A Social-Psychological Analysis of HIV-Related Stigma: A Two-Factor Theory

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A Two-Factor Theory

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Despite the best efforts of public health agencies, HIV/AIDS continues to carry a significant stigma in the general population. Research indicates that people's negative reactions to persons with AIDS (PWAs) are due to their relatively automatic reactions to a disease that has become associated with death, promiscuity, drugs, and homosexuality. There is also evidence that more controlled or effortful information processing influences how people respond to PWAs. A model of HIV-related stigma is developed that assumes psychological reactions to stigmatized persons are governed by a primarily associative and a rule-based system, and that there is a temporal pattern such that initial reactions are governed by the associative system whereas subsequent reactions are governed by the rule-based system. Because associations to PWAs often are negative, relatively automatic reactions tend to be negative; however, if perceivers have enough time, motivation, and cognitive resources, they may adjust their initial reactions in a more positive direction. This theoretical model has general implications for understanding how any perceived stigma influences social cognition processes.

> With man, most of his misfortunes are occasioned by man.
> —Pliny the Elder, 23-79 A.D.

In the early 1980s, we witnessed the beginning of one of the most complicated and bewildering social problems ever faced by contemporary society: the epidemic of infection with Human Immunodeficiency Virus (HIV), which causes Acquired Immunodeficiency Syndrome (AIDS). For both the natural and the social/behavioral sciences, the AIDS epidemic has spawned a brood of

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perplexing questions. Among those in the social/behavioral sciences are questions about stigma. Truly amazing are the power and the scope of AIDS stigma. At the hands of their fellow humans, people with HIV infection have received negative treatment in employment, health care, housing, insurance coverage, public accommodations, education, and immigration policies (Gostin & Weber, 1998; Haefli, Pryor, & Landau, 1995; Landau, Pryor, & Haefli, 1995).

In the mid-1980s, we began studying some of the correlates of negative reactions to persons with AIDS (PWAs) (Pryor, Reeder, Vinacco, & Kott-Russo, 1989).[1] Our inspiration for these initial studies came from news stories that blanketed the nation in the 1980s about Ryan White. White was a hemophiliac who contracted HIV through contaminated blood products. When it became known in White's small Indiana community that he was infected with HIV, he became the target of petitions that attempted to remove him from public school and acts of harassment from his classmates and neighbors. We sought to understand why people would have such intense negative reactions to a child with HIV. So these first studies examined correlates of people's reactions to HIV-infected children. Our studies suggested that two factors contributed independently to attitudes toward interacting with HIV-infected children: instrumental considerations (e.g., parents' fears of their own children contracting HIV) and symbolic considerations (i.e., the connection of the disease to a negatively evaluated social group—homosexuals). Instrumental factors include a weighing of the pros and cons of interacting with an HIV-infected person. Symbolic factors concern the social and personal meanings of AIDS. We theorized that AIDS represents a symbol for antihomosexual affect for many heterosexuals. So, even children who have contracted HIV through blood transfusions evoke antihomosexual affect to some extent because they bear a symbol strongly associated with homosexuality.

As part of a project concerning the reactions of both children and their parents to AIDS-related issues (Haefli et al., 1995; Landau, Mangione, & Pryor, 1997; Landau et al., 1995; Pryor & Landau, 1994), we recently replicated the Pryor et al. (1989) findings with a group of central Illinois parents. Figure 1 shows the simple correlations between fathers' and mothers' instrumental concerns and their attitudes toward their children interacting with an HIV-infected peer across a variety of school-related social situations. These instrumental concerns were measured using the procedures for measuring attitude-relevant beliefs outlined in the Fishbein and Ajzen (1975) *Theory of Reasoned Action*. For example, parents were asked to evaluate how they felt about their children learning about AIDS and how likely this outcome would be if their children remained in a classroom with an HIV-infected peer. These two ratings were multiplied to produce an index of an instrumental belief or concern. We also found that both fathers' and mothers' attitudes toward their children interacting with an HIV-infected peer (who was said to have contracted the disease through a blood transfusion) were related to their general attitudes toward homosexuality (for

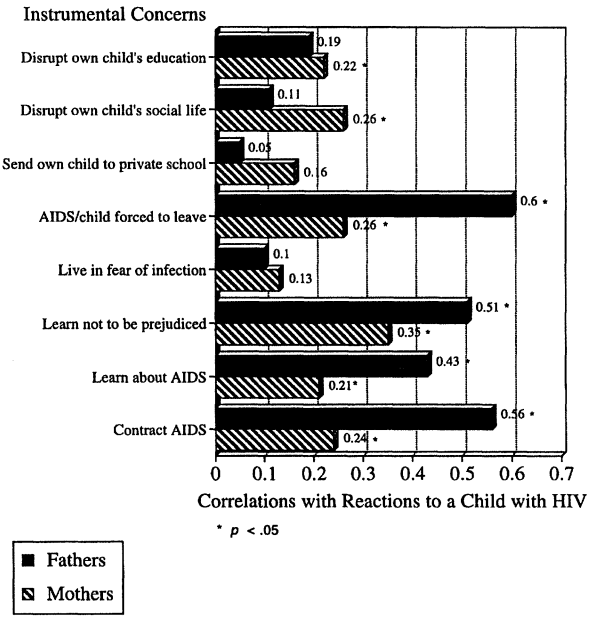

Figure 1: Correlations Between Fathers' and Mothers' Instrumental Concerns and Their Attitudes Toward Their Children Interacting With an HIV-Infected Peer
*$p < .05$.

fathers, $r = .60$, $p < .01$; for mothers, $r = .37$, $p < .01$). A series of hierarchical multiple regression analyses was used to show that these instrumental concerns and attitudes toward homosexuality independently contributed to the attitudes toward a PWA. For fathers and mothers, when attitudes toward homosexuality were entered first into the regression equation, adding instrumental concerns (i.e., beliefs about consequences) to the equation resulted in a significant increase in the Multiple *R*. When the order of entry was reversed, attitudes toward homosexuality still significantly boosted the Multiple *R* over instrumental concerns.

This connection between antihomosexual attitudes and reactions to nonhomosexual PWAs represents a very robust relationship. Recently, Reeder and Pryor (in press) found that antihomosexual attitudes were significant predictors of how students felt about Magic Johnson playing in the National Basketball Association. Similar to the analyses reported above, antihomosexual attitudes were significant predictors even after beliefs about the likelihood of Magic Johnson's transmitting HIV to other players were statistically controlled. In

other studies, a variety of potential "third variables" have been statistically controlled and antihomosexual attitudes still predict how heterosexuals feel about both homosexual and nonhomosexual PWAs. For example, Pryor, Reeder, and McManus (1991) found that the correlations between attitudes toward homosexuality and reactions to working with a nonhomosexual PWA remained statistically significant even when authoritarianism (Berkowitz & Wolkon, 1964) was statistically controlled.

In summary, our early studies suggested that people's reactions to PWAs are related to a thoughtful consideration of the pros and cons of interacting with a PWA, as evidenced in the analyses of the *Theory of Reasoned Action* (Fishbein & Ajzen, 1975) variables. Independently, reactions to PWAs also are related to associations that people have to HIV. Pryor and Reeder (1993) theorized that the specific affective associations an individual holds about HIV disease may reflect both cultural and idiosyncratic experiences. For example, in Western, industrialized countries like the United States, the ratio of infected men to women is about 16:1. The dominant means of transmission have been unprotected homosexual intercourse and the sharing of unsterilized hypodermic needles. In sub-Saharan Africa, the sex ratio is closer to 1:1 and the dominant means of transmission is unprotected heterosexual intercourse. These different cultural experiences create different collections of associations to HIV disease. So in the United States, people are more likely to think of HIV as a gay disease or a disease associated with people who use illegal drugs.[2] In Africa, people are more likely to think of HIV as a disease associated with migratory laborers or those who break sexual taboos (Goldin, 1994). The opportunistic diseases associated with HIV disease are also different in the West and in Africa, producing different images of what PWAs are like. In Africa, it is more common for PWAs to manifest a wasting of different parts of their bodies, giving rise to AIDS being called the "slim disease." In some African cultures this wasting is attributed to the power of witches to eat the life souls of their victims (Farmer, 1990). Thus, the differing cultural experiences of people are likely to lead to different collective representations of HIV disease. On an individual level, the organization of one's social acquaintances is also likely to have an impact on the psychological network of ideas people associate with HIV disease. For example, personally knowing someone who has AIDS provides a unique architecture of associative links about HIV disease. For many uninfected people, this seems to relate to less stigmatization of PWAs (Herek & Capitanio, 1997; Zimet et al., 1994).

Since these initial studies, our research has taken two major directions. One has been to further study the associative nature of HIV-related stigma and the other has been to explore how these associative, affective reactions interface with more deliberative or thoughtful processes in determining how people respond to HIV stigma. Both of these bodies of research will be briefly described.

THE ASSOCIATIVE NATURE OF STIGMA

Pryor and Reeder (1993) have characterized the aversive response to the stigmatized as a social contamination reaction. The social contamination reaction, according to the Pryor and Reeder model, is fundamentally an associative process. Negative affect emanates from various ideas associated with a stigma. This negative affect has the potential to be activated by any person or thing to which the stigma is associated. Part of the negative reaction that people have about contact with the stigmatized may stem from fears that the negative affect will be associated with the self (Rozin, Markwith, & McCauley, 1994). In a sense, this is a realistic fear. As Goffman (1963) and others (Beckerman, 1994; Bennett, Kelaher, & Ross, 1994; Fair, Spencer, Weiner, & Riekert, 1995) have documented, those who affiliate with the stigmatized also come to feel the burden of the stigma. For this same reason, uninfected people often manifest aversions to physical objects associated with PWAs (Rozin, Nemeroff, & Markwith, 1992).

In our laboratories we have explored the following hypotheses about the associative qualities of stigma: (a) The affective reactions that people manifest regarding a PWA are related to a network of ideas associated with HIV disease and their cumulative affect; (b) social contamination, like the activation of ideas in consciousness, can spread along a chain of arbitrary associations; and (c) negative affect may be automatically activated by the presence of a stigma. Evidence related to each hypothesis will be reviewed.

A network of contamination. Findings from a Pryor and Landau (1994) study provide compelling evidence that the affect evoked by HIV stigma is related to the network of associations within which it is nested. As part of this study, two cohorts of children (not known to be HIV infected) in Grades 2, 5, 8, and 11 were interviewed. Pryor and Landau examined how reactions to second-order associations may be used to predict reactions to socially interacting with an HIV-infected peer. Their reasoning was that the social contamination experienced from someone infected with HIV disease should correlate with the social contamination that spreads from other ideas somehow associated with HIV disease in American culture. For example, knowing that a stimulus person's brother is a homosexual or a drug user (two factors associated with HIV disease infection) could influence how children respond to the stimulus person (a second-order association). The affect from these same sources could contribute to how one might react to a peer with HIV disease.

In measuring their reactions to PWAs, children were shown a photograph of an age-matched, same-gender peer and told that the person had AIDS. They were asked to rate how they would feel in nine different social interactions with the infected child. These ranged from sitting next to the child in class to being in a swimming pool with the child. Analyses of the intercorrelations of the nine

scales used to measure children's reactions toward interacting with a PWA suggested that they could be combined into a single index (coefficient $\alpha = .93$). In a separate set of ratings, children were asked to indicate how they would feel about playing with a new child at school whose brother was described as having various attributes. These attributes included the brother's using illegal drugs, being a homosexual, having a serious illness (cancer), being the victim of misfortune (losing a leg in a car accident), and having recently died.[3] All of these are potentially related to the affect associated with HIV disease. Using multiple regression techniques, we found that children's social contamination reactions to peers infected with HIV disease were significantly related to their sensitivity to contamination from other sources of affect associated with this illness. The simple correlations between the reactions to contamination from the various sources and attitudes toward a PWA are presented in Figure 2. The mothers and fathers of these same children also were asked a similar series of questions in a mail survey. For example, parents were asked how they felt about their children interacting with an HIV-infected peer across the same nine social interactions. Generally, there were relationships between the contamination reactions of these adults to these same sources and their attitudes toward their children's interaction with a PWA. The simple correlations for these relationships are also presented in Figure 2.

A somewhat similar study conducted by Rozin et al. (1994) illustrates how the associative network of concepts connected to HIV stigma can result in the contamination of social objects. Participants (male and female college students plus their mothers and fathers) were asked to rate how they felt about wearing a laundered sweater, sleeping in a hotel bed for 1 night, or driving a used car for 1 day that had come into contact with a healthy man, a man who lost his leg in an auto accident (not his fault), a homosexual without HIV, a murderer, a PWA who was infected through a transfusion, a PWA who was infected through homosexual intercourse, and a man with tuberculosis. These conditions were compared to conditions where the sweater, hotel bed, and car were new. Ratings of the conditions where there was contact with a healthy stranger exhibited some decrease relative to the new conditions. Tracing the mean ratings from least to most negative yields the following rank order of conditions: healthy man, accident, homosexual, murderer, PWA from transfusion, homosexual PWA, and tuberculosis. Ratings of the last four were highly negative and tightly grouped with little difference among them. The rank order and general pattern of the ratings were the same across the sweater, bed, and car. It is interesting that the ratings of the PWA from transfusion and homosexual PWA conditions were almost identical. The correlation between PWA from transfusion and homosexual PWA ratings was .94 or higher across all the domains. So, the cause of the disease seemed to make little difference in its power to contaminate these objects. A final interesting finding was that ratings of accident, murderer, and tuberculosis all entered significantly into a multiple regression analysis where the ratings associated with

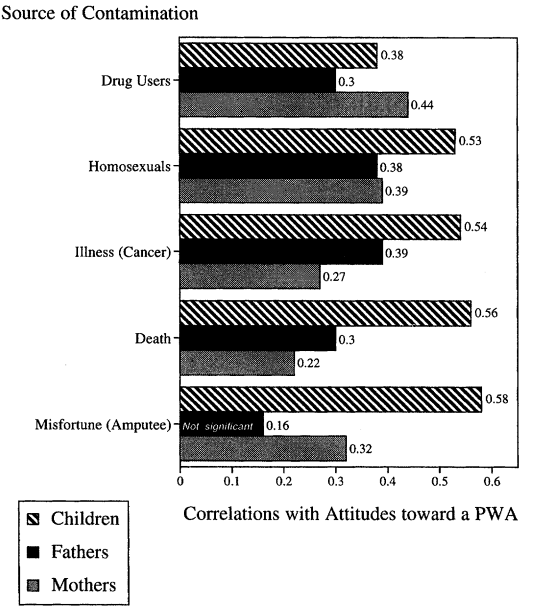

Figure 2: Correlations of Children's (Grades 2, 5, 8, and 11), Fathers', and Mothers' Reactions to Persons With AIDS With Their Social Contamination Responses From Various Sources

the homosexual PWA were predicted (the rating of the healthy stranger failed to pass the statistical criteria to enter). In accounting for this finding, Rozin and his colleagues suggest that misfortune (exemplified by the accident victim), moral taint (exemplified by the murderer), and illness (exemplified by the man with tuberculosis) are three concepts that are related to feelings about the homosexual PWA.

Social contamination resulting from arbitrary associations. A key concept in our analysis of stigma is that purely arbitrary associations may serve as conduits of affect from a stigma to persons and objects. Two findings from our labs show that it is possible to create arbitrary associations that can serve as conduits for the social contamination properties of a stigma. In a study reported by Pryor and Reeder (1993), college students (presumably heterosexual) with negative attitudes toward homosexuality were found to socially reject someone with a hypothetical disease if the disease was associated with homosexuality (i.e., one described as more common among homosexuals). This pattern of rejection emerged even though the person contracted the disease through eating shellfish.

So, like the HIV-infected children in the Pryor et al. (1989) studies, stimulus persons who had a disease merely associated with homosexuality were stigmatized.

Some findings from a study focused upon elementary school settings (Patterson, Landau, & Pryor, 1993; Pryor & Landau, 1994; Pryor, Landau, Patterson, Greenwell, & Reeder, 1993) illustrate how a chain of arbitrary associations can transmit social contamination. In one phase of this study, parents were asked how they would feel about their children eating cookies baked by the mother of an HIV-infected child. The cookies were described as never touched by the HIV-infected child and as wrapped in cellophane by the uninfected mother. In another phase of this research, these same parents were asked about their attitudes concerning gay men (Herek, 1984). The associative chain linking these two ideas might be described as follows:

$$\text{self} \rightarrow \text{child} \rightarrow \text{cookie} \rightarrow \text{mother} \rightarrow$$
$$\text{PWA} \rightarrow \text{AIDS} \rightarrow \text{homosexuality} \rightarrow \text{negative affect}$$

Despite the lengthy chain of associative connections, the correlation between aversion to one's child eating the cookies and attitudes toward gay men was $r = .48$, $p < .01$.

Automatic activation. Several years ago, Zajonc (1984) suggested that preferences need no inferences. By this he meant that evaluative responses often flow immediately from our encounters with a stimulus. We do not have to think about them. Although both negative and positive evaluations may be extracted in a relatively automatic fashion (Fazio, Sanbonmatsu, Powell, & Kardes, 1986), people seem to be particularly proficient in their responses to negative information (Peeters & Czapinski, 1990; Pratto & John, 1991; Taylor, 1991). As recounted above, we have found repeatedly that the affect that heterosexuals associate with homosexuality seems to drive their negative reactions to PWAs, even those who are not homosexuals. We have speculated that this robust connection may be related to the automatic activation of negative affect that heterosexuals have to homosexuality. Consistent with this notion, Pryor and Reeder (1993) reported a study that provides some evidence that the concept *homosexual* can result in automatic affective reactions. Using a procedure devised by Bargh (1989) and his colleagues, the concept of homosexual was subliminally primed for college student participants (presumably heterosexuals) by presenting them with a series of words related to the stereotype of homosexuals. Bargh's (1989) subliminal priming procedure involves presenting words for a very short duration on a computer screen while participants are working on an unrelated task. Even though participants in this study were unaware that they had been primed to think about homosexuals, the affect emanating from this concept spread to participants' evaluations of a stranger they subsequently judged for suitability as a roommate. For participants who held negative

attitudes toward homosexuality, the stranger was evaluated more negatively than for participants who did not hold such negative attitudes. This study revealed that negative affect can be automatically activated by the concept of homosexual for some people and that this affect, once activated, can contaminate their feelings about others.

TWO-FACTOR THEORIES OF STIGMA

A sense of social contamination seems to be an integral property of HIV-related stigma and probably many other types of stigma as well (Rozin, Lowery, & Ebert, 1994). However, people are no doubt capable of more reasoned and thoughtful responses to stigma as well as such immediate, emotional reactions. Two separable processes were evident in our first studies of HIV-related stigma (Pryor et al., 1989): reactions related to associations and reactions related to some consideration of the pros and cons of interacting with a PWA. Since that time, several other researchers have proposed two-factor theories of how uninfected people react to PWAs and AIDS-related issues. In a recent study, Herek and Capitanio (1998) used data gathered from a national sample of English-speaking adults to examine questions about how AIDS stigma may serve different psychological functions for different individuals. Data were collected in 1991 and 1992 in two waves of telephone interviews. These two waves served as within-subject replications. Respondents were asked to rate the extent to which their feelings about AIDS were a function of personal worries about getting AIDS, their personal religious views, and their political values. Respondents were classified as people for whom their feelings primarily reflected an expressive function if they rated their feelings as more a function of their religious views or their political values than their personal worries about getting AIDS. Respondents were classified as people for whom their feelings primarily reflected an evaluative function if they rated their feelings as more a function of their personal worries than either their religious views or their political values. Using this procedure, it was possible to classify 13% of the sample as evaluatives and 48% as expressives. Regression analyses were used to examine how affective reactions toward PWAs, attitudes toward PWAs, and intentions to avoid PWAs were related to beliefs about transmission through casual contact and attitudes toward gay men. Following the rationale in Pryor et al. (1989), transmission beliefs were conceptualized as instrumental factors and attitudes toward gay men as symbolic factors. Herek and Capitanio (1998) found that only transmission beliefs were relevant in predicting the reactions of evaluatives but that both transmission beliefs and attitudes toward gay men were important in predicting the reaction of expressives. (See also Herek and Glunt [1993] for a slightly different take on two-factor theory.)

Research by Price and Hsu (1992) used data collected from two nationally representative U.S. surveys conducted in 1985 and 1988. They found that AIDS

misinformation (beliefs about the transmission of HIV through casual contact) and antigay attitudes independently predicted support for restrictions on PWAs (e.g., quarantines, tattoos, and ID cards). Similarly, Kraft and Rise (1995) suggested that attitudes toward restrictive or coercive AIDS policies in dealing with PWAs seem to have both cognitive and symbolic components. The cognitive components involve specific beliefs about modes of transmission and so forth (similar to what Pryor and his colleagues labeled instrumental factors), and the symbolic components involve attitudes toward minority groups such as homosexuals.

These two-factor theories of stigma have a certain similarity to other two-factor theories that have developed in the study of social cognition. For example, Fazio's (1990) MODE theory of attitudes suggests that attitudinal responses are a product of reasoned action factors (i.e., an expectancy-value weighing of the costs and benefits of some attitude-relevant behavior) and automatically activated affective responses to an attitude object. This latter factor involves essentially an associative process. Fazio (1990) described the first type of attitudinal reaction as more controlled and the latter as more immediate. He suggested that more controlled, deliberative processes are likely to be involved when responding to new attitude objects whereas more automatic, practiced processes are more likely for attitude objects with which one is familiar. Also, in Weiner's (1986) attributional theory of emotion, people are depicted as having an initial positive or negative reaction to an event followed by a more cognitive consideration of its causes. The outcome of these attributional processes is theorized to be especially important for any behavioral reactions that people have to events. Similar analyses are found in Berkowitz's (1990) most recent theory of aggression. Recent theoretical analyses of person perception processes by Reeder (1993) suggest that people often have initial automatic reactions to the behaviors of others followed by more thoughtful considerations of the causes of their behaviors, extenuating circumstances, and so forth. Similarly, Devine (1989; Devine, Monteith, Zuwerink, & Elliot, 1991; Devine, Plant, & Harrison, 1999 [this issue]; Monteith, Devine, & Zuwerink, 1993) portrays prejudicial reactions to minorities as involving initial automatic reactions often based on stereotypes followed by more controlled consideration of such cognitions as the concern for not being prejudicial. Devine suggests that the difference between the prejudiced and the nonprejudiced may not be so much in terms of their initial automatic reactions, but in the course of their more controlled responses. Nonprejudiced people monitor and control their initial reactions so as not to be prejudiced.

These ideas about two stages of processing may have important implications for understanding people's responses to stigma. Figure 3 schematically portrays how these processes might unfold in responses to a person with AIDS stigma or any other stigma. Reeder and Pryor (in press) suggest that the initial reaction to stigma is characterized by a relatively automatic negative affect. Then, given time, cognitive resources, and motivation, this initial negative response can be

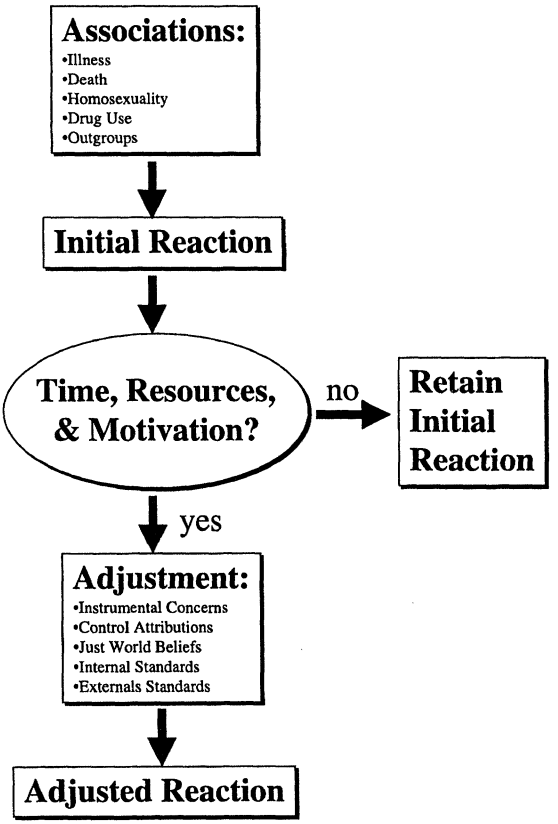

Figure 3: A Two-Stage Model of How People React to HIV-Related Stigma

adjusted. Our assumption is that this adjustment will often result in a more moderate or less negative reaction to the stigmatized person. There are many possible empirical implications inherent in this conceptual model. First, if the first phase is relatively automatic, then it should be generally unaffected by processing demands, time considerations, and the like. The second phase where people edit and make adjustments, however, should be highly vulnerable to factors that would stress the information processing capabilities of the person. So, time constraints and other factors that reduce the opportunities for adjustment should have more impact on the second phase than the first. Second, the degree to which people adjust their initial reactions to a stigma should be subject to the type of stigma involved and individual differences in people's motivations to control stigmatized reactions. Essentially, the adjustment phase entails a thoughtful and

reasoned response, and reactions to some kinds of stigma, although automatic and highly negative, may seem highly appropriate even after thoughtful consideration. Also, some people may feel little compunction to adjust their negative reactions to the stigmatized.

Some implications of this model have recently been subjected to empirical scrutiny in our laboratories. Weiner (1993; Weiner, Perry, & Magnusson, 1988) has argued that attributions of control are important in the reactions of people toward the stigmatized. Our two-stage model depicts such "thoughtful" considerations (e.g., How did the person acquire the stigma?) as likely to come into play in the adjustment phase. So, these kinds of considerations are more likely to influence reactions if sufficient time for adjustment has transpired.

To test these notions, Smith, Reeder, and Pryor (1998) first asked a group of 24 college students to rate the degree to which people with various stigmas were perceived as having had control over the acquisition of the stigma. Similar to Weiner's (1993) findings, a little girl with AIDS was rated as having low control over her stigmatizing condition ($M = 1.46$ on a 5-point scale). By comparison, a drug addict was rated as having high control ($M = 4.08$). In a subsequent study, Smith et al. (1998) asked 115 college students to indicate their feelings about having lunch with a group of 32 different target persons using a 9-point favorability scale. These target persons ranged from famous people (e.g., Keanu Reeves) to people with various stigmatizing conditions. Embedded in this list were a little girl with AIDS and a drug addict. Participants were seated in front of a computer monitor. Half of them were asked to make their decisions within 5 seconds following the presentation of the target stimulus (immediate reaction), whereas the other half were asked to wait 15 seconds before responding to the target (delayed reaction). The prediction was that the participants in the immediate reaction condition would have less time to make any kinds of adjustments to their initial reactions to the stimulus persons than participants in the delayed reaction condition. Time to make an adjustment should be more crucial when such considerations as the controllability of the stigma are relevant. Smith et al. (1998) expected that reactions to the little girl with AIDS would be more positive when the participants were in the delayed as compared to the immediate reaction conditions. No such differences were expected when the target person was a drug addict. As shown in Figure 4, these predictions were confirmed. The time permitted for reactions was related to reactions to the little girl with AIDS but unrelated to reactions to a drug addict. Whereas participants given ample time to consider their reactions demonstrated more positive reactions to the little girl with AIDS than those who reacted immediately, participants' reactions to a drug addict were unaffected by the time course variable.

In many ways, this research draws theoretical parallels between reactions that people have to stigma and other forms of prejudicial reactions, such as affective reactions based on race (Devine, 1989; Dunton & Fazio, 1997; Monteith, 1993). Fazio (Fazio, Jackson, Dunton, & Williams, 1995) suggested that individual differences in racial prejudice among Whites are the product of both

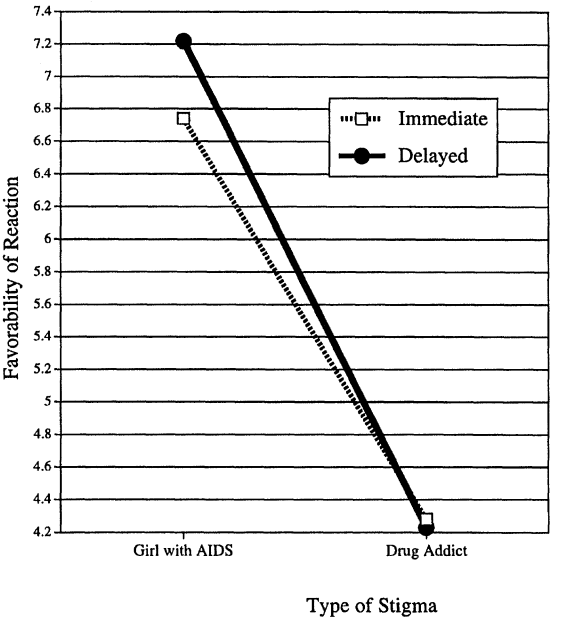

Figure 4: Reactions to Having Lunch With a Stimulus Person as a Function of Stigma Type and Time Allowed for the Reaction

automatic and controlled factors. Fazio has found that some White individuals have automatic negative reactions to photographs of African Americans; in essence, exposures to these photographs prime negative affect. Independent of this automatic reaction, Fazio (Dunton & Fazio, 1997) found that people also vary in their motivation to control their prejudicial reactions. A similar analysis has been proposed by Devine (1989; Devine et al., 1991), who additionally suggests that people may want to control prejudicial reactions for internal reasons (e.g., they think it is wrong) or external reasons (e.g., they do not want to appear prejudiced).

Both Fazio and Devine have developed self-report questionnaires to measure individual differences in the motivation to control prejudicial responses. To further explore the parallels between reactions to HIV-related stigma and this body of research, we have begun work on a Motivation to Control Prejudice Against Persons With AIDS (MCPAPWA) scale. Our conceptualization of the MCPAPWA follows Devine's notion that controlling prejudicial reactions to the stigmatized could be motivated by both internal and external reasons. The

appendix shows the items for both the internal and the external MCPAPWA subscales along with their associated reliabilities.

In an initial examination of this scale, we asked 103 White undergraduates to complete the MCPAPWA and to indicate their reactions to having lunch with a variety of stimulus persons with different potentially stigmatizing conditions. Included in this list was also "a Black person" so that we might assess whether the MCPAPWA is related to a general motivation to control all types of prejudice or something more specific to PWAs. Factor analysis of these 13 MCPAPWA items revealed a two-factor solution accounting for 54% of the variance. The relative factor loadings cleanly sort the items into the two subscales depicted in the appendix. The correlations between participants' favorability ratings and their average scores on the internal and external subscales of the MCPAPWA are shown in Figure 4. What we found is that the internal subscale showed significant correlations with reactions to a variety of stigmatized target persons. The external subscale, however, only showed one apparently anomalous negative correlation. Because these ratings were made under anonymous conditions (participants were sitting alone in front of a computer), external pressures to be nonprejudiced were not salient. For this reason, the external subscale of the MCPAPWA may have shown little systematic connection to reactions to stigma. The significant correlations with reactions to other types of stigmatizing conditions shown in Figure 5 suggest that the internal subscale of the MCPAPWA may tap personal standards and beliefs that are not AIDS-specific. However, reactions to some forms of stigma were not significantly related to motivations to control HIV-related prejudice (e.g., reactions to drug addicts), nor were reactions to Black persons. In future research, we plan to explore the qualities those stigmatizing conditions that are correlated to the MCPAPWA have in common.

One message inherent in these studies is that reactions to PWAs possibly represent just another form of prejudice. People manifest immediate affective responses to obvious characteristics of others. Rozin, Lowery, et al. (1994) suggested that the emotional response to many types of stigma may be one reflecting disgust. It is possible that other emotional reactions are automatically evoked in other forms of prejudice. However, immediate reactions are only part of the story. As shown in Figure 3, sometimes people are not satisfied with their initial reactions. These reactions may be edited or adjusted to reflect a person's convictions that prejudicial reactions are wrong. Monteith (1993) has found that people sometimes experience considerable guilt when they think they have reacted to someone in a prejudicial fashion.

It is interesting, though perhaps not surprising, to note that broader societal reactions to previous epidemics have been characterized in ways that parallel our descriptive model of the intrapsychic processes involved in responding to HIV-related stigma. For example, in a historical analysis of public reactions to venereal disease in the United States, Brandt (1986) described a clash between two opposing ideologies: moralism and pragmatism. The moralistic approach

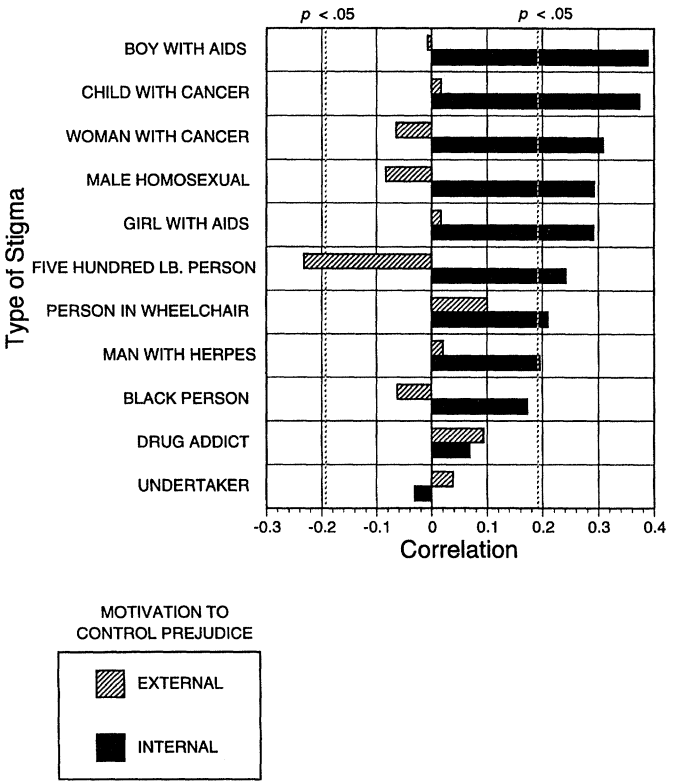

Figure 5: Correlations Between Reactions to Various Stigmatizing Conditions and the Internal and External Subscales of the Motivation to Control Prejudice Against Persons With AIDS Questionnaire

was to condemn those infected with sexually transmitted disease and to imprison and quarantine those infected, thus removing them from respectable society. The pragmatic approach was to treat sexually transmitted disease as a public health problem, trying to reduce its incidence through the promotion of prophylactics and to treat the symptoms among the already afflicted. Rozin, Lowery, et al. (1994) found that the emotional reactions that people have to moral transgressions (a certain form of disgust reaction) bear similarity to their reactions to people who are stigmatized. So, it may be that broader societal reactions to stigma have their roots in some individually based psychological processes.

APPENDIX
Motivation to Control Prejudice Against Persons With AIDS (PWAs) Questionnaire

INTERNAL SCALE (α = .76)

1. I attempt to act in nonprejudiced ways toward people with AIDS because it is personally important to me.
2. I am personally motivated by my beliefs to be nonprejudiced toward people with AIDS.
3. Being nonprejudiced toward people with AIDS is important to my self-concept.
4. My personal beliefs and values determine how I respond to people with AIDS more than my concern with others' reactions.
5. My personal beliefs and standards are more important in my decision for how to act toward people with AIDS than is my concern for how others will react.

EXTERNAL SCALE (α = .84)

6. I try to hide any negative thoughts about people with AIDS to avoid negative reactions from others.
7. If I acted prejudiced toward people with AIDS, I would be concerned that others would be angry with me.
8. According to my personal values, using stereotypes about people with AIDS is OK.
9. I appear to be nonprejudiced toward people with AIDS to avoid disapproval with others.
10. It is important for me not to appear prejudiced against people with AIDS because others might think I am some kind of redneck if I do.
11. I don't want my friends to think I am prejudiced against people who have AIDS.
12. I try to act nonprejudiced toward people with AIDS because of pressure from others.

NOTES

1. Throughout this article, we also will use persons with AIDS (PWAs) to refer to persons with HIV disease, no matter whether the person has clinical AIDS or is at an earlier stage of the disease.

2. Hamilton (1988) provided evidence that the media have generally shaped a connection between HIV disease and homosexuality that results in heterosexuals assuming that all homosexuals are at risk for HIV. In fact, there is little risk for lesbians and gay men are at risk only if they engage in activities that could transmit HIV (see Herek & Capitanio, 1999 [this issue]). Hamilton found that most major newspaper and magazine accounts employ generic references to homosexuals being at risk for HIV disease without specifying male homosexuals. Furthermore, many people overestimate the risk of HIV disease for lesbians. This study shows how associative links to HIV disease are molded by the media.

3. Research by Whalen, Henker, Burgess, and O'Neil (1995) found that among the most frequent associates of children in Grades 4 through 8 to AIDS were death (71%), disease (59%), sex (42%), no cure (40%), needles (23%), and drugs (18%). Whereas homosexuality was rarely mentioned specifically (3%), mentions of sex included things like "sex with dirty people."

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