

**The Social Construction of Attitudes:
Functional Consensus and Divergence in the US Public's Reactions To AIDS**

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Since the earliest days of the AIDS epidemic in the United States, public reactions to the disease have been shaped by a variety of factors. AIDS has been regarded as a deadly and transmissible illness. At the same time, it has been widely perceived as a disease that disproportionately affects society's out-groups, especially gay men, nongay men who have sex with other men, and people who share needles for injecting drug use.

Consequently, educating the public about AIDS has been a complicated challenge. It requires communicating information about how to avoid infection with the human immunodeficiency virus (HIV), including discussion of formerly taboo topics such as male-male anal intercourse and needle sharing. It also requires disseminating clear messages about how HIV is *not* transmitted so as to minimize AIDS-related stigma and discrimination against the communities most affected by the epidemic. In these tasks, health workers have long known that simply providing accurate information about HIV is not enough. AIDS education must also confront many emotion-laden issues, including heterosexuals' attitudes toward homosexuality and the stigma associated with illegal drug use. How best to accomplish this task — which messages should be presented to different audiences, how they should be presented — has not always been obvious.

Because these questions ultimately are about persuasive communication and behavior change, findings from social psychological research on attitudes are potentially relevant to the design of AIDS interventions.

The functional approach to attitudes can be especially helpful in this arena. It posits that people hold and express particular attitudes because they derive psychological benefit from doing so, and that the type of benefit varies among individuals (Katz, 1960, 1968; Katz & Stotland, 1959; Sarnoff & Katz, 1954; Smith, 1947, 1973; Smith, Bruner, & White, 1956). Within this framework, attitudes are understood according to the psychological needs they meet — that is, the functions they serve. Thus, a functional perspective assumes that different people have different motivations for their attitudes concerning AIDS, with the consequence that various persuasive messages will be differentially effective in reaching them.

While potentially offering valuable insights about AIDS-related attitudes to health workers and policy makers, functionalism itself has a great deal to gain from its application to societal problems such as the AIDS epidemic. Confronting the complexities of public reactions to AIDS can lead functional theorists to new insights that will enrich the theory. Thus, applying the functional perspective to AIDS education is likely to be mutually beneficial to front-line AIDS educators and to academic social psychologists.

In the present chapter, I offer some observations about attitude functions based on my own research in the area of AIDS and stigma. In the first part of the chapter, I present a conceptual framework for thinking about how the functions served by attitudes can vary across domains and among the specific attitude objects that comprise those domains. As used here, *domain* refers to a closely related set of specific attitude objects (Herek, 1986). For example, the objects comprising the AIDS domain include people with AIDS (PWAs) as a group, specific PWAs, AIDS-related public policies and laws, and HIV-prevention behaviors.

I argue that some attitude objects are socially constructed in such a way that they elicit the same function from virtually all members of a population (a pattern labeled *functional consensus*), whereas others are

constructed such that they elicit a variety of functions (*functional divergence*). When attitudes are functionally divergent, their relationships to other theoretically relevant variables differ across function-based population subgroups. When attitudes are functionally consensual, however, the population exhibits a fairly homogeneous pattern of relationships between those attitudes and other theoretically relevant variables.

In the second part of the chapter, I present data from a series of opinion surveys about AIDS conducted between 1990 and 1997 with national probability samples of US adults. These data provide estimates of the proportions of the US adult population whose attitudes in the AIDS domain generally are motivated by concerns about contagion or by symbolic associations between AIDS and societal outgroups. In addition, the data indicate that most of the specific attitude objects included in the surveys elicited functional divergence: Depending on the function served generally by their attitudes in the AIDS domain, respondents' specific AIDS attitudes were differentially correlated with their beliefs about HIV transmission and attitudes toward gay men. However, some specific AIDS attitudes elicited functional consensus: Regardless of which function their AIDS attitudes generally served at the domain level, most respondents' attitudes toward these specific aspects of AIDS manifested a similar pattern of relationships to their transmission beliefs and attitudes toward gay men.

ATTITUDE FUNCTIONS AND THEIR SOURCES OF VARIATION

No consensus has emerged for a definitive catalog of attitude functions. However, most researchers in this tradition have agreed that attitudes variously help to organize perceptions of the environment in a way that maximizes rewards and minimizes punishments for the individual (labeled *utilitarian*, *proximal*, *object-instrumental*, *object-appraisal*, and *schematic* functions), mediate one's interpersonal relations (*social adjustment*, *social expressive*, and *social identity* functions), express values important to one's self-concept (*ego-instrumental* and *value expressive* functions), and protect the self from anxiety and threats to self esteem (*ego-defensive*, *externalization*, and *ego-enhancement* functions; Katz, 1960, 1968; Katz & Stotland, 1959; Smith, 1947; Smith, Bruner, & White, 1956; for more recent conceptualizations, see DeBono, 1987; Herek, 1986, 1987; Lutz, 1981; Pratkanis & Greenwald, 1989; Shavitt, 1989).

Empirical research based on the functional approach has usually focused on the importance of personality traits in determining which attitude functions prevail for any individual. Although it has yielded important insights into attitude functions, this approach can limit

our understanding of how and why attitude functions vary across situations and attitude domains. Therefore, I offer three propositions about functional variation.

Attitude Objects Are Socially Constructed.

Attitude objects and domains vary in their potential for eliciting different attitude functions (Herek, 1986; Lutz, 1981; Shavitt, 1989). An adequate analysis of this variation requires that attitude objects and domains be understood within their social context. In other words, the meanings associated with attitude objects and domains are largely socially constructed (see generally Berger & Luckman, 1966; Gergen, 1985).

Even many qualities of an attitude object that appear at first glance to result entirely from its physical characteristics (e.g., taste, cost, and utility, to use some characteristics noted by Shavitt, 1989) can be constructed differently from one social group to another. For example, whether a particular food or beverage is perceived as tasting pleasant or unpleasant varies not only among individuals but also among social groups and entire cultures. Indeed, groups differ in their perceptions of which edible items are even appropriate for ingesting. Consider group differences in attitudes toward consuming red meat, dogs, monkeys, pigs, insects, caffeinated drinks, and liquor. Similarly, an object's cost, as well as the very notion of whether it is an appropriate item for exchange, is determined socially. And perceptions of an object's utility, or even whether the object is thought of in utilitarian terms, are strongly influenced by social factors.

How an object is socially defined largely determines the attitude functions it is capable of eliciting. For example, depending on historical events and social context, a brightly colored rectangle of fabric may come to be socially defined as a piece of clothing, a national flag, or a work of art. Depending on how a group defines the object, attitudes toward it will serve quite different functions. Attitudes toward the fabric as clothing may be based on utilitarian concerns about its durability and cost, or social expressive concerns about the status associated with wearing it (which might vary according to whether it is mass-produced or a designer original). Attitudes toward the fabric as a flag are likely to evoke ingroup and outgroup attitudes, as well as value expressive attitudes about patriotism and nationalism. Attitudes toward the fabric as a piece of art are likely to be based on factors such as the esthetic pleasure the viewer receives from it or the message that it is perceived to convey.

Even objects that seem as though they might be evaluated strictly in terms of physical characteristics or personal utility are subject to these social processes. Whereas Shavitt (1990) found that an air conditioner was

regarded primarily in utilitarian terms in a middle-class college student sample, for example, attitudes toward the same object might be quite different in an extremely poor population or a sample of environmental activists. In a poor community, attitudes toward air conditioners might serve functions related as much to social status and identity as to utilitarianism. Among some environmentalists, in contrast, attitudes toward air conditioners may serve primarily value expressive or social adjustment functions, reflecting the individual's strong identification with a group that bases its judgments of consumer items more on their environmental impact than personal comfort.

As these examples illustrate, the meanings that attitude objects have for an individual are rooted in her or his relationships with others and the larger society, and develop through social interactions, both direct (e.g., experiencing or discussing the attitude object with others) and indirect (e.g., observing portrayals of the object in mass media). Because constructions of an object can differ dramatically across social groups, the same object can elicit different attitude functions from one group to another.

In A Given Population, The Social Construction of Attitude Objects Can Create One or Many Functions.

Within any group, an object can be socially constructed to have a single meaning (so that attitudes toward it serve the same function for all members) or many different meanings (so that attitudes toward it can serve multiple functions). The likelihood that an object will have multiple meanings increases with the complexity of the group. In large, pluralistic societies such as the United States and Canada, attitude objects and domains are more likely to evoke multiple meanings than in small, homogeneous societies.

John Capitanio and I have proposed the terms *functional consensus* and *functional divergence* to differentiate between an attitude domain that elicits, respectively, one function or multiple functions within a particular population (Herek & Capitanio, 1998a). Functional divergence is possible when an attitude object has multiple social constructions, such that the function served by a person's attitudes toward the object is determined primarily by individual-level factors such as personal experiences or dispositional traits, or can be manipulated situationally by making salient a particular type of need or a particular set of evaluative criteria. Consider, for example, a White US citizen's attitudes toward African Americans and a heterosexual person's attitudes toward lesbians. In both cases, the attitude domain (i.e., the social groups *African Americans* and *lesbians*) has been socially constructed in the larger society in such a way that its exemplars can potentially

be perceived by the attitude holder along many dimensions: religious, political, social, experiential, and others. One White heterosexual, for example, might think about both African Americans and lesbians mainly in religious terms — believing that both groups consist of human beings created in God's image and deserving love and compassion or, alternatively, that religious beliefs require embracing African Americans but rejecting lesbians. Another White heterosexual, in contrast, might evaluate African Americans primarily in social expressive terms (“My friends and family — whose approval and acceptance I want — all dislike Blacks; therefore, I dislike Blacks”) but lesbians in experiential terms (“My neighbor is a lesbian and I like her; therefore, I have positive feeling about lesbians as a group”).

If an entire population (or the vast majority) defines an attitude domain along the same dimension, however, only one type of attitude function is realistically available to most people in that group. This is the case with functional consensus. For example, attitudes toward the Christian Bible probably serve a value expressive function for most citizens of the United States. People may hold varying degrees of positive or negative attitudes toward the Bible and its contents, but they most likely base their attitudes on value considerations rather than, for example, utilitarian ones.

Two points warrant emphasis here. First, functional consensus and divergence are group level phenomena. They represent patterns in a population. Second, because the social construction of attitude objects can be highly nuanced, functional consensus and divergence may differ among specific attitude objects within a domain. For example, whereas attitudes toward the American flag may elicit functional consensus in the United States (because they serve a value expressive function for most Americans), attitudes toward a constitutional amendment to prohibit flag burning might be functionally divergent. Some people may hold value expressive attitudes toward the issue (e.g., basing their attitudes on patriotism or allegiance to the First Amendment) whereas others might hold social expressive attitudes (e.g., forming their attitudes in reaction to the position taken by family members or important reference groups) or even utilitarian attitudes (e.g., the flag manufacturer who fears that the wording of the amendment would prohibit him from incinerating old flags that are no longer usable).

An Individual's Attitudes Toward Different Objects Can Serve Different Functions.

Once we recognize that the meanings attached to any object reflect its social construction, and that social constructions can result in functional consensus for some objects and functional divergence for others, it follows

that the functions served by any individual's attitudes can differ across attitude objects and domains. For a simple illustration of this point, consider the case when two different attitude objects each elicit functional consensus in a particular population. If the first object is socially constructed such that it uniformly elicits a utilitarian function whereas the second object elicits exclusively value expressive attitudes, an individual from that population will most likely hold utilitarian attitudes toward the first object and value expressive attitudes toward the second object.

Functional researchers have always assumed that one person can express attitudes serving a variety of functions. In the earliest functional theories, intraindividual variation was assumed to result from the interaction of personal needs and situational cues. Katz's (1960) formulation, for example, assumed that all of the needs associated with the different functions are more or less present in all individuals but that their relative intensity differs among people, and that situations vary in their ability to arouse particular needs and hence engage particular attitude functions. Consistent with this formulation, laboratory experiments based on the functional approach have used a variety of situational manipulations for making one type of function more salient than others (e.g., Peak, 1960; Maio & Olson, 1995).

Researchers have also long recognized that many attitude objects and domains are likely to elicit multiple functions (e.g., DeBono, 1987; Herek, 1987; Maio & Olson, 1995; Pryor, Reeder, Vinacco, & Kott, 1989). As Shavitt (1989, 1990) explained, multifunctionalism is more likely for some attitude objects than others. Her studies laid the groundwork for better understanding how the characteristics of attitude objects affect functions, especially with unfunctional objects, that is, objects that elicit one principal function in a particular population. Considered in tandem with studies of multifunctional attitude objects, her research also empirically established that some objects elicit one function whereas others are multifunctional. Thus, the functions served by an individual's attitudes can differ across attitude objects and domains. This conclusion has important implications for operationalizing attitude functions.

Operationalizing Attitude Functions

Characterizing their study as "a prolegomenon to measurement," M. Brewster Smith and his colleagues collected mainly qualitative interview data in their exploratory study of opinions (Smith et al., 1956, p. 4). In contrast, Daniel Katz's group at Michigan and most later functional researchers used standardized assessment methods that allowed for objective scoring and mass administration. Operationalizing attitude functions with

objective measures has been a challenge and often a problem. One reason for this difficulty is the longstanding tension within the functional approach between two conceptualizations of attitudes: as relatively stable personality traits and as dynamic outcomes of a dialectic among characteristics of persons, objects, and situations. Reflecting that tension, functional researchers have used a variety of indirect and direct measurement strategies.

Indirect Measurement of Attitude Functions

The use of indirect measures of attitude functions dates back to the 1950s, when Michigan researchers employed global measures such as the F-scale, MMPI items, and special TAT cards (e.g., Katz, McClintock, & Sarnoff, 1957; Katz, Sarnoff, & McClintock, 1956; McClintock, 1958). Their operationalizations reflected the view that attitudes were equivalent to personality syndromes (e.g., McClintock, 1958). Many contemporary researchers have found this conceptualization useful and have continued to impute attitude functions from global assessments of personality traits, especially the trait of self monitoring (e.g., Bazzini & Shaffer, 1995; DeBono, 1987; DeBono & Snyder, 1989; Petty & Wegener, 1998; Snyder & DeBono, 1985, 1987, 1989).

Another indirect approach to measuring attitude functions derives from research on symbolic and instrumental attitudes (Abelson & Prentice, 1989; Herek, 1986; Pryor et al., 1989). Researchers in this area differentiate between attitudes based on the individual's self interested, utilitarian concerns (*instrumental attitudes*) and those reflecting symbolic expressions of deep-seated values and prejudices (*symbolic attitudes*; for background and debate, see Bobo, 1983; Herek, 1986; Jelen & Wilcox, 1992; Kinder, 1986; Kinder & Sears, 1981; Sears, 1993; Sniderman & Tetlock, 1986).

The instrumental-symbolic dichotomy has been translated into functional terms in various ways. In my own work (Herek, 1986, 1987), I have described two broad categories of attitude functions: the *expressive* functions, which underlie symbolic attitudes, and the *evaluative* functions, which underlie instrumental attitudes (see also Abelson & Prentice, 1989; Herek, 1987; Herek & Capitanio, 1998a; Prentice, 1987). Expressive attitudes (i.e., those serving functions such as value expression, social adjustment, ego defense, or ego enhancement) derive their affective content from personal needs that are met by the attitude's expression — needs broadly related to affirmation of identity, enhancement of self esteem, strengthening relations to an ingroup, or distancing oneself from outgroups. The attitude object serves primarily as a symbol (e.g., for values integral to the self concept). In contrast, evaluative attitudes (e.g., utilitarian, schematic, proximal,

object-instrumental) are based principally on appraisals of the attitude object in terms of its direct utility for the person rather than as a symbol. The attitude's affect derives from whether the object itself is a source of benefit or detriment.

Measurement strategies for instrumental and symbolic attitudes have typically focused on assessing, respectively, cost-benefit evaluations of the attitude object and attitudes toward other objects to which it is symbolically linked (e.g., Bishop, Alva, Cantu, & Rittiman, 1991; Jelen & Wilcox, 1992; Pryor & Reeder, 1993; Pryor et al., 1989; Schneider, Snyder-Joy, & Hopper, 1993). A particular attitude has been characterized as serving a symbolic or instrumental function to the extent that symbolic and instrumental variables explain significant portions of its variance.

An empirical example of this approach is Pryor et al.'s (1989) innovative program of research on the symbolic and instrumental functions of attitudes toward interacting with a person with AIDS. Pryor and his colleagues operationalized instrumental attitudes with a series of expectancy-value measures focusing on the possible outcomes of such interaction (e.g., the likelihood that one's child would become infected through interactions with a schoolmate with AIDS). Symbolic attitudes were operationalized in terms of heterosexuals' attitudes toward homosexuality, reflecting the fact that the American public's perceptions of the epidemic were shaped by the disproportionate impact of AIDS on gay and bisexual men in the United States (Herek, 1997). In a series of studies, both instrumental and symbolic measures consistently predicted significant and independent portions of the variance in AIDS attitudes (see also Pryor & Reeder, 1993; Pryor, Reeder, & McManus, 1991).

Indirect approaches to operationalizing attitude functions have important advantages. Research with personality measures — especially the self-monitoring scale — has enjoyed impressive success at predicting differential responses to persuasive messages. Moreover, as Snyder and DeBono (1987, 1989) explained with reference to the use of the self-monitoring scale in functional research, such measures permit “differences in attitudinal functions to be placed in the larger psychological context of the generalized interpersonal orientations associated with self-monitoring propensities, and in the larger theoretical framework provided by the entire network of evidence for the construct validity of self-monitoring” (p. 122). Functional research based on the symbolic-instrumental distinction has also made important theoretical and empirical contributions. It has successfully demonstrated the multiple sources of attitudes toward important social problems, such as the AIDS epidemic, and has contextualized the findings of

functional research within the scientific literature on symbolic politics and expectancy-value approaches.

Yet, indirect measures do not yield information about the specific functions served by the attitudes under study. As noted above, the functions served by an individual's attitudes can differ across attitude objects and domains. Personality-based approaches in particular do not permit assessment of these intraindividual differences in attitude functions. Instead, they are based on the assumption that a person who manifests a particular trait (e.g., high or low self monitoring) will consistently hold attitudes serving the same function in multiple domains. For example, a White heterosexual man's attitudes toward Blacks are presumed to serve the same function as his attitudes toward gay men, gun control, the Boston Celtics, Coca-Cola, and the Microsoft Corporation.

The strategy of using instrumental and symbolic variables as proxy measures of attitude functions is more specific than the use of personality variables. It allows intraindividual variation in attitude functions to be reflected in varying expectancy-value judgments and responses to symbolically linked attitude objects. Nevertheless, this operational strategy does not establish whether a functional connection actually exists between the proxy attitudes and the attitude of interest. Simply because a heterosexual man has negative attitudes toward gay men, for example, does not mean that antigay attitudes are the primary motivation for his AIDS-related attitudes. It is necessary to know as well whether AIDS, as an attitude domain, activates those antigay sentiments and makes them sufficiently salient that his AIDS-related attitudes function to express them symbolically. The extent to which such direct activation occurs can be known only when attitude functions are measured directly.

Direct Measurement of Attitude Functions

The feasibility of directly assessing functions has been demonstrated for a variety of attitude domains with a variety of approaches. Functions have been reliably and validly ascertained from content analysis of respondents' verbal statements (Herek, 1987; Maio & Olson, 1994, 1995; Shavitt, 1990) and through objectively-scored direct questions about respondents' reasons for their opinions (Abelson, 1988; Anderson & Kristiansen, 1990; Gastil, 1992; Herek, 1987; Herek & Glunt, 1993; Shavitt, 1990), behavioral intentions (Hooper, 1983), and behaviors (Omoto & Crain, 1995).

I have detailed a method for directly assessing attitude functions with a series of objectively scored items which I call the *Attitude Functions Inventory*, or AFI (Herek, 1987). The AFI method involves developing a set of statements describing the reasons why an individual holds her or his attitudes in a particular

domain, with each statement keyed to a particular attitude function. Respondents indicate the extent to which each statement describes their own attitudes (for studies utilizing the AFI and similar methods, see Anderson & Kristiansen, 1990; Brandyberry & McNair, 1996; Herek, 1987; Herek & Glunt, 1993; Herek & Capitanio, 1998a; Wyman & Snyder, 1997).

Direct measures of attitude functions can focus on a specific attitude or a general domain. The AFI has typically been used to measure attitude functions at the domain level. In the first study using the AFI, for example, respondents indicated the extent to which various factors had influenced their general attitudes toward lesbians and gay men (Herek, 1987). In the surveys detailed below, respondents were asked how much various considerations (worry about getting AIDS, religious beliefs, etc.) had “influenced your own opinions about AIDS.” The AFI format could also be used to measure the functions of attitudes toward specific objects within a domain. For example, one set of AFI items could be worded to refer specifically to attitudes toward policies that mandate reporting of the names of people who test positive for HIV, and another set could refer to attitudes toward working closely in an office with a PWA. At the most specific level, a separate set of AFI items could be administered in reference to each item on an attitude scale.

It seems reasonable to assume, however, that attitudes toward most objects within a domain derive from the same motivation(s), that is, an individual’s attitudes within a particular domain generally serve the same function (or functions) across most attitude objects comprising that domain. For example, individuals whose AIDS-related attitudes generally reflect instrumental concerns about contagion and infection (the domain level) are likely to manifest those same concerns in their specific AIDS attitudes toward mandatory HIV reporting policies or working with a PWA (the specific attitude level).

Using the AFI to assess functions at the domain level, rather than the more specific level of the attitude object, has at least two advantages. First, separately assessing the functions associated with responses to each item on an attitude scale would create a considerable burden for respondents and would limit the extent to which other questions could be asked in an interview or self-administered questionnaire. Such an approach would be especially cumbersome in field research and surveys with population-based samples, whose respondents often are reluctant to engage in repetitive tasks and in which the addition of a single question can have high monetary costs. Second, such an approach permits general categorization of respondents according to the function most likely to be served by their attitudes toward specific

objects within the domain. The utility of such categorization is illustrated below.

Operationalizing Consensus and Divergence

When attitude domains differ in the number of functions they elicit within a specific population, this difference is manifested in the relative numbers of people in that population who hold attitudes serving each available function. With functional consensus, everyone (or nearly everyone) manifests the same function in their attitudes within that domain; with functional divergence, different functions are served by the attitudes of sizable portions of the population.

Methodologically, identifying whether functional consensus or functional divergence prevails for a particular domain in a particular population is somewhat akin to taking a vote. Rather than the outcome being determined by a simple majority, however, it should be based on whether or not the *vast majority* of a population (e.g., 90% or more) manifests attitudes that serve the same function. In that case, the domain can be said to elicit functional consensus. However, if significant portions of the sample manifest each function or combinations of functions, it is a case of functional divergence.¹

Thus, determining whether a particular attitude domain is unifunctional or multifunctional within a particular population requires that individuals be somehow categorized according to the function served predominantly or exclusively by their attitudes, and then counted. If most or all of the respondents can be placed in a single group, the attitude is unifunctional; the group’s attitudes are characterized by functional consensus. If a significant minority holds attitudes serving a different function from that of the majority, the attitude is multifunctional; the group’s attitudes are functionally divergent.

A Note on Methodological Paradigms

Traditionally, theoretical frameworks based on the functional approach have been operationalized in attitude-change paradigms. Research in this tradition usually tests the hypothesis that function-relevant messages are more persuasive or more favorably received when they match the recipient’s dominant attitude function or the function that has been made most salient by situational manipulations (e.g., Katz, 1960; Maio & Olson, 1995; Peak, 1960; Snyder & DeBono, 1989). Despite the theoretical power of this approach, as well as the empirical support it has often enjoyed, we functional researchers should take care not to put all of our conceptual eggs in one basket, namely, the experimental attitude-change paradigm. Many psychological processes are implicated in the process of

persuasive communication (for a discussion of some of the steps between presentation of a message and attitude change, see the communication-persuasion matrix presented by McGuire, 1985). Most functional research has focused only on the initial input step (message presentation) and the ultimate output (attitude change) without considering intervening psychological processes (for exceptions to this pattern, see DeBono & Harnish, 1988; DeBono & Telesca, 1990; Petty & Wegener, 1998). The development of functional theory may be hampered if we rely exclusively on the experimental attitude-change paradigm. Such reliance might lead us to ignore other behavior patterns that are predicted by functional theories and even, in some cases, to inappropriately reject functional hypotheses because of failures to obtain statistically significant levels of attitude change through experimental manipulations.

In the remainder of the chapter, I describe research relevant to the model I have described. It is based not on laboratory experimentation, but on survey methods and the analytic strategies employed in past studies of symbolic politics. Using data from a series of national surveys that included AFI items, I begin by describing the distribution of functions for the general domain of AIDS attitudes in the sample (and, by implication, in the US adult population at the time the surveys were conducted). Then I assess the adequacy of this description for attitudes toward a variety of specific AIDS-related objects by extending a model used in the symbolic politics literature. That model tests whether attitudes toward a particular object are instrumental or symbolic by using multiple regression to assess the relative power of instrumental versus symbolic variables in predicting attitude scores.

I hypothesized that whether AIDS attitudes were functionally consensual or divergent would affect their relationship to instrumental and symbolic variables. If attitudes toward a specific attitude object within the domain of AIDS are functionally divergent, they should be predicted by the instrumental variable for persons whose AIDS attitudes generally (at the domain level) serve an evaluative function, but by a symbolic variable for persons whose attitudes generally (at the domain level) serve an expressive function. Consequently, the specific attitudes of those who are generally evaluative and those who are generally expressive will manifest quite different patterns of relationships to other key variables. If functional consensus prevails, whether a person has generally evaluative or generally expressive attitudes within the domain of AIDS will not matter; the specific attitudes of both groups should be predicted mainly by one type of variable (either the symbolic or instrumental variable, depending on the social construction of the attitude object).

FUNCTIONAL CONSENSUS AND DIVERGENCE IN AIDS-RELATED ATTITUDES

My focus in the studies described below is the attitude domain of AIDS, which includes the attitudes of non-HIV-infected individuals toward a wide range of phenomena: e.g., persons with AIDS, behaviors related to AIDS (e.g., personal AIDS prevention, donating time or money to AIDS charities, interacting with or avoiding PWAs), and AIDS-related public policies (e.g., treatment, prevention, and surveillance programs; nondiscrimination laws).

In the United States, Canada, and much of the world, stigma has been a dominant feature of social constructions of AIDS (Herek et al., 1998). AIDS-related stigma affects the quality of life for people infected with HIV, those at risk for infection, and those perceived to be at risk. People with HIV (or believed to be infected) have been fired from their jobs, driven from their homes, and even physically attacked. AIDS stigma also poses threats to the physical and psychological well-being of the loved ones of PWAs, their caregivers, and communities disproportionately affected by HIV. Fears of AIDS stigma and its attendant discrimination appear to deter people from seeking information and assistance for AIDS risk reduction, being tested for HIV, and, if they are HIV-positive, disclosing their serostatus to others. The latter may lead to social isolation and interfere with receiving needed medical and social services (for general discussions, see Herek, 1990; Herek et al., 1998; Herek & Glunt, 1988; Mann, Tarantola, & Netter, 1992; Pryor & Reeder, 1993). Because of the prevalence of AIDS stigma and its widespread impact, I selected various aspects of AIDS stigma for operationalization in the studies described here.

The 1991 and 1992 Surveys

The first set of data concerning functional divergence and consensus in AIDS-related attitudes comes from a 2-wave telephone survey about AIDS. Because the data were drawn from a national probability sample, they provided an unusual opportunity to assess the extent to which various attitude objects within the domain of AIDS were functionally divergent or functionally consensual in the US adult population.

Method

Sampling and Procedures

The sampling methods and interview procedures for the survey have been described in detail elsewhere (Herek & Capitano, 1993, 1997, 1998a). In brief, a 2-stage random-digit dialing (RDD) method was used to obtain a sample of respondents from the universe of all

English-speaking adults (at least 18 years of age) residing in households with telephones within the 48 contiguous states. They were interviewed on two separate occasions approximately one year apart. Interviews were conducted by the staff of the Survey Research Center at the University of California at Berkeley between September of 1990 and February of 1991 for Wave 1, and between November of 1991 and February of 1992 for Wave 2, using their computer-assisted telephone interviewing (CATI) system. Wave 1 interviews were completed with 538 individuals. Wave 2 reinterviews were completed with 382 (71%) of the original respondents. Of the 382 Wave 2 respondents, 366 had identified themselves as heterosexual at Wave 1 and are included in the analyses discussed here.

The Wave 1 sample was 46% male and 54% female. Described racially and ethnically, it was 81% White, 10% Black, 5% Hispanic, and 3% Asian. The mean age was 44 years; median annual household income was between \$30,000 and \$40,000; and the median level of educational attainment was some college or post-secondary technical school. The demographic characteristics of the Wave 2 sample were nearly identical to Wave 1, except that significantly more Asians and significantly fewer Whites were lost between Waves 1 and 2 than would be expected through random attrition. In addition, the highest income category (income greater than \$70,000 annually) had a significantly lower attrition rate than did any of the other income categories. More detailed information about the sample is reported elsewhere (Herek & Capitanio, 1993, 1994, 1995, 1996, 1997).

Measures

As noted earlier, although a person's attitudes toward the various objects in a particular domain are likely to display some degree of consistency, they need not be uniform across all objects within that domain. Recognizing the importance of such complexities, four types of attitudes within the domain of AIDS were assessed: (1) *coercion and blame*, including support for quarantine and public labeling of PWAs, and the belief that PWAs deserve their illness; (2) *attitudes toward interacting with persons with AIDS* in various social situations; (3) *negative feelings* (fear, anger, and disgust) toward PWAs as a group (asked only at Wave 1) or toward a homosexual man with AIDS (asked only at Wave 2); and (4) *attitudes toward policies* mandating HIV-testing of immigrants and people "at high risk for getting AIDS" (asked only at Wave 2).

Three AFI items were used to directly assess respondents' attitude functions in the general domain of AIDS and to categorize respondents into functional groups. One item was used to assess the extent to which

AIDS-related attitudes served an evaluative function for the individual. After reporting whether they were *very worried*, *somewhat worried*, *not too worried*, or *not at all worried* that they would get AIDS, respondents were asked "How much has that [e.g., the fact that they were somewhat worried] influenced your feelings about AIDS and what should be done about it?" This question is referred to hereafter as the *personal worry* item. Two other items were used to assess the expressive function, one that asked how much the respondent's political values had influenced her or his "feelings about AIDS and what should be done about it" (the *political* item) and the other asking about the influence of "your own personal religious or moral beliefs — your feelings about right and wrong" (the *religious* item). For all three AFI items, four response alternatives were provided (*a great deal*, *some*, *very little*, *no influence at all*).

Consistent with previous research in this area (Pryor et al., 1989), attitudes toward gay men were used as a symbolic auxiliary variable, and beliefs about HIV transmission were used as an instrumental auxiliary variable. Attitudes toward gay men were assessed with a 3-item short form of the Attitudes Toward Gay Men (ATG) scale (Herek, 1994), and beliefs about the risk of HIV-transmission through casual contact were measured with a 4-item Casual Contact Transmission Beliefs (CCTB) scale. Higher scores on the scales indicated, respectively, more unfavorable attitudes toward gay men and greater overestimation of risk from casual social contact (see Herek & Capitanio, 1997, 1998a).

Functional Categorization

The responses to the three AFI items were used to identify respondents whose attitudes in the domain of AIDS generally served a single primary function, and to categorize them into two groups: evaluatives (persons with attitudes motivated primarily by personal worry about getting HIV) and expressives (persons with attitudes motivated primarily by political or religious values). Respondents' general AIDS attitudes were categorized as serving primarily an evaluative function if their score for the *personal worry* item was greater (i.e., indicating stronger influence) than their score for either the *religious* or *political* items. They were categorized as primarily expressive if their score for either the *religious* or *political* items was greater than their score for the *personal worry* item.

Results

Functional Categorization

Forty-eight respondents (13%) were classified as evaluatives and 179 (49%) as expressives. The remainder scored equally high on both functions (30%), or reported that none of the three factors had exerted an influence on

their attitudes about AIDS (8%). This overall pattern suggests that US attitudes in the general AIDS domain were functionally divergent, in that substantial portions of the sample manifested an evaluative or expressive function (either singly, or in combination). The fact that a near-majority of respondents was categorized as primarily expressive — with another 30% manifesting both an expressive and an evaluative function — suggested that AIDS domain attitudes were more strongly expressive than evaluative when the survey was conducted. (As explained below, however, findings from the 1997 survey suggested that more evaluatives might have been identified if additional items had been included in the survey.)

Based on this pattern of functional divergence, it would be expected that the specific AIDS attitudes assessed in the survey would be differentially predicted by an instrumental or symbolic variable, depending on the individual respondent's domain-level dominant attitude function. Before examining the findings in this regard, it is appropriate to consider how functional divergence and consensus for a specific attitude will be reflected in the relationships among the key variables.

Operational Criteria for Functional Divergence and Consensus

If a specific attitude object (e.g., attitudes toward mandatory AIDS testing) in a particular population (in this case, adults in the US) is characterized by functional divergence, we should observe different correlational patterns among subgroups of individuals, depending on which function their attitude serves. That is, the valence and intensity of attitudes should be influenced by different factors for people whose attitudes serve expressive functions compared to those whose attitudes serve an evaluative function. Symbolic factors — for example, attitudes toward groups perceived to be closely associated with the epidemic, such as gay men — should be powerful predictors of attitudes for expressives, that is, people whose attitudes in the larger domain (i.e., AIDS) serve an expressive function. In contrast, utilitarian considerations — for example, beliefs about whether HIV is easily transmitted — should be more influential for evaluatives, people whose attitudes in the general domain of AIDS serve an evaluative function. If, on the other hand, attitudes toward a specific aspect of AIDS show functional consensus, the extent to which relevant symbolic and instrumental variables predict those attitudes should not differ between the evaluative and expressive groups.

Insert Table 1 about here

The four rows of Table 1 describe regression analysis results expected for specific attitude objects associated with four different patterns of functional consensus and divergence. The first two columns display predicted patterns among respondents whose attitudes in the general domain serve an evaluative function; the middle two columns describe respondents whose attitudes in the general domain serve an expressive function.² For each pattern, the table indicates the extent to which symbolic independent variables (e.g., general attitudes toward groups associated with AIDS) and instrumental independent variables (e.g., beliefs about the risk of contracting AIDS) are expected to predict attitudes toward specific AIDS objects. A plus sign (+) indicates that the variable is expected to explain a relatively high proportion of the variance in attitudes toward the object (R^2 in a regression model), whereas a minus sign (–) means that the variable should explain a relatively low proportion of variance.

The first two rows of Table 1 describe the expected pattern when functional consensus prevails. For example, if attitudes toward interacting with PWAs are instrumental for most of the American public, their valence and intensity would be substantially and significantly predicted by scores on an instrumental variable (e.g., beliefs about the likelihood of HIV being transmitted in casual social contact), whereas a symbolic variable (e.g., attitudes toward gay men) would not explain a great deal of variance in attitudes. This pattern of *instrumental consensus* is portrayed in Row 1 of Table 1. If attitudes about contact with PWAs instead represent a symbolic issue for most of the population, regardless of the domain-level functions served by their general AIDS attitudes, symbolic variables would be the main predictor (Table 1, Row 2).

The third row of Table 1 represents a simple case of functional divergence: Expressives' attitudes are predicted largely by the symbolic variable and evaluatives' attitudes are predicted largely by the instrumental variable. Put another way, the symbolic variable accounts for a significant and substantial amount of variance in the attitudes of expressives (but not evaluatives) *and* the instrumental variable accounts for a significant and substantial amount of variance in the attitudes of evaluatives (but not expressives).

The case of AIDS — and, most likely, other transmissible diseases that have strong symbolic connotations in popular discourse — suggests a variation on the simple functional divergence pattern (see Row 4 of Table 1). Because practically all AIDS stigma, regardless of the psychological function it serves, is based to some extent on the characteristics of AIDS as a disease, most specific aspects of AIDS stigma might be significantly predicted by instrumental variables (e.g.,

casual contact beliefs) for both functions groups. For this pattern, the plus-sign (+) in the instrumental variable column for both groups indicates that this variable should account for a significant proportion of variance for expressives as well as evaluatives. For the expressive group, a significant portion of additional variance in specific forms of AIDS stigma should be predicted by attitudes toward gay men, indicated by the plus sign (+) in the symbolic variable column.

Interpretation of the patterns described in the first 4 columns of Table 1 can be aided by comparing the relative proportion of variance explained by the symbolic and instrumental variables across groups (see the last two columns of Table 1). The *evaluative function ratio*, or VFR, summarizes the relative proportion of variance explained by the instrumental variable (in this case, casual contact beliefs) for evaluatives compared to expressives. It is computed as:

$$\text{VFR} = \frac{R_{VI}^2}{(R_{VI}^2 + R_{VS}^2)} \bigg/ \frac{R_{XI}^2}{(R_{XI}^2 + R_{XS}^2)}$$

[1]

where R_{VI}^2 = the proportion of variance in evaluatives' attitudes explained by the instrumental independent variable (beliefs about casual contact); R_{VS}^2 = the proportion of variance in evaluatives' attitudes explained by the symbolic independent variable (attitudes toward gay men); R_{XI}^2 = the proportion of variance in expressives' attitudes explained by the instrumental independent variable; and R_{XS}^2 = the proportion of variance in expressives' attitudes explained by the symbolic independent variable.

Values of VFR > 1 indicate that casual contact beliefs are a more powerful predictor of attitudes for evaluatives than for expressives. Values of VFR < 1 indicate such beliefs are a less powerful predictor for evaluatives, and values of VFR = 1 indicate that the variable's predictive power is approximately the same for both function groups.

The *expressive function ratio* (XFR) is computed in a similar manner, except that it describes the relative proportion of variance explained by the symbolic variable (attitudes toward gay men) for the expressive group compared to the evaluative group:

$$\text{XFR} = \frac{R_{XS}^2}{(R_{XS}^2 + R_{XI}^2)} \bigg/ \frac{R_{VS}^2}{(R_{VS}^2 + R_{VI}^2)} \quad [2]$$

Examined in conjunction with the actual proportions of variance explained (i.e., the information in the first 4 columns of Table 1), the functional ratios assist in interpreting functional patterns. Instrumental functional consensus is indicated when (a) both ratios are approximately equal to 1, indicating that the predictive

power of the instrumental and symbolic variables is similar for both groups, *and* (b) the proportion of variance explained by the instrumental variable (casual contact beliefs) is greater than the proportion explained by the symbolic variable (attitudes toward gay men). With symbolic functional consensus, both ratios again are equal to 1, but the proportion of variance explained by the symbolic variable is greater than that explained by the instrumental variable.

Simple functional divergence is indicated when (a) both ratios are substantially greater than 1, *and* (b) the symbolic variable accounts for a substantial amount of variance in the attitudes of expressives (but not evaluatives), *and* (c) the instrumental variable accounts for a significant and substantial amount of variance in the attitudes of evaluatives (but not expressives). With the special case of functional divergence hypothesized for AIDS (Table 1, Row 4), the instrumental variable explains the attitudes of both function groups to a significant extent (and VFR is approximately equal to 1), but the symbolic variable is a significant predictor for expressives (and XFR is substantially greater than 1).

For the data presented below, in addition to using ordinary least squares regression analyses to assess the substantive proportion of variance explained by symbolic and instrumental independent variables (with the patterns in Table 1 serving as a guide for interpretation), moderated regression analysis was used to test the extent to which the magnitude of the predictors (i.e., the unstandardized coefficients associated with each independent variable) was significantly different between expressives and evaluatives. Put differently, we tested whether the slope of the regression line for each independent variable differed significantly between evaluatives and expressives (Herek & Capitano, 1998a).

This analysis required construction of a set of multiplicative interaction terms, representing the product of a dummy-coded variable (indicating the respondent's primary attitude function) and scores on each of the symbolic and instrumental variables. The interaction terms were entered into the regression equation on a second step, after the "main effects" variables (the instrumental and symbolic variables, as well as the dummy variable for function group) had been entered on the first step. In addition to considering statistical significance, the magnitude of statistically significant effects in this analysis can be evaluated by calculating the proportional reduction in error, or PRE (the squared partial correlation) for each interaction term. The PRE is an indicator of whether including the interaction term substantially improves the explanatory power of the regression equation (McClelland & Judd, 1993).

Insert Table 2 about here

Predictors of AIDS Stigma: Regression Analyses Within Function Groups

Table 2 reports the results of a series of regression analyses for the evaluatives ($n = 43$ self-described heterosexuals who provided complete responses for all variables) and expressives ($n = 157$). ATG scores (the symbolic variable) and Casual Contact Transmission Beliefs, or CCTB scores (the instrumental variable) were entered simultaneously. The results suggest three patterns.

First, coercion and blame (at both waves) and attitudes toward mandatory testing manifested patterns consistent with those described above for the special case of functional divergence. CCTB scores explained the attitudes of both expressives and evaluatives, and VFR was approximately equal to 1, but ATG scores significantly predicted expressives' attitudes and $XFR > 1$.

Second, negative feelings toward PWAs were consistent with the pattern described earlier for simple functional divergence. Both XFR and VFR were greater than 1, and ATG scores accounted for a substantial portion of the variance in expressives' scores, whereas CCTB scores accounted for a substantial portion of the variance in evaluatives' scores.

Third, attitudes toward interactions with a PWA fit the pattern for instrumental functional consensus. Both VFR and XFR were approximately 1, and the proportion of variance explained by CCTB scores was considerably greater than the proportion explained by ATG scores for both expressives and evaluatives.

Testing Interaction Effects: Moderated Regression Analyses Across Function Groups

Table 3 reports results from the moderated regression analysis. Whereas Table 2 reports the reliability of transmission beliefs and attitudes toward gay men as predictors of AIDS stigma within each domain-level function group, the results in Table 3 indicate the extent to which the magnitude of the predictors (i.e., the unstandardized coefficients associated with each independent variable) differs significantly between expressives and evaluatives. In all analyses, the interaction terms were entered into the equation only after their component variables (functional group, ATG scores, and CCTB scores) were entered. To simplify Table 3, and because our hypotheses focused on the interaction terms, results are presented only for the interactions.

The dummy variable was coded so that positive regression coefficients in Table 3 indicate that the independent variable's predictive power is greater for the expressives than the evaluatives. Negative coefficients indicate that the independent variable's predictive power is greater for the evaluatives. Thus, the simple functional divergence hypothesis predicts that coefficients in the $\text{Function} \times \text{ATG}$ column will be positive and statistically significant, whereas the coefficients in the $\text{Function} \times \text{CCTB}$ column will be negative and statistically significant. Alternatively, the special case of functional divergence predicts that the $\text{Function} \times \text{ATG}$ interactions will be positive and statistically significant, whereas the $\text{Function} \times \text{CCTB}$ interactions will be near zero and nonsignificant. Functional consensus would be indicated by nonsignificant, near-zero coefficients in both columns.

Insert Table 3 about here

Table 3 shows that the regression coefficient for expressives' ATG scores was significantly greater than the coefficient for evaluatives' ATG scores for three outcome variables, all of them from the 1992 wave of data collection: feelings toward a homosexual man with AIDS, coercion and blame, and attitudes toward mandatory testing. The PRE associated with each of these interaction terms was greater than 2%, indicating substantial improvement in the equation's explanatory power as a result of including the interaction term. In contrast, the differences for attitudes toward contact with PWAs were not significantly different at either wave. In light of the patterns in Table 2, we interpreted this finding as indicating functional consensus concerning personal interactions with PWAs.

For the remaining attitude measures — Wave 1 feelings toward a generic PWA and Wave 1 coercion and blame — Table 3 shows that the differences between expressives and evaluatives were not significant. However, because the $\text{Function} \times \text{ATG}$ coefficients for the Wave 2 counterparts to these variables were significant — along with the fact that the Table 2 patterns of explained variance are consistent with one of the functional divergence patterns — it is possible that the differences between expressives and evaluatives might have reached statistical significance with a larger sample.

In summary, the results were consistent with one of the patterns of functional divergence for measures of negative affect toward PWAs, coercion and blame, and support for mandatory testing. Attitudes toward interacting with PWAs, in contrast, were predicted

mainly by transmission beliefs for expressives and evaluatives alike, a pattern suggesting functional consensus. The stability of these patterns was subsequently assessed in another national survey with a larger sample and somewhat refined measurement methods.

The 1997 Survey

The findings from the 1991 and 1992 surveys were limited in important respects. Although a national probability sample was used, the total number of respondents may not have been sufficient to overcome the problem of Type II error, which is common in moderated regression analyses with nonexperimental data (McClelland & Judd, 1993). As noted above, a larger sample would have increased the statistical power of the analyses. In addition, the assessment of attitude functions was accomplished with only two expressive items and one evaluative item. The use of additional items would probably increase the accuracy of the analyses. These issues were subsequently addressed in a national survey completed in 1997.

Method

Sampling and Procedures

Following procedures similar to those employed in the earlier surveys, interviews were conducted by the staff of the Survey Research Center at the University of California at Berkeley between July of 1996 and June of 1997, using their CATI system. The median duration of the interview was 44 minutes.

As in the previous study, respondents were drawn from the universe of all English-speaking adults (at least 18 years of age) residing in households with telephones within the 48 contiguous states. Ten-digit telephone numbers were generated using list-assisted RDD (Casady & Lepkowski, 1993). This method resulted in 2009 household phone numbers (56% of the 3,603 numbers initially generated by the procedure). Of these, interviews were completed with 1,309 (1,246 totally completed and 63 partially completed), yielding a final response rate of 65%. This sample was 45% male and 55% female. Described racially and ethnically, it was 79% White, 11% Black, 5% Hispanic, 2% Asian, and 1% Native American. The mean age was 44 years (*s.d.* = 16); median annual household income was between \$40,000 and \$50,000; and the median level of educational attainment was some college or post-secondary technical school. Two-thirds of respondents (68%) were currently employed.

An additional oversample of 403 individuals who described their own race or ethnicity as Black or African American was also recruited. Telephone numbers for the oversample were generated using the same RDD

procedure, but were then cross-referenced with another list that identified telephone prefixes linked to census tracts with at least 15% Black households. This method yielded 3,230 telephone numbers, from which 638 (19.8%) were determined to be eligible household phone numbers. Interviews were completed with 403 (369 totally completed, 34 partially completed), for a response rate of 63%. The oversample was 40% male and 60% female, with a mean age of 41 years (*s.d.* = 14), median household income between \$20,000 and \$30,000, and a median educational level of high school graduate. Nearly two-thirds of respondents (63%) were currently employed.

The original purpose of oversampling Blacks in the survey was to permit more finely detailed statistical comparisons of response patterns across race (e.g., Herek & Capitano, 1993, 1994, 1995). However, such comparisons are beyond the scope of the present chapter. For the analyses presented here, therefore, responses from the oversample were combined with the main sample. Cases were post-stratified by sex and race to correspond to the US adult population, based on US census data.

Measures

The survey included most of the same items as the previous instrument to permit comparison across surveys. New items were added to assess additional facets of instrumental and symbolic stigma (Table 4). For instrumental stigma, in addition to the *personal worry* item, questions were included to assess the prominence of concerns about the *financial impact* of AIDS, the epidemic's impact on general *quality of life*, and the respondent's belief about whether the AIDS epidemic was likely to affect her or his *own social circle*. For symbolic stigma, the earlier *religious* item was separated into two items, one about religious influences and the other about the influence of personal values of *right and wrong*. The *political* item was retained.

Insert Table 4 about here

The 1997 survey included the same sets of items to assess specific AIDS attitudes as in the previous surveys. These included three items related to coercion and blame (support for quarantine, support for public labeling of PWAs, blame for PWAs); attitudes toward interacting with PWAs (at a school, in the workplace, at a neighborhood grocery store); negative feelings (anger, disgust, fear) toward PWAs as a group;³ and support for mandatory testing of certain groups (immigrants, "people at risk for getting AIDS"). In contrast to the previous surveys, the items concerning mandatory testing were not

highly correlated and consequently could not be combined in a meaningful index. They are presented separately below.

Once again, respondents' attitudes toward gay men and beliefs about HIV transmission through casual contact were used as, respectively, symbolic and instrumental independent variables. In addition, a 3-item index of attitudes toward injecting drug users (IDUs) was included in the survey as a possible alternative symbolic variable.⁴

Results

Functional Categorization

In preliminary analyses, I evaluated two different functional classification strategies. First, I replicated the classification procedure from the 1991 survey, described above. This categorization utilized only the function items that had been included in the 1991 survey (*personal worry, religious, and political*). Next, I classified respondents using an alternate method, which used the same general procedure but added the new function items (*financial impact, quality of life, own social circle, right and wrong*).

The two methods produced an interesting difference in the distribution of domain-level functions. The first method resulted in a pattern quite similar to that obtained in the 1991 survey. A substantial plurality (44%) manifested AIDS attitudes that served primarily an expressive function (compared to 49% in the previous survey). Another 27% (versus 30% in the earlier survey) manifested a mix of expressive and evaluative functions, and only 14% (versus 13% earlier) manifested primarily an evaluative function.

With the additional items permitting a richer operationalization, however, the alternate categorization method yielded a pattern in which a plurality (39%) manifested attitudes serving multiple functions, with roughly comparable minorities manifesting expressive or evaluative functions (30% and 22%, respectively). For the analyses presented below, I used the latter method (i.e., with the additional items) for categorizing respondents according to attitude function.

Predictors of AIDS Stigma: Regression Analyses Within Function Groups

As before, I computed a series of regression equations to assess the extent to which the variance in different components of AIDS stigma was predicted for the evaluatives and expressives by a variable relevant to assessment of personal risk (i.e., knowledge about HIV transmission through various forms of casual contact) and a variable relevant to the symbolic aspects of AIDS stigma. For the latter, I conducted separate analyses using ATG scores and IDU attitude scores as symbolic

independent variables. In most cases, the measure of attitudes toward gay men explained at least as much variance as the measure of IDU attitudes, and the patterns of results were highly similar for the two variables. Therefore, except in the one analysis in which IDU attitudes yielded noticeably different results (see below), I report results with ATG scores as the symbolic independent variable. As in the previous survey, all respondents included in the analysis were self-described heterosexuals who did not report that they were HIV-positive. Cases with missing data were excluded from the analysis.

Insert Tables 5 and 6 about here

Table 5 displays the results of the separate regression analyses. Although the magnitudes of the values are somewhat different from those presented above in Table 2, the relative predictive power of the variables was fairly consistent with those in the previous survey. As would be expected from the larger sample in the 1997 survey, variables that explained even relatively small proportions of variance were statistically significant.

The patterns of functional consensus and divergence were quite similar to those observed in the 1991 survey, suggesting a fair amount of stability in the social construction of attitudes toward specific aspects of AIDS. The measures of negative feelings and support for different types of mandatory testing generally corresponded to the pattern for simple divergence, whereas the measure of coercion and blame appears to correspond to the special case of functional divergence. Attitudes toward contact with PWAs again matched the pattern for instrumental functional consensus.

Table 6 shows that the regression coefficient for expressives' ATG scores was significantly greater than the coefficient for evaluatives' ATG scores for negative feelings toward PWAs, coercion and blame, and support for mandatory testing of immigrants. The PRE associated with each of these interaction terms was relatively low, ranging from 0.5% to 1.4%, indicating small-to-moderate improvement in the equation's explanatory power as a result of including the interaction term.

As shown in Table 6, the interaction terms associated with the item concerning mandatory testing of "at risk" groups were not significant. This analysis, however, was the only one in which using IDU attitudes as the symbolic variable (rather than ATG scores) yielded substantially different results. With IDU attitudes in the moderated regression analysis, the IDU \times Function interaction term was statistically significant ($b = 0.129, p < .001, PRE = 0.017$). IDU attitudes accounted for

11.1% of the variance in expressives' attitudes about testing people at risk, but only 1.8% of the variance in evaluatives' attitudes. With the IDU variable, VFR = 5.18 and XFR = 4.05. Thus, attitudes toward mandatory testing of people at high risk for AIDS reflected functional divergence, but the key symbolic variable appears to have been attitudes toward injecting drug users rather than attitudes toward gay men.

DISCUSSION AND CONCLUSIONS

Work in the functional tradition has been dominated by an emphasis on personality characteristics, the use of indirect measures of attitude functions, and nearly exclusive reliance on experimental attitude-change studies as a method for validation. In this chapter, I have tried to offer some alternative perspectives. Like Shavitt (1989, 1990), I have argued for the importance of considering the role of attitude objects and domains in the functional process. My analysis differs from hers somewhat in my emphasis on the meanings that come to be associated with attitude domains as a result of their social construction. Conceptualizing attitude objects as socially constructed highlights the importance of grounding an attitude domain within a specific social group, evaluating the extent to which patterns observed in that group can be reliably generalized to a larger population (see, e.g., Sudman, 1976), and explicitly recognizing the ways in which one group's social construction of an object might differ from that of others. Specific constructions are influenced by a host of factors, ranging from the importance and salience of the attitude object to the group, to group members' developmental stage in the life span, to the group's location on various continua related to broad cultural syndromes (see generally Alwin & Krosnick, 1991; Krosnick & Abelson, 1992; Sears, 1986; Triandis, 1996). Understanding the historical, cultural, and situational contexts in which data about attitude functions are collected is likely to enrich our interpretation of data and our theorizing.

In contrast to much recent empirical work in this area, I have argued for the importance of direct assessment of functions. Direct assessment should be regarded not as a competitor to indirect methods, but as a complement. Whereas indirect measures, such as the self-monitoring scale and the approach utilized in studies of instrumental and symbolic attitudes, have the advantage of helping functional researchers to link their observations with a broader body of knowledge about personality characteristics and political attitudes, direct measures permit an understanding of the functions served by attitudes within a specific domain. As noted above, the same functions may not always be served by an individual's attitudes across domains. With direct measures, intra-individual differences in attitude

functions can be studied. Such differences provide important insights about influences on behavior apart from personality and dispositional factors. These include situational, social, and cultural variables.

I have also suggested that in a particular population, attitude domains and their component objects can be socially constructed in a manner that elicits one or many functions. This notion, although not yet extensively studied, is not new (Shavitt, 1989, 1990; see also Herek, 1986). I hope, however, that the present chapter's conceptualization and operationalization of functional consensus and divergence will help to extend thinking in this area. A few of the chapter's empirical findings about consensus and divergence warrant brief comment here.

First, the importance of creating operational definitions of multiple facets of attitude functions is clear. Using only three items (*personal worry*, *religious*, *political*) to classify respondents according to function resulted in quite similar proportions of evaluatives and expressives across the 1991 and 1997 surveys. When additional functional items were used in the 1997 survey, however, the proportion of evaluatives increased by roughly one-half and the proportion of expressives dropped from 44% to 30%. The difference resulted mainly from previously unclassified respondents being recategorized as evaluative, and from previously expressive respondents being reclassified to having attitudes that served both functions. Fewer than 1% of respondents were reclassified from expressive to evaluative when the larger number of instrumental items was used; none were reclassified in the opposite direction. Thus, assessing more facets of each type of function is likely to result in a more thorough (and presumably more accurate) categorization of respondents.

Second, the data supported the assumption that domain-level functions are likely to hold for attitudes toward most of the specific objects that comprise the domain, at least in the AIDS domain. Response distributions for the AFI items suggested that AIDS attitudes were functionally divergent (especially in the 1997 survey, which included more functional items). Attitudes toward specific aspects of AIDS were similarly divergent, with the exception of attitudes toward interacting with PWAs. In this regard, the findings were quite consistent across the surveys, suggesting that the functional dynamics of AIDS-related attitudes in the United States have been fairly stable during the 1990s.

The finding about attitudes toward personal contact with a PWA appears to contradict the results reported by Pryor and his colleagues (1989), which indicated a strong symbolic component to such attitudes. This inconsistency, however, may point to a difference between direct and indirect measurement strategies.

Pryor et al. used an indirect method to assess functions, in contrast to the direct method employed with the present data set. When the present data were reanalyzed using regression analyses similar to those of Pryor's group (i.e., with attitudes toward gay men and beliefs about casual contact used to predict AIDS attitudes, but with no direct measure of attitude function included), both independent variables explained significant and unique portions of the variance; however, the instrumental variable (casual contact beliefs) explained considerably more variance (e.g., see Herek & Capitanio, 1997, Tables 2 and 6).⁵

One important implication of the distinction between consensus and divergence is that when everyone's attitudes toward a particular object consistently serve one function, the functional approach may not be particularly useful in understanding or changing those attitudes. Rather, the principal utility of the functional approach lies in the insights it offers about attitudes that serve two or more functions in a particular population. Thus, the distinction between functional consensus and divergence can help to identify which attitude objects are most amenable to a functional analysis. Historically, the functional approach has been portrayed as applicable to all attitude domains. However, functionalism might be relevant principally to attitude objects that evoke functional divergence. That same subset of objects might also provide the most appropriate domains for a functional approach to attitude change, that is, one stressing the importance of formulating different persuasive messages to appeal to attitudes with different functions.

What advice can this functional analysis offer to AIDS educators and those who would reduce AIDS stigma in the United States? A detailed discussion of the practical implications of the present research program is beyond the scope of this chapter, but a few observations can be made. First, the fact that the AIDS-related attitudes of more than two-thirds of the public serve expressive functions (primarily or in combination with evaluative functions) points to the importance of directly confronting the symbolic linkages of AIDS to key social groups. To a great extent, the primary symbolic group continues to be the gay community. This is somewhat surprising because the proportion of new AIDS cases linked to male-male sexual activity has dropped considerably in recent years. In 1997, for example, only 35% of new AIDS cases in the US were diagnosed among men who reported sex with other men, with another 4% among men who reported both homosexual sex and injecting drug use (Centers for Disease Control and Prevention, 1998). At the same time, injecting drug users are also strongly linked to symbolic AIDS attitudes. Indeed, public support for mandatory testing of people

assumed to be at risk for AIDS appears to be more strongly linked to hostility toward injecting drug users than to hostility toward gay men.

Thus, efforts to reduce AIDS stigma must simultaneously strive to disentangle public reactions to AIDS from attitudes toward homosexuality and injecting drug use, while directly confronting societal hostility toward gay men and injecting drug users. The former task is complicated by the willingness of some groups in society to exploit popular fears and misconceptions about AIDS for political gain (e.g., Bailey, 1994). The latter task is made difficult by the fact that attitudes toward gay men and toward injecting drug users are clearly quite different from each other, and confronting them will require different strategies (for more general discussions, see Capitanio & Herek, 1999; Herek, 1991, 1992, 1994; Herek & Capitanio, 1995, 1996, 1999).

Second, almost as many adults in the US have AIDS attitudes that serve an evaluative function as an expressive function (primarily, or in combination). These attitudes are motivated mainly by individuals' judgments about whether they are likely to become infected, or whether AIDS will affect people in their immediate social circle (25% and 23%, respectively, reported that their AIDS attitudes were influenced "a great deal" by these beliefs). As demonstrated above, when AIDS attitudes serve an evaluative function, they are shaped to a large extent by an individual's beliefs about how HIV is transmitted. Thus, AIDS educational programs must teach the public about the ways that HIV can and cannot be transmitted. The continuing need for this type of basic information is dramatized by the fact that substantial proportions of respondents to the 1997 survey — in some cases more than half — overestimated the risks of HIV infection through various types of casual social contact. Indeed, the proportion of the public harboring misinformation about HIV transmission appeared to increase from the 1991 survey (Herek & Capitanio, 1998b).

Finally, the fact that attitudes toward AIDS policies and general affective responses to PWAs are functionally divergent suggests that interventions seeking to affect these attitudes will be differentially effective depending on the dominant function served by the recipients' attitudes. Whether an intervention should focus primarily on symbolic or instrumental aspects of AIDS stigma will depend on its intended targets. Messages in these areas should be tailored to the intervention's audience. Attempts to break down reluctance to personally interact with a PWA, in contrast, probably need to confront personal fears about contagion, regardless of the function served by the recipients' other AIDS attitudes.

REFERENCES

- Abelson, R. P. (1988). Conviction. *American Psychologist*, 43, 267-275.
- Abelson, R.P., & Prentice, D.A. (1989). Beliefs as possessions: A functional perspective. In A. Pratkanis, S. Breckler, & A. Greenwald (Eds.), *Attitude structure and function* (pp. 361-381). Hillsdale, NJ: Erlbaum.
- Alwin, D. F., & Krosnick, J. A. (1991). Aging, cohorts, and the stability of sociopolitical orientations over the life span. *American Journal of Sociology*, 97, 169-195.
- Anderson, D. S., & Kristiansen, C. (1990). Measuring attitude functions. *Journal of Social Psychology*, 130, 419-421.
- Bazzini, D. G., & Shaffer, D. R. (1995). Investigating the social-adjustive and value-expressive functions of well-grounded attitudes: Implications for change and for subsequent behavior. *Motivation & Emotion*, 19, 279-305.
- Berger, P. L., & Luckman, T. (1966). *The social construction of reality*. New York: Doubleday.
- Bishop, G.D., Alva, A.L., Cantu, L., & Rittiman, T.K. (1991). Responses to persons with AIDS: Fear of contagion or stigma? *Journal of Applied Social Psychology*, 21, 1877-1888.
- Bobo, L. (1983). Whites' opposition to busing: Symbolic racism or realistic group conflict? *Journal of Personality and Social Psychology*, 45, 1196-1210.
- Brandyberry, L. J., & MacNair, R. R. (1996). The content and function of attitudes toward AIDS. *Journal of College Student Development*, 37, 335-346.
- Capitanio, J.P., & Herek, G.M. (1999). AIDS, stigma, and injecting drug users. *American Behavioral Scientist* (in preparation).
- Casady, R.J., & Lepkowski, J.M. (1993). Stratified telephone survey designs. *Survey Methodology*, 19, 103-113.
- Centers for Disease Control and Prevention. (1998). *HIV/AIDS Surveillance Report*, 9 (2), 1-43.
- DeBono, K. G. (1987). Investigating the social-adjustive and value-expressive functions of attitudes: Implications for persuasion processes. *Journal of Personality and Social Psychology*, 52, 279-287.
- DeBono, K. G., & Harnish, R. J. (1988). Source expertise, source attractiveness, and the processing of persuasive information: A functional perspective. *Journal of Personality and Social Psychology*, 55, 541-546.
- DeBono, K. G., & Snyder, M. (1989). Understanding consumer decision-making processes: The role of form and function in product evaluation. *Journal of Applied Social Psychology*, 19, 416-424.
- DeBono, K. G., & Telesca, C. (1990). The influence of source physical attractiveness on advertising effectiveness: A functional perspective. *Journal of Applied Social Psychology*, 20, 1383-1395.
- Gastil, J. (1992). Why we believe in democracy: Testing theories of attitude functions and democracy. *Journal of Applied Social Psychology*, 22, 423-450.
- Gergen, K. J. (1985). The social constructionist movement in modern psychology. *American Psychologist*, 40, 266-275.
- Herek, G.M. (1986). The instrumentality of attitudes: Toward a neofunctional theory. *Journal of Social Issues*, 42(2), 99-114.
- Herek, G.M. (1987). Can functions be measured? A new perspective on the functional approach to attitudes. *Social Psychology Quarterly*, 50, 285-303.
- Herek, G.M. (1990). Illness, stigma, and AIDS. In P.T. Costa, Jr., & G.R. VandenBos (Eds.), *Psychological aspects of serious illness: Chronic conditions, fatal diseases, and clinical care* (pp. 103-150). Washington, DC: American Psychological Association.
- Herek, G. M. (1991). Stigma, prejudice, and violence against lesbians and gay men. In J. C. Gonsiorek, & J. D. Weinrich (Eds.), *Homosexuality: Research implications for public policy* (pp. 60-80). Thousand Oaks, CA: Sage.
- Herek, G. M. (1992). Psychological heterosexism and anti-gay violence: The social psychology of bigotry and bashing. In G. M. Herek, & K. T. Berrill (Eds.), *Hate crimes: Confronting violence against lesbians and gay men* (pp. 149-169). Thousand Oaks, CA: Sage.
- Herek, G.M. (1994). Assessing attitudes toward lesbians and gay men: A review of empirical research with the ATLG scale. In B. Greene, & G.M. Herek (Eds.) *Lesbian and gay psychology: Theory, research, and clinical applications* (pp. 206-228). Newbury Park, CA: Sage.
- Herek, G. M. (1997). The HIV epidemic and public attitudes toward lesbians and gay men. In M. P. Levine, P. Nardi, & J. Gagnon (Eds.), *In changing times: Gay men and lesbians encounter HIV/AIDS* (pp. 191-218). Chicago: University of Chicago Press.
- Herek, G.M., & Capitanio, J.P. (1993). Public reactions to AIDS in the United States: A second decade of stigma. *American Journal of Public Health*, 83, 574-577.
- Herek, G.M., & Capitanio, J.P. (1994). Conspiracies, contagion, and compassion: Trust and public reactions to AIDS. *AIDS Education and Prevention*, 6, 367-377.
- Herek, G. M., & Capitanio, J. P. (1995). Black heterosexuals' attitudes toward lesbians and gay men in the United States. *The Journal of Sex Research*, 32, 95-105.
- Herek, G. M., & Capitanio, J. P. (1996). "Some of my best friends": Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin*, 22, 412-424.
- Herek, G.M., & Capitanio, J.P. (1997). AIDS stigma and contact with persons with AIDS: The effects of personal and vicarious contact. *Journal of Applied Social Psychology*, 27, 1-36.
- Herek, G. M., & Capitanio, J. P. (1998a). Symbolic prejudice or fear of infection? A functional analysis of AIDS-related stigma among heterosexual adults. *Basic and Applied Social Psychology*, 20, 230-241.
- Herek, G.M., & Capitanio, J.P. (1998b). AIDS stigma and HIV-related beliefs in the United States: Results from a national telephone survey. *Conference record of the 12th World AIDS Conference*. Geneva, Switzerland.
- Herek, G.M., & Capitanio, J.P. (1999). AIDS, stigma, and homosexuality. *American Behavioral Scientist* (in preparation).

- Herek, G.M., & Glunt, E.K. (1988). An epidemic of stigma: Public reactions to AIDS. *American Psychologist*, *43*, 886-891.
- Herek, G.M., & Glunt, E.K. (1993). Public attitudes toward AIDS-related issues in the United States. In J.B. Pryor & G.D. Reeder (Eds.), *The social psychology of HIV infection* (pp. 229-261). Hillsdale, NJ: Erlbaum.
- Herek, G. M., Mitnick, L., Burris, S., Chesney, M., Devine, P., Fullilove, M. T., Fullilove, R., Gunther, H. C., Levi, J., Michaels, S., Novick, A., Pryor, J., Snyder, M., & Sweeney, T. (1998). AIDS and stigma: A conceptual framework and research agenda. *AIDS & Public Policy Journal*, *24*, in press.
- Hooper, M. (1983). The motivational bases of political behavior: A new concept and measurement procedure. *Public Opinion Quarterly*, *47*, 497-515.
- Jelen, T.G., & Wilcox, C. (1992). Symbolic and instrumental values as predictors of AIDS policies. *Social Science Quarterly*, *73*, 736-749.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, *24*, 163-204.
- Katz, D. (1968). Consistency for what? The functional approach. In R. P. Abelson, & et al (Eds.), *Theories of cognitive consistency: A sourcebook*. Chicago: Rand McNally.
- Katz, D., & Stotland, E. (1959). A preliminary statement to a theory of attitude structure and change. In S. Koch (Ed.), *Psychology: A study of a science* (Vol. 3, pp. 423-475). New York: McGraw Hill.
- Katz, D., McClintock, C., & Sarnoff, I. (1957). The measurement of ego defense as related to attitude change. *Journal of Personality*, *25*, 465-474.
- Katz, D., Sarnoff, I., & McClintock, C. (1956). Ego defense and attitude change. *Human Relations*, *9*, 27-45.
- Katz, D., & Stotland, E. (1959). A preliminary statement to a theory of attitude structure and change. In S. Koch (Ed.), *Psychology: A study of a science* (Vol. 3, pp. 423-475). New York: McGraw Hill.
- Kinder, D.R. (1986). The continuing American dilemma: White resistance to racial change 40 years after Myrdal. *Journal of Social Issues*, *42* (2), 151-171.
- Kinder, D.R., & Sears, D.O. (1981). Prejudice and politics: Symbolic racism versus racial threats to the good life. *Journal of Personality and Social Psychology*, *40*, 414-431.
- Krosnick, J. A., & Abelson, R. P. (1992). The case for measuring attitude strength in surveys. In J. M. Tanur (Ed.), *Questions about questions: Inquiries into the cognitive bases of surveys* (pp. 177-203). New York: Russell Sage Foundation.
- Lutz, R. J. (1981). A reconceptualization of the functional approach to attitudes. *Research in Marketing*, *5*, 165-210.
- Maio, G. R., & Olson, J. M. (1994). Value-attitude-behaviour relations: The moderating role of attitude functions. *British Journal of Social Psychology*, *33*, 301-312.
- Maio, G. R., & Olson, J. M. (1995). Relations between values, attitudes, and behavioral intentions: The moderating role of attitude function. *Journal of Experimental Social Psychology*, *31*, 266-285.
- Mann, J., Tarantola, D., & Netter, T. (Eds.) (1992). *AIDS in the world*. Cambridge: Harvard U. Press.
- McClelland, G.H., & Judd, C.M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, *114*, 376-390.
- McClintock, C. G. (1958). Personality syndromes and attitude change. *Journal of Personality*, *26*, 479-493.
- McGuire, W. J. (1985). Attitudes and attitude change. In G. Lindzey, & E. Aronson (Eds.), *Handbook of social psychology* (3rd ed., pp. 233-346). New York: Random House.
- Omoto, A., & Crain, A. L. (1995). AIDS volunteerism: Lesbian and gay community-based responses to HIV. In G. M. Herek, & B. Greene (Eds.), *AIDS, identity, and community: the HIV epidemic and lesbians and gay men* (Vol. 2, pp. 187-209). Thousand Oaks, CA: Sage.
- Peak, H. (1960). The effect of aroused motivation on attitudes. *Journal of Abnormal and Social Psychology*, *61*, 463-468.
- Petty, R. E., & Wegener, D. T. (1998). Matching versus mismatching attitude functions: Implications for scrutiny of persuasive messages. *Personality and Social Psychology Bulletin*, *24*, 227-240.
- Pratkanis, A. R., & Greenwald, A. G. (1989). A sociocognitive model of attitude structure and function. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 22, pp. 245-285). San Diego, CA: Academic Press.
- Prentice, D.A. (1987). Psychological correspondence of possessions, attitudes, and values. *Journal of Personality and Social Psychology*, *53*, 993-1003.
- Pryor, J.B., & Reeder, G.D. (1993). Collective and individual representations of HIV/AIDS stigma. In J.B. Pryor & G. Reeder (Eds.), *The social psychology of HIV infection* (pp. 263-286). Hillsdale, NJ: Erlbaum.
- Pryor, J. B., Reeder, G. D., & McManus, J. (1991). Fear and loathing in the workplace: Reactions to AIDS-infected co-workers. *Personality and Social Psychology Bulletin*, *17*, 133-139.
- Pryor, J.B., Reeder, G.D., Vinacco, R., & Kott, T.L. (1989). The instrumental and symbolic functions of attitudes toward persons with AIDS. *Journal of Applied Social Psychology*, *19*, 377-404.
- Sarnoff, I., & Katz, D. (1954). The motivational bases of attitude change. *Journal of Abnormal and Social Psychology*, *49*, 115-124.
- Schneider, A. L., Snyder-Joy, Z., & Hopper, M. (1993). Rational and symbolic models of attitudes toward AIDS policy. *Social Science Quarterly*, *74*, 349-66.
- Sears, D. O. (1986). College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature. *Journal of Personality and Social Psychology*, *51*, 515-530.
- Sears, D. O. (1993). Symbolic politics: A socio-psychological theory. In S. Iyengar, & W. J. McGuire (Eds.), *Explorations in political psychology* (pp. 113-149). Durham, NC: Duke University Press.
- Shavitt, S. (1989). Operationalizing functional theories of attitude. In A.R. Pratkanis, S. Breckler, & A. Greenwald (Eds.),

Attitude structure and function (pp. 311-337). Hillsdale, NJ: Erlbaum.

Shavitt, S. (1990). The role of attitude objects in attitude functions. *Journal of Experimental Social Psychology*, 26, 124-148.

Smith, M. B. (1947). The personal setting of public opinions: A study of attitudes toward Russia. *Public Opinion Quarterly*, 11, 507-523.

Smith, M. B. (1973). Political attitudes. In J. N. Knutson (Ed.), *Handbook of political psychology* (pp. 57-82). San Francisco: Jossey-Bass.

Smith, M.B., Bruner, J.S., & White, R.W. (1956). *Opinions and personality*. New York: Wiley.

Snyderman, P. M., & Tetlock, P. E. (1986). Symbolic racism: Problems of motive attribution in political analysis. *Journal of Social Issues*, 42(2), 129-150.

Snyder, M., & DeBono, K. G. (1985). Appeals to image and claims about quality: Understanding the psychology of advertising. *Journal of Personality and Social Psychology*, 49, 586-597.

Snyder, M., & DeBono, K. G. (1987). A functional approach to attitudes and persuasion. In M. P. Zanna, J. M. Olson, & C. P. Herman (Eds.), *Social influence: The Ontario symposium* (Vol. 5, pp. 107-125). Hillsdale, NJ: Lawrence Erlbaum Associates.

Snyder, M., & DeBono, K.G. (1989). Understanding the functions of attitudes: Lessons from personality and social behavior. In A. Pratkanis, S. Breckler, & A. Greenwald (Eds.), *Attitude structure and function* (pp. 339-359). Hillsdale, NJ: Erlbaum.

Sudman, S. (1976). *Applied sampling*. New York: Academic Press.

Triandis, H. C. (1996). The psychological measurement of cultural syndromes. *American Psychologist*, 51, 407-415.

Wyman, M. A., & Snyder, M. (1997). Attitudes toward "gays in the military": A functional perspective. *Journal of Applied Social Psychology*, 27(4), 306-329.

NOTES

¹ This approach differs from a strategy of simply comparing mean scores for different functions for a particular attitude object. Mean differences across functions may be statistically significant even when a sizable minority of a sample holds attitudes serving a nondominant function or a mix of functions. In Shavitt's (1990) study, for example, groups of attitude objects were rated significantly higher on the function they had been hypothesized a priori to serve. Thus, the group of self-esteem maintenance objects elicited higher scores on that function than on the other function items. However, those objects also elicited relatively high scores for the other functions: $M_s = 4.05$ for self-esteem maintenance,

3.88 for social identity, and 3.59 for utilitarian, based on a 5-point scale (Shavitt, 1990, Table 1). In a similar fashion, the self-esteem maintenance objects elicited about the same number of self-esteem maintenance thoughts as social identity thoughts ($M_s = 1.32$ and 1.31, respectively; Shavitt, 1990, Table 2). Thus, although she demonstrated convincingly that certain attitude objects elicited one type of function more than others, it is not clear from her published report how many of the individual objects studied by Shavitt (1990) were truly unifunctional. However, some objects appear to have fit this description. For example, the group of objects predesignated as utilitarian elicited substantially more utilitarian thoughts ($M = 3.20$) than social identity or self-esteem maintenance thoughts ($M_s = 0.17$ and 0.29, respectively; Shavitt, 1990, Table 2). Interpretation of the characteristics of specific objects is made difficult by the fact that Shavitt's published paper collapsed scores across objects within each category. Her observation that the "ratings for each attitude object individually were also supportive for most of the objects" (Shavitt, 1990, p. 132, emphasis added) suggests that some objects may not have been unifunctional. Indeed, my own research conducted around the same time (Herek, 1987) suggested that at least one of the attitude objects that she used (*homosexuals*) was likely to be multifunctional.

² Many members of the population inevitably will have attitudes serving a mix of experiential and expressive functions. With the exception of Pattern 4, discussed below, I focus here on the conceptually simpler cases of individuals whose attitudes in a particular domain serve more or less "pure" functions.

³ Feelings were assessed toward PWAs in general (as in the 1991 survey), rather than toward a homosexual man with AIDS (as in the 1992 survey).

⁴ The scale consisted of three items, modeled after the ATG: "Injecting illegal drugs is just plain wrong," "I think people who inject illegal drugs are disgusting," and "People who inject illegal drugs are a threat to society" ($\alpha = .67$). Higher scores indicate more negative attitudes toward IDUs.

⁵ Pryor et al., (1989) reported only the standardized regression coefficients (*beta weights*) for their analysis, so it was not possible to compare the amount of variance explained by each variable across studies. Even if they had reported additional regression data, however, comparisons between their study and the surveys described here would be problematic because of differences in the samples and measures, and the fact that Pryor and his colleagues collected their data several years earlier in the epidemic.

Table 1
Predicted Patterns of Variance Explained by Symbolic and Instrumental Variables for Functional Divergence and Functional Consensus

PATTERN	FUNCTION GROUP				FUNCTION RATIOS	
	EVALUATIVE		EXPRESSIVE		VFR	XFR
	Symbolic Variable	Instrumental Variable	Symbolic Variable	Instrumental Variable		
Functional Consensus: Instrumental	-	+	-	+	~1	~1
Functional Consensus: Symbolic	+	-	+	-	~1	~1
Functional Divergence: Simple Case	-	+	+	-	>1	>1
Functional Divergence: Special Case	-	+	+	+	~1	>1

+ = relatively large proportion of R^2 predicted to be explained.

- = relatively small proportion of R^2 predicted to be explained, or R^2 predicted to be not substantively significant.

VFR = Evaluative Function Ratio.

XFR = Expressive Function Ratio.

Table 2
Function Ratios and Percentage of Variance (R²) in AIDS Stigma Explained By Symbolic and Instrumental Variables For Each Function Group (1991-92 Surveys)

DEPENDENT VARIABLE	FUNCTION GROUP					
	EVALUATIVE		EXPRESSIVE		FUNCTION RATIOS	
	ATG	CCTB	ATG	CCTB	VFR	XFR
Coercion and Blame						
1991	4.9	19.1 ^b	8.9 ^c	11.9 ^c	1.39	2.10
1992	0.0	15.3 ^b	7.2 ^c	22.9 ^c	1.30	23.92
Interacting with PWA						
1991	1.8	21.8 ^b	2.0 ^a	30.9 ^c	0.98	0.80
1992	4.2	25.1 ^c	3.6 ^b	19.3 ^c	1.02	1.10
Negative Feelings For PWA						
1991 (Generic)	2.4	12.9 ^a	13.4 ^c	4.0 ^b	3.67	4.91
1992 (Homosexual)	2.5	18.4 ^b	18.4 ^c	6.9 ^c	3.23	6.08
Mandatory Testing Index (1992 only)						
	0.0	10.4 ^a	12.8 ^c	12.4 ^c	2.01	50.79

^a $p < .05$ ^b $p < .01$ ^c $p < .001$

$n = 43$ for Evaluatives; 157 for Expressives.

ATG = Attitudes Toward Gay Men (Symbolic Variable).

CCTB = Casual Contact Transmission Beliefs (Instrumental Variable).

VFR = Evaluative Function Ratio.

XFR = Expressive Function Ratio.

Table 3
Comparison of Unstandardized Regression Coefficients for Interaction Terms Between Expressives and Evaluatives

DEPENDENT VARIABLE	INTERACTION TERM			
	Function × ATG		Function × CCTB	
	b	PRE	b	PRE
<hr/>				
Coercion and Blame				
1991	.073	.002	-.000	.000
1992	.233 ^a	.021	.130	.014
<hr/>				
Interacting with PWA				
1991	-.000	.000	.035	.006
1992	.001	.000	-.003	.000
<hr/>				
Negative Feelings For PWA				
1991 (Generic)	.151	.009	-.058	.003
1992 (Homosexual)	.277 ^a	.023	-.063	.003
<hr/>				
Mandatory Testing Index	.259 ^b	.035	.026	.001
<hr/>				

n = 43 for Evaluatives; 157 for Expressives.
 n.s. = not significant (*p* > .05).

PRE = Proportional Reduction in Error (squared partial correlation)
 ATG = Attitudes Toward Gay Men (Symbolic).
 CCTB = Casual Contact Transmission Beliefs (Instrumental).

Table 4
Items for Assessing Attitude Functions Associated With AIDS Stigma, 1997 Survey

“People's opinions about AIDS can be influenced by many different things. As I read each one of the following, please tell me how much it has influenced your own opinions about AIDS.”

Evaluative Functions

1. How about the fact that you are [*very worried/somewhat worried/not too worried/not at all worried*]* about getting AIDS or becoming infected with the AIDS virus? How much has that influenced your opinions about AIDS — a great deal, some, very little, or not at all?
2. How about the fact that you generally think of AIDS as affecting people [*in your own circle of family and friends/outside your own circle*]? (How much has that influenced your opinions about AIDS?)
3. How about the fact that you think it's [*very/somewhat/not too/not at all*] likely that the AIDS epidemic will affect you financially through higher taxes or health care costs? (How much has that influenced your opinions about AIDS?)
4. How about the fact that you think it's [*very/somewhat/not too/not at all*] likely that the AIDS epidemic will affect the general quality of your life in other ways? (How much has that influenced your opinions about AIDS?)

Expressive Functions

5. How about your political values? (How much have they influenced your opinions about AIDS — a great deal, some, very little, or not at all?)
 6. How about your religious beliefs? (How much have they influenced your opinions about AIDS?)
 7. How about your personal values about right and wrong? (How much have they influenced your opinions about AIDS?)
-

Note. Wording in brackets was inserted based on respondent's responses to related items administered earlier in the interview. Before item #1, for example, respondents were asked “*How worried are you about getting AIDS or becoming infected with the AIDS virus yourself? Would you say you are very worried, somewhat worried, not too worried, or not at all worried that you will get AIDS?*” Responses to this item were inserted as indicated for item #1.

Table 5
Percentage of Variance (R^2) in AIDS Stigma Explained By Symbolic and Instrumental Variables For Each Function Group (1997 Survey)

DEPENDENT VARIABLE	FUNCTION GROUP					
	EVALUATIVE		EXPRESSIVE		FUNCTION RATIOS	
	ATG	CCTB	ATG	CCTB	VFR	XFR
Coercion and Blame	3.3 ^c	7.7 ^c	13.7 ^c	13.8 ^c	1.39	1.66
Interacting With PWA	3.5 ^c	6.1 ^c	6.6 ^c	13.5 ^c	0.95	0.90
Negative Feelings Scale	2.6 ^b	8.8 ^c	13.2 ^c	6.7 ^c	2.29	2.91
Mandatory Testing: Immigrants	3.5 ^c	9.9 ^c	2.5 ^b	1.2 ^a	2.28	2.59
Mandatory Testing: "At Risk" Groups	2.9 ^b	4.7 ^c	4.8 ^c	0.8 ^a	4.33	2.25

^a $p < .05$ ^b $p < .01$ ^c $p < .001$

$n = 311$ Evaluatives; 416 Expressives.

ATG = Attitudes Toward Gay Men (Symbolic).

CCTB = Casual Contact Transmission Beliefs (Instrumental).

VFR = Evaluative Function Ratio.

XFR = Expressive Function Ratio.

Table 6
Results of Moderated Regression Analysis For Expressive and Evaluative Variables, 1997 Survey

DEPENDENT VARIABLE	INTERACTION TERM			
	Function × ATG		Function × CCTB	
	b	PRE	b	PRE
Negative Feelings Scale	0.148 ^c	0.014	-0.179	0.000
Interacting With PWA	0.014	0.001	0.019	0.002
Coercion and Blame	0.132 ^b	0.009	0.039	0.001
Mandatory Testing: Immigrants	0.051 ^a	0.005	-0.014	0.001
Mandatory Testing: “At Risk” Groups	0.019	0.001	-0.041	0.004

n = 311 Evaluatives and 416 Expressives.

^a *p* < .05 ^b *p* < .01 ^c *p* < .001

n.s. = not significant (*p* > .05).

PRE = Proportional Reduction in Error (squared partial correlation)

ATG = Attitudes Toward Gay Men (Symbolic Variable).

CCTB = Casual Contact Transmission Beliefs (Instrumental Variable).