was 34.60 years (SD = 8.30). On average, they had known about their infection for 5 years (SD = 2.10).

Two different control groups were included in this study. First, we asked 29 heterosexual students of the University of Bielefeld (13 women and 16 men; M = 25 years old) to fill out the same questionnaire. Because most of the participants in the group with HIV-infected persons were gay men, we included a second control group with 18 gay men not infected with HIV who were contacted through the gay student organization of the University of Bielefeld (M = 32 years old).

Questionnaire. Participants infected with HIV were asked for how long they had known about their infection. In addition, they were asked to name the specific (efficient) cause of their infection. The following choices were provided: infection by a contaminated blood transfusion, unsafe sexual contact with heterosexual partners, unsafe sexual contact with homosexual partners, and use of HIV-contaminated needles when using drugs. Space was given to provide alternatives.

Participants in the control groups were asked to imagine becoming infected with HIV as vividly as possible. They had to report which of four possible causes would be the most probable one in case they became infected with HIV (the same alternatives were provided for the other group of participants). Subsequently, participants were asked to rate the perceived causal dimensions (stability, internality, and controllability) of the specific cause that had led to their (actual vs. hypothetical) infection (e.g., "Do you think that this cause was controllable?"). In addition, participants had to rate causal attributions (to the person, to circumstances, and to bad luck) and existential attributions. For this purpose, the existential attributions were taken from the aforementioned interview series with HIV-infected persons (i.e., personal fate or destiny, poetic justice, and punishment). For example, participants were asked: "Do you think that your infection is due to poetic justice?" Finally, participants actually infected with HIV were asked to rate their current feelings of guilt. For each alternative, rating scales ranged from 0 (not at all) to 7 (very much).

In addition, concerning causal and existential attributions, space was provided so that participants could mention additional alternatives in a free-response format.

Results

First, for the participants actually infected with HIV, we analyzed the perceived causes of their infection: 16 men were infected by unsafe homosexual intercourse, 2 men were infected by contaminated needles due to drug abuse, 1 woman was raped by an unknown infected man, and 2 women named several possible sources of infection. The time interval of knowing about their infection had no influence on any of the dependent measures (r < .20). Within this sample, the stability, internality, and controllability ratings for the perceived causes of the infection varied from 0 to 7 (Ms = 4.00, 4.67, and 3.01, respectively). The perceived guilt of these persons was also intermediate, with a mean of 3.05 and a high variance within the sample (again, values ranged from 0 to 7). Concerning causal dimensions and perceived guilt, the results are in line with Weiner's (1986) attributional theory. A positive correlation between internality of the cause and feelings of guilt was obtained, r(20) = .53, p < .05. The correlation between controllability and feelings of guilt was also in the predicted direction, r(20) = .24, ns. No significant correlations between specific causal attributions on the one hand and existential attributions on the other hand were obtained (r < .25). Finally, we computed the correlation between the general preference for existential attributions (computed by the sum of the ratings for the different existential attributions) and subjective feelings of guilt; these two variables were highly negatively correlated, r(20) = -.62, p < .005. That is, higher ratings for existential attributions are associated with lower perceptions of guilt. These correlations between the specific existential attributions and feeling of guilt varied considerably: for personal destiny, r(20) = -.72, p < .001; for poetic justice, r(20) = -.42, p < .01; and for punishment, r(20) = -.20, ns.

Second, we computed the mean ratings for causal and existential attributions, respectively, for each group of participants (single analyses for each individual causal and existential attribution revealed completely corresponding results). We conducted a two-factor analysis of variance (ANOVA) with group (participants infected with HIV and two control groups) and type of attribution (causal vs. existential) as independent variables (the latter factor was a repeated measurement). A significant main effect of group was obtained, F(2, 64) = 10.73, p < .001. HIV-infected persons generally made more attributions (M = 8.00) than persons in the control groups (Ms = 4.10 and 3.20 for the heterosexual control group and the homosexual control group, respectively). Furthermore, a significant main effect for attribution was obtained, F(1, 64) = 18.52, p < .001, because, overall, higher means were obtained for causal attributions (M = 8.90) as compared to existential attributions (M = 6.40). These main effects were
FIGURE 1 Study 1: Mean rating of attribution (causal vs. existential) × HIV Status (infected vs. noninfected).

qualified by an interaction between both factors, $F(1, 64) = 5.83, p < .005$. As can be seen in Figure 1, this interaction is due to the finding that no difference between the experimental and the control groups is obtained for causal attributions ($r \leq 2$ in both cases), whereas existential attributions received significantly higher ratings from the participants actually infected with HIV as compared to the control groups: For the difference between the heterosexual control group and the HIV group, $r(48) = 4.08$, $p < .001$, and for the difference between the homosexual control group and the HIV group, $r(45) = 3.84$, $p < .001$. A closer inspection of the data reveals that, without exception, all of the HIV-infected persons refer to existential causes as explanations for their infection. Furthermore, the mean ratings for causal versus existential attributions did not differ for the HIV-infected participants ($r \leq 1$), whereas, for the control groups, causal attributions were much more prevalent than existential attributions: For the heterosexual control group, $r(20) = 5.37$, $p < .001$, and for the homosexual control group, $r(17) = 3.60$, $p < .005$.

Discussion

These data reveal that existential attributions indeed play a major role in the reasoning of individuals who are infected with HIV. Although infected versus noninfected participants referred equally often to causal attributions, participants actually infected with HIV reported a substantially higher degree of existential attributions than noninfected participants. This finding corresponds with data available from other sources, such as interviews with HIV-infected persons, and for other kinds of negative events (see Janoff-Bulman & Wortman, 1977).

Moreover, these results indicate that persons infected with HIV refer to both causal and existential attributions to explain their infection. Several researchers have proposed that existential attributions (or related concepts) are only initiated if a preceding causal explanation fails to provide an explanation of personal significance (e.g., Wong, 1991); a similar position has been proposed by Lazarus and Folkman (1984). Although this assumption is compatible with these data, the design of this study does not provide a direct test.

Finally, for existential attributions of poetic justice and personal destiny, we obtained highly negative correlations between existential attributions and perceived guilt within the sample of HIV-infected persons. This finding suggests that these existential attributions might indeed have a functional value in helping persons find a positive explanation for a bad event. This is not true for the punishment attribution, thus indicating that different existential attributions may differ with regard to their emotional and behavioral consequences. Unfortunately, a classification system for different existential attributions—similar to the attributional dimensions of causal
attributions—is still missing. Further research concerning the implications of existential attributions for emotional and behavioral reactions is needed, and these data present only an initial step into this direction.

STUDIES 2, 3, AND 4

Thus far, we have dealt with the attributions of persons actually infected with HIV. The main part of the growing sociopsychological literature about HIV, however, has dealt with the perception of HIV by individuals who are not infected themselves. In this context, the main issue has been if and to what extent HIV-infected persons are seen as personally responsible for their infection. It has been shown that the ascription of responsibility depends on many factors, for example, the mode of transmission and the sexual orientation of the infected person (e.g., Anderson, 1992; Dowell, Lo Presto, & Sherman, 1991; Ho, 1990; Triplet, 1992; Triplet & Sugarman, 1987; Weiner, Perry, & Magnusson, 1988). Moreover, responsibility ascriptions are determined by subjective, naive assumptions regarding the causes of the disease and the course of the infection (e.g., Sontag, 1978). Furthermore, Weiner (1993, 1994) showed that perceived responsibility determines the emotional and behavioral reactions concerning the stimulus person (e.g., sympathy, anger, and help giving) to a large extent. Little research has been conducted, however, comparing the attributions of persons actually infected with HIV to those of (noninfected) observers.

The question arises as to how the attributions of the affected person are perceived and evaluated by an outside observer. We argue that the engagement in a search for existential attributions requires the event itself and is therefore typical of the affected person (the actor). By contrast, the observer, as a naive scientist, will not be motivated to seek purpose and meaning by reaching a philosophical, reason-oriented (existential) explanation. Rather, the observer should be highly motivated to arrive at a causal explanation that is concerned with prediction of the future and (action) control (cf. Jones & Nisbett, 1971). From this point of view, the observer would be interested in questions such as whether the relevant person is responsible (e.g., Walster, 1966), should receive help (e.g., Dooley, 1995), or the estimation of the risk of facing a similar event. Vis-à-vis these diverging motivations, a perspective discrepancy between actors and observers should arise.

The fact that an observer will evaluate a stimulus person’s attribution as to whether it realistically reflects antecedent information (in terms of covariation information such as consensus, distinctiveness, and consistency) contributes to this discrepancy (Fürstinger & Rudolph, 1988). An evaluation of a stimulus person’s existential attribution against a normative model of causal attribution (such as the ANOVA-model proposed by Kelley, 1973) might trigger perceptions of the nonveridicality of the actor’s existential attribution: The observer, being primarily concerned with causal attributions, might perceive the existential attribution of a stimulus person as unrealistic and of little help. These perceptions, however, might represent a serious misunderstanding of the stimulus person’s perspective because the existential attribution offers an answer to a different question and, thus, serves a different purpose.

Moreover, we wondered which factors might help to overcome the presumed perspective-discrepancy between actors and observers concerning causal versus existential attributions. Two approaches seem promising in this context. First, we analyzed whether the general (dispositional) ability of participants to take the perspective of another person would help to acknowledge the functional value of existential attributions (Studies 2 and 3). Such dispositional abilities have been proposed and analyzed by several authors in developmental and social psychology (e.g., Davis, 1983; Mehrabian & Epstein, 1972; Piaget, 1932). Second, situational variables such as the risk of being involved with the critical event (e.g., an infection with HIV) might reduce the discrepancy between the actors’ and the observers’ perspective. Regan and Totten (1975), for example, showed that the perception of an affected (“empathizing”) observer is more similar to the perspective of an actor. Likewise, Jones (1990; Jones & deCharms, 1957; Jones & Thibaut, 1958) suggested that the relevance of an observed event for the observer will increase perspective taking. Thus, the relevance of an observed HIV infection should—among other factors—vary with the perceived risk of the observer becoming infected. In Study 4, participants with a low versus high subjective risk of becoming infected were compared with regard to their perceptions of causal and existential attributions of HIV-infected persons.

STUDY 2

As has been outlined previously, existential search should require that a person is affected by a highly negative event, whereas the observer—in case of a highly negative event—might be more interested in seeking causal rather than existential attributions. Thus, depending on the perspective of the person, the same event might be seen in a very different light. From the perspective of an observer, who engages in causal rather than existential search, an existential attribution might seem unrealistic and of little help. However, we hypothesized that the tendency of a person to react empathetically to others would lead to a higher acceptance of existential attributions, especially when such an attribution serves the actor’s goal of making an event, which would otherwise seem unbearable, subjectively meaningful. Because emotional em-
pathy represents the ability to "apprehend another person's condition or state of mind" (cf. Hogan, 1969, p. 367), highly empathic persons should be more able than others to recognize the possible impact of existential attributions on the well-being of the person actually affected by a highly negative event.

These hypotheses were investigated in a questionnaire study requiring participants to evaluate fictitious scenarios in which the importance of the event was varied: an event of lesser importance, namely, an allergic reaction against a preventive vaccination against malaria (the malaria scenario), and an extremely important event, namely, an HIV infection caused by a contaminated blood transfusion (the HIV scenario). Both events were presented as being caused by accidental circumstances; therefore, causal attributions to bad luck should appear as highly appropriate. Moreover, the attributions of the stimulus person were varied. Either a causal attribution (bad luck) or an existential attribution (poetic justice) was presented. Finally, participants received (a) a scale to measure emotional empathy according to Mehrabian and Epstein (1972; see also Chlopan, McCain, Carbonell, & Hagen, 1985), and (b) a scale to assess knowledge concerning HIV infection and modes of HIV transmission. The main dependent variables were the perceived appropriateness and comprehensibility of the attribution, the recommendation to change it, and its' perceived helpfulness for the stimulus person.

Method

Participants. A total of 123 participants from two cities in Germany (Berlin and Hamburg) participated in the study. We did not know whether age, sex, occupational status, knowledge about AIDS, and other demographic variables would influence the results. Thus, we included different demographic groups in this design. In addition, we wanted to gain information from lay people as well as experts in medical matters. Therefore, the subgroups that participated in this study were (a) 35 pupils from a Gymnasium in Berlin (19 women and 16 men; M = 16 years old), (b) 60 students from the University of Hamburg and the University of the Bundeswehr Hamburg (22 women and 38 men; M = 27 years old), and (c) 28 participants from different medical professions (mostly physicians) working in Hamburg (17 women and 11 men; M = 38 years old). None of the participants had received information concerning attribution theory or related issues.

Participants were approached in different ways. Pupils and students received the questionnaire during their course requirements in Gesellschaftsfahndung (social issues); afterwards, a discussion concerning AIDS was planned. Physicians received the questionnaire at the beginning of a continuing education course. All participants participated on a voluntary basis.

Design and questionnaire. Each participant received a booklet with two scenarios: one scenario of high severity and another scenario of medium severity (differences in perceived severity were assessed in pretests). We did not include a completely unimportant scenario because attributional processes are unlikely to occur for such events. Great care was taken that both scenarios represented events that should be attributed to circumstances (bad luck) according to Kelley's (1973) covariation principle. Thus, participants were informed about low consensus, high distinctiveness, and low consistency.

The HIV scenario described a person named M who had been run over by a drunken car driver while M had been crossing at a crosswalk. M had to undergo a complicated surgery and received several blood transfusions. It turned out that one of the blood transfusions was infected with HIV. Participants were told that, at this time (at the beginning of the 1980s), few other people had become infected with HIV in this way, that there was a low probability of being infected by other modes of transmission, and that it was impossible that M had been previously infected. Thus, covariation information concerning low consensus, high distinctiveness, and low consistency were provided, indicating that the event was attributable to bad luck.

In the malaria scenario, a person named F prepared a voyage to Latin America and received several vaccinations, one of them being a prevention against malaria, that had to be taken for several days. However, F began to suffer from an allergic reaction to this vaccination. After stopping the vaccination, F recovered almost immediately. However, F could not be vaccinated effectively against malaria and had to cancel the planned voyage. Participants were also told that only very few people show allergic reactions to this vaccination, that this person had not shown other kinds of allergic reactions, and that this person had not shown allergic reactions to this vaccination before because this was the first time he or she received it. Thus, again, low consensus, high distinctiveness, and low consistency were provided. The two scenarios were presented in random order and in no way hinted at the sex of the stimulus person.

Each scenario was followed by several questions to check for the perceived severity of the event and the perceived causes of the event. Concerning the perceived causes of the event, participants were asked: "What brought this event about?" Participants received the following possibilities: (a) "It was due to M," (b) "It was due to the pharmaceutical industry" (malaria scenario) or "due to the practicing doctor"
(HIV scenario), or (c) "It was bad luck." Each possibility was rated on a scale from 0 (not at all) to 7 (completely). Furthermore, participants were asked to add further causes (in a free-response format) if none of these three possibilities seemed adequate to them.

On the following page, participants were either informed that the stimulus person had a causal explanation of the event (bad luck), or that the event was attributed to an existential cause (poetic justice). Half of the participants received the HIV scenario in combination with the causal attribution and the malaria scenario with the existential attribution; for the other half of the participants, this combination was reversed. Thus, a nested design with a $2 \times 2$ factorial design results. The existential attribution read as follows: "I have always been very fortunate in my life, with my parents, my childhood, my profession ... everything came so easily to me. I believe that this is a kind of poetic justice, because I did too well." The causal attribution was as follows: "It is an incredible misfortune that this happened; this is due to bad luck."

To assess their evaluation of this attribution, participants were asked: (a) "How appropriate is this attribution in your opinion?" (appropriateness), (b) "How comprehensible is this attribution in your eyes?" (comprehensibility), (c) "Should M/F change his/her opinion regarding the causes of the event?" (change), (d) "How helpful is this attribution to M/F?" (helpfulness), and (e) "Given that this happened to one of your friends, how would this event affect you?" (emotional reaction). Rating scales from 0 (not at all) to 7 (very much) were provided.

Finally, participants answered two short questionnaires. The first one was a short version of a scale developed by Mehrabian and Epstein (1972) to measure emotional empathy. We extracted 16 items from the original scale containing 33 items. For example, one of the items is "I tend to get emotionally involved with a friend’s problems." As pretests (with 20 participants) had shown, the correlation between the shorter version and the original version was .93. To obtain information about participants' knowledge concerning HIV, we asked them several questions taken from a survey study by Ehrnter, Hahn, and Jacobs (1992), such as "It is irresponsible when AIDS-suffering children play together with healthy children," and "Only certain groups are endangered by AIDS—because of their style of life" (p. 529).

Results

Knowledge about AIDS and manipulation checks. As the questionnaire about knowledge concerning AIDS revealed, participants differed concerning their knowledge about possible modes of HIV transmission, $F(2, 120) = 4.08, p < .01$. As was confirmed by a subsequent Scheffé test ($p < .05$), the pupils showed a significantly higher number of false responses in this questionnaire ($M = 2.56$, 0.75, and 0.70 in this subgroup, the students' group, and the medical profession group, respectively). ANOVAs were conducted to examine the effects of sex, professional status, and order of presentation on manipulation checks and dependent variables. No significant differences were obtained ($F < 2.00$). Regarding manipulation checks, both events were predominantly attributed to bad luck ($M = 5.25$); attributions to the person or to external causes were much lower ($M = 0.65$ and 1.90 for person and external causes, respectively). No differences between the scenarios were obtained ($F \leq 2.00$). Thus, the following analyses are combined for the different subgroups. Finally, we examined whether the presented scenarios differed as predicted with regard to their perceived severity for the malaria scenario ($M = 4.07$; i.e., in the medium range of the scale) and for the HIV scenario ($M = 6.52$; i.e., near the highest value of the scale). This difference is significant, $r(100) = 11.81, p < .001$.

The evaluations of attributions. For each scenario, regression analyses with attribution (causal vs. existential) as a categorical variable and empathy as continuous predictor were conducted. First, a significant effect for emotional empathy was only found concerning one's own emotional reaction (in case the event had happened to a close friend). A significant main effect of empathy was found for both scenarios: For the HIV scenario, $F(1, 96) = 4.96, p < .05$, and for the malaria scenario, $F(1, 96) = 10.27, p < .01$. In both cases, higher emotional empathy was associated with higher ratings concerning emotional reactions, $r(99) = .25, p = .01$, and $r(99) = .35, p < .01$, respectively. No other significant main effects or interactions were found for emotional empathy.

However, significant effects for attribution were obtained with regard to perceived appropriateness, comprehensibility, and recommendation to change the attribution (see Table 1). Concerning appropriateness, the causal attribution was regarded as being more appropriate than the existential attribution. For the HIV scenario, $F(1, 96) = 330.47, p < .001$, and for the malaria scenario, $F(1, 96) = 57.02, p < .001$. The same pattern of data was found with regard to comprehensibility, $F(1, 96) = 89.96, p < .001$, and $F(1, 96) = 40.70, p < .001$, respectively. For the recommendation to change the attribu-

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tion, significant effects of attribution were also found: For the HIV scenario, $F(1, 96) = 85.13, p < .001$, and for the malaria scenario, $F(1, 96) = 26.30, p < .001$. Higher ratings were found for the existential attribution as compared to the causal attribution. For these dependent variables, no other significant effects or interactions emerged. Moreover, we analyzed whether the attribution differed with respect to perceived helpfulness. No significant effects were obtained ($F < 2.30$), and all ratings were close to the medium part of the scale (see Table 1). Finally, we computed the correlations between the evaluations of attributions (appropriateness, comprehensibility, and recommendation to change) and their perceived helpfulness. No significant correlations were obtained.

Discussion

The results show that, from the observer's perspective, an existential attribution for a negative event is not acknowledged, regardless of the perceived severity of the event. One exception to this general finding seems worth noting, namely, the equivalence of both kinds of attributions with regard to their perceived helpfulness. This seems all the more surprising as these attributions differed highly concerning their perceived appropriateness and comprehensibility. Thus, one might argue that participants indirectly acknowledged the functional value of an existential attribution. Although such an attribution may be "wrong" according to a causal analysis, it nevertheless attains an intermediate functional value (helpfulness). However, because no positive correlations between the evaluations of the attributions and perceived helpfulness were found, it seems more plausible to argue that participants simply did not feel able to judge the helpfulness of different kinds of attributions.

Quite surprisingly, no theoretically relevant effects were obtained for the empathy variable. Therefore, a different kind of perspective-taking measure, focusing on cognitive aspects of perspective taking, was employed in the following study.

STUDY 3

This study is a close replication of Study 2, except for four major changes. First, we tried to change the observer's perspective on the person infected with HIV. Participants were asked to imagine themselves as the person in the scenarios. According to the findings of Storms (1973) as well as Regan and Totten (1975), we hypothesized that this instruction would reduce the perspective discrepancy between the participants and the stimulus person (depicted in the scenario), thus promoting a greater acceptance of an existential attribution. Second, the perspective-taking ability was measured by a scale developed by Davis (1983), which provides a measure of cognitive abilities to acknowledge the perspective of another person (in contrast to emotional perspective taking as measured by the Mehrabian & Epstein, 1972, scale; see Steins & Wicklund, 1993). We analyzed whether cognitive perspective-taking enhanced the acceptance of an existential attribution. Third, poetic justice as the existential attribution was replaced by personal destiny to exclude the possibility that the evaluation of the existential attribution in Study 2 was in some way bound to specific aspects of the poetic justice attribution. However, both kinds of attributions have in common that they were associated with reduced feelings of guilt for the HIV-infected participants in Study 1.

Finally, two changes were introduced to account for a possible shortcoming of Study 2. In this study, participants had been asked to rate causal attributions as a manipulation check, and it was only after these questions that the stimulus person's existential attribution was presented. Thus, it is possible that a causal analysis was triggered by these manipulation checks and that the rejection of existential attributions is due to the fact that the questionnaire had already elicited a causal analysis against which existential attributions were evaluated. Thus, we presented the questions concerning the stimulus persons' attribution before the manipulation checks were given. Moreover, instead of using a within-subject design, all factors were varied between subjects, to exclude potential carryover effects across the repeated measurements.

Method

Participants. Because no differences were obtained for different demographic groups in Study 1, we restricted this study to a more homogeneous group of participants, which consisted of 106 students of different majors from the University of Bielefeld (34 women and 72 men; $M = 24$ years old). Students came individually or in groups to a designated laboratory and filled out a questionnaire. Each student was reimbursed with DM 3 (about US $2).

Design and questionnaire. Each participant received a booklet with a general introduction, followed by a fictitious scenario (identical to those in Study 2). Again, a $2 \times 2 \times 2$ between-subjects design resulted, with scenario, attribution, and perspective-taking ability as independent variables. The questionnaire was identical to Study 2, except for the following changes. First, great care was taken that participants put themselves into the position of the stimulus person described in the scenario. It was stressed that it was very important that they imagined themselves as actors in the presented situation.

Your task is to imagine as vividly as possible that you are the person that is described in this scenario.... It is very important that you will answer the following questions as openly and honestly as possible, and that you imagine yourself as well as possible in the described situation.
Second, participants received a self-report measure of perspective-taking (Davis, 1983) that assessed their cognitive perspective-taking ability (e.g., “I sometimes try to understand my friends better by imagining how things look from their perspective.”). Third, the evaluation of the attribution had to be rated first, and then the manipulation checks were given. Finally, all factors were varied between subjects.

Results

Manipulation checks. No differences between female and male participants were obtained; therefore, the following analyses were combined for female and male participants. Moreover, t-tests were computed to examine whether the two scenarios differed as predicted concerning their perceived severity. As in Study 2, the HIV scenario received higher ratings than the malaria scenario (Ms = 6.39 and 3.75, respectively), t(104) = 10.32, p < .001. In addition, we examined whether participants perceived the causes of the event in the predicted way. This was indeed the case. For the HIV scenario, attributions to bad luck received highest ratings (M = 4.90), whereas attributions to the person or to external causes were rejected (Ms = 0.72 and 1.32, respectively). As t tests show, these latter two attributions differ significantly from an attribution to bad luck, t(52) = 10.59, p < .001, and t(52) = 7.21, p < .001, respectively, and no significant difference between the person attribution and the external attribution was obtained. A similar picture is obtained for the malaria scenario. Only attributions to bad luck were perceived as plausible (M = 5.21), whereas attributions to the person or to some external cause received lower ratings (Ms = 2.35 and 0.83, respectively). As t tests show, attributions to bad luck are significantly higher than attributions to the person, t(52) = 4.83, p < .001, and attributions to external causes, t(52) = 10.42, p < .001. In this case, however, there is also a significant difference between person attribution and internal attribution, t(52) = 3.68, p < .001. This is due to the fact that several participants maintained that the failure to receive a malaria vaccination is not a sufficient reason to cancel the journey; some other participants stated that the allergy against this event, although accidental in nature, is a factor that should be localized within the person. However, in both scenarios, bad luck is perceived by far as the most important factor; therefore, the manipulation of the perceived cause of the event as well as the manipulation of perceived severity were successful.

Evaluation of attributes. To analyze the evaluations of the stimulus person’s attribution, we conducted regression analyses with scenario (HIV vs. malaria) and attribution (causal vs. existential) as categorical variables. Furthermore, perspective-taking ability was included as a continuous predictor. With respect to appropriateness, a significant main effect for attribution was obtained, F(1, 99) = 21.88, p < .001. Participants rated the causal attribution as more appropriate than the existential attribution (see Table 2). No other significant effects or interactions were obtained. Concerning comprehensibility of the attribution, a significant effect of attribution was also obtained, F(1, 101) = 19.31, p < .001. Attributions to bad luck were judged as more comprehensible than existential attributions. Furthermore, a significant main effect of perspective-taking ability was obtained: The higher the perspective-taking ability score, the higher was the perceived comprehensibility of both attributions, F(1, 101) = 5.38, p < .05.

With regard to the recommendation to change the attribution, no effects or interactions were obtained (F ≤ 3.00). In contrast to Study 2, an effect for scenario concerning the helpfulness of the attribution was found, F(1, 96) = 5.98, p < .05, because both attributions were regarded as being more helpful for the HIV scenario as compared to the malaria scenario. Concerning the emotional reaction, a main effect for scenario was obtained, F(1, 101) = 86.88, p < .001. Participants anticipate stronger emotional reactions if they were infected with HIV. An interaction between attribution and perspective-taking ability, F(6, 98) = 3.53, p < .05, revealed that, for the causal attribution, the correlation between perspective-taking ability and the emotional reaction is r = .07, whereas for the existential attribution, the correlation is r = .17. However, this effect explains only about 2.8% of variance in the model (which explains an overall of 48% of variance). No other effects or interactions were obtained.

Discussion

As in Study 2, the results indicate that an existential attribution of an accidental HIV infection was rejected as inappropriate and less comprehensible. Regardless of the severity of the event, participants preferred the realistic causal perception (i.e., the attribution of the event to bad luck). Because the evaluation of attributions was rated before participants were required to think about their own causal perception of the event, it is impossible that the rejection of the existential
attribution was triggered by the causal search of the participants. Therefore, the results of Studies 2 and 3 demonstrate that existential attributions are generally regarded as unrealistic and of little help. The only hint of an understanding of a functional value of existential attributions in case of an HIV infection are the results concerning the anticipation of one’s own emotional reactions: Participants high in perspective-taking ability anticipated stronger emotional reactions when imagining themselves as attributing an HIV infection to bad luck than when ascribing an infection to personal destiny. Thus, attributing an accidental event to existential attributions might be regarded as helpful in that it reduces the anticipated emotional consequences. Taken together, Studies 2 and 3 suggest that emotional empathy and perspective-taking ability have only little impact on the perception of existential attributions. Further discussion of this finding is withheld until after presentation of Study 4.

STUDY 4

In Study 4, we investigated another potential factor that might contribute to the understanding of existential attributions, namely, the personal risk of becoming infected with HIV. Based on the theoretical premises of Jones (1990) and Regan and Toiten (1975), we assume that perceiving oneself as being at risk of becoming HIV infected will increase the personal relevance of the event for the observer, thus reducing the discrepancy between the actors’ and the observers’ perspective. According to these considerations, a higher personal relevance of the observed event and a reduced perspective discrepancy should enable participants to acknowledge the veridicality and functionality of existential attributions more adequately.

Therefore, we asked students about their own (perceived) risk of becoming infected with HIV. Participants with a low versus high risk of becoming infected received four scenarios presenting stimulus persons who became infected with HIV by different modes of transmission (blood transfusion, unsafe heterosexual intercourse, unsafe homosexual intercourse, and contaminated needle). The stimulus person attributed the infection either to bad luck or to existential causes (personal destiny). Again, participants rated appropriateness, comprehensibility, and helpfulness of the attribution.

Method

Participants. One hundred first-year college students (74 women and 26 men; M = 20 years old) of different majors of the University of Bielefeld (Germany) volunteered for the study. This sample was chosen because we assumed that younger participants would have a lower probability of being engaged in a stable relationship, thus having a higher probability of facing situations in which they are thinking about safe sex and the risk of becoming infected with HIV.

Design and questionnaire. Each participant received a booklet with an introduction and four scenarios (one scenario for each possible mode of transmission). In the introduction, information concerning possible modes of the transmission of HIV was given. Then, participants received several questions concerning their own sexual behavior and their possible risk of becoming infected. Specifically, they were asked (a) how often they wondered if they could be infected with HIV, (b) how probable it was that they actually became infected, and if so, (c) which mode of transmission would be the most probable one. For the last question, the alternatives “blood transfusion,” “unsafe sexual contact with heterosexual partners,” “unsafe sexual contact with homosexual partners,” and “use of HIV-contaminated needles during drug abuse” were provided as alternatives. Each possibility had to be rated on scales ranging from 0 (not at all) to 7 (very much). We gathered this information to distinguish two groups of participants, namely, participants with a very low subjective risk of becoming infected versus participants with at least a moderate subjective risk.

Subsequently, four different scenarios (one for each possible mode of transmission) were presented. Half of the participants received the drug abuse and heterosexual scenario in combination with a causal attribution to bad luck, whereas the other two scenarios (heterosexual and blood transfusion) were combined with an existential attribution (personal destiny). For the other half of the participants, these combinations were reversed. The order of presentation was varied randomly. There were no hints as to the sex of the stimulus persons. Again, information concerning low consensus, high distinctiveness, and low consistency was provided within the scenarios. As in the previous study, each event was combined with either a causal attribution (bad luck) or an existential attribution (personal destiny). Thus, a $2 \times 4 \times 2$ nested design resulted with risk status, scenario, and attribution as independent variables (the latter two were varied within subject).

Manipulation checks and dependent variables. As a manipulation check, participants were asked whether the event was caused by internal causes (something about the person), whether the event was caused by external causes (something about the situation or external factors), and whether the event was due to bad luck. Additional space was provided to mention other or more specific causes. Furthermore, participants were asked to evaluate the stimulus person’s causal perception with regard to appropriateness, comprehensibility, recommendation to change the attribution, probability that such an attribution might actually occur, and helpfulness of the attribution.
Results

Neither order of presentation nor sex of the students had an effect on any of the dependent variables (P < 1.00); therefore, the following analyses are combined for these variables.

Perceived HIV risk. The perceived probability of actually being infected with HIV was rated as very low; overall M = 0.55 on a scale from 0 (not at all) to 7 (very much). However, about one third of the participants (n = 39) reported that they were at least sometimes afraid of becoming infected (thus, responding with a rating higher than 0; M = 2.04 for this group). Subsequently, these participants are referred to as the high (subjective) risk group. Students who did not think about a possible HIV infection are referred to as low (subjective) risk group. Among the possible causes of an infection, receiving a contaminated blood transfusion (with an overall likelihood of M = 2.61) and unsafe heterosexual contact (with an overall likelihood of M = 2.32) were rated as the most probable alternatives. Homosexual contact and drug abuse were rarely mentioned here (Ms = 0.10 and 0.36, respectively).

Perceived causes of the event. We conducted two-factor ANOVAs for each possible cause (internal, external, and chance) with scenario and risk (no subjective risk and high subjective risk) as independent variables. These analyses revealed that the blood transfusion scenario differed from the other three scenarios because this scenario received lower internality ratings, as verified by a significant main effect of scenario (Ms = 0.06, 4.24, 3.60, and 4.45 for the blood transfusion, heterosexual, homosexual, and drug abuse scenarios, respectively), F(3, 288) = 157.43, p < .001. In contrast, the infection was attributed more to external causes for the blood transfusion scenario (Ms = 5.92, 1.43, 2.53, and 2.20 for the blood transfusion, heterosexual, homosexual, and drug abuse scenarios, respectively), F(3, 288) = 100.30, p < .001. Moreover, the attribution to bad luck received higher ratings for the blood transfusion scenario than for the other scenarios (Ms = 3.44, 2.47, 2.82, and 2.40 for the blood transfusion, heterosexual, homosexual, and drug abuse scenarios, respect-
FIGURE 3. Study 4: Mean rating of perceived comprehensibility of the stimulus person's attribution.

FIGURE 4. Study 4: Mean rating of perceived helpfulness of the stimulus person's attribution.
Evaluation of attributions. Two-factor ANOVAs were conducted to investigate the influence of attribution and risk status (low-risk vs. high-risk group); these were computed separately for each scenario. The results are summarized in Figures 2, 3, and 4. Concerning appropriateness of the attribution (see Figure 2), significant interactions between attribution and risk status were found for the blood transfusion, homosexual, and drug abuse scenarios, $F(1, 96) = 17.85, p < .001$; $F(1, 96) = 14.25, p < .001$; and $F(1, 96) = 8.66, p < .01$, respectively. This is due to the fact that participants with a high perceived risk of becoming infected rated the existential attribution as more appropriate than the causal attribution, whereas participants in the low-risk group regarded the causal attribution as more appropriate than the existential attribution. This picture was slightly changed for the heterosexual scenario because both kinds of attributions were regarded as more appropriate by the high-risk group as compared to the low-risk group, resulting in a significant main effect of risk status, $F(1, 96) = 6.05, p < .01$.

A very similar picture was obtained for the comprehensibility of the attribution (see Figure 3). Again, a significant interaction of attribution and risk status was obtained for the blood transfusion, homosexual, and drug abuse scenarios, $F(1, 96) = 41.57, p < .001$; $F(1, 96) = 10.03, p < .01$; and $F(1, 96) = 6.89, p < .01$, respectively. Again, the high-risk group showed higher ratings for the existential attribution than for the causal attribution. In contrast, the low-risk group showed higher ratings for causal than for existential attributions. For the heterosexual scenario, a main effect for risk group was obtained, $F(1, 96) = 4.23, p < .05$, because both kinds of attributions received higher ratings in the high-risk group as compared to the low-risk group.

Finally, participants were asked whether the attribution would help the fictitious person to deal with the infection (see Figure 4). As for the previous dependent variables, interactions between attribution and risk group were obtained for the blood transfusion, $F(1, 96) = 6.67, p < .01$; homosexual, $F(1, 96) = 6.08, p < .05$; and drug abuse scenarios, $F(1, 96) = 3.58, p = .06$. Participants in the high-risk group rated the existential attribution as more helpful than the causal attribution. Again, the reverse pattern was found for the low-risk group. No significant effect was obtained for the heterosexual scenario, and no other significant effects or interactions were obtained.

Discussion

The results of these studies replicate and extend the findings of Studies 2 and 3. The previous results were replicated insofar as causal attributions to bad luck were regarded as more appropriate and comprehensible than existential attributions. These findings were extended, however, because existential attributions were regarded as more appropriate and comprehensible by persons who have previously thought about the possibility of becoming infected themselves. Furthermore, existential attributions were regarded as helpful in coping with an HIV infection from the perspective of those who see themselves as a higher risk of becoming infected themselves. Taken together, these results suggest that the evaluation of existential attributions with regard to appropriateness, comprehensibility, and helpfulness is fostered by the participants' perception that they might be affected by these kinds of negative events.

GENERAL DISCUSSION

Three questions have been raised in this research:

1. Do individuals infected with HIV indeed search for existential attributions?
2. How are these existential attributions interpreted by the observer?
3. Does perspective taking and being prone to risk promote an understanding of existential attributions?

As Study 1 shows, HIV-infected persons indeed report existential attributions to a significantly higher degree than noninfected participants. Moreover, the ascription of the event to existential attributions is highly correlated with lower feelings of guilt. In addition, Studies 2, 3, and 4 analyzed the conditions under which an existential attribution in the context of an HIV infection is understood from the perspective of an observer. Studies 2 and 3 suggest that observers reject the appropriateness of existential attributions and do not comprehend existential attributions. At first glance, this result seems to suggest that observers are not able to understand the actor's needs. However, this finding is also open to the interpretation that observers do not want to blame the victims (or do not want to appear to do so). In this case, the observers might have rated bad luck (the causal attribution) as more appropriate and comprehensible because it did not involve blaming the victim. Furthermore, Studies 2 and 3 revealed that the evaluation of existential attributions is not fostered by "classic" perspective-taking abilities. Neither emotional aspects of perspective taking such as emotional empathy (Study 2) nor cognitive aspects of perspective taking (Study 3) are positively fostered.

\(^*\) Because of the nested structure of this overall design, the combination of scenario and attribution was included as a factor in these analyses as well. Moreover, to avoid throwing away variance in the ratings, it might seem more reasonable to analyze the data in regression format. Therefore, we conducted corresponding regression analyses using risk status as a continuous predictor. The results completely corresponded to those obtained with the ANOVAs, which have the advantage that the differences between persons with low- versus high-risk status can be shown in Figures 2, 3, and 4.
correlated with perceived veridicality and functionality of existential attributions. Even highly empathic persons or “good” perspective takers evaluate causal attributions as more appropriate and comprehensible than existential attributions.

However, as has been shown in Study 4, the functional value of an existential attribution is better understood when participants perceive themselves at a higher risk with regard to the relevant event. These persons evaluate existential attributions as relatively more appropriate, comprehensible, and helpful. Thus, from the perspective of the observer, the search for causal attributions—as it is performed by the naive scientist—seems to be triggered by the event itself, whereas the acknowledgment of existential attributions is fostered only if the observed event is actually considered as relevant for the observers themselves. Taken together, these findings suggest that empathy and perspective taking as stable person dispositions are not necessarily predictive for an understanding of the perspective of another person. Rather, situational variables, such as the relevance of the event or situation under consideration for the individual person, might be more powerful in promoting perspective taking—a finding that is well in line with recent findings by Steins and Wicklund (1996).

In addition, a number of questions have been raised. Although it became obvious that uninvolved observers generally tend to regard existential attributions as inappropriate and less helpful, little evidence has been gathered to highlight the specific features of existential attributions. More specifically, the nature of existential attributions remains unclear insofar as these cannot be judged against a normative model, as is the case with causal attributions vis-à-vis the Kelley (1973) model. Instead, existential attributions might differ drastically with regard to their personal meaning, as for example between individuals who have different philosophies of life (for a discussion of this point, see also Wong, 1991). Specifically, to our knowledge, no studies have been conducted that systematically analyze the actual content of existential attributions. Therefore, it would be especially interesting to investigate how people describe these existential attributions according to their underlying causal dimensions. Furthermore, systematic research is needed with regard to the question as to how the causal perception of persons affected by highly negative events is related to coping. It should be emphasized, however, that existential attributions have to be distinguished from positive illusions (S. E. Taylor, 1989). Positive illusions generally consist of biased self-knowledge that is more positive than negative in tone and serves a self-aggrandizing self-perception. Existential attributions, in contrast, are not necessarily positive in tone. For example, some of the HIV-infected persons in our sample regarded their infection as a kind of punishment for their behavior.

In this article, we assumed that existential attributions have a functional value. This assumption seems to be at odds with current concepts in clinical psychology (especially cognitive behavior therapy) that primarily stress the functional value of realistic causal perceptions (e.g., see Forsterling & Rupp, 1988). However, as these studies have shown, such seeming contradictions are to be resolved by distinguishing causal versus existential attributions, which represent answers to different questions quite independent of one another. Buss (1978) hinted at the possible confusions that may arise from a conflating of these two concepts by quoting Wittgenstein (1953): “The existence of the experimental method makes us think we have the means of solving the problems that trouble us, though problem and method pass one another by” (p. 580). In the light of this evidence, we conclude that, although the perspective of the victim of a highly negative event and the perspective of the outside observer often pass one another by, this is not necessarily the case.

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