A study focused on the way that image, knowledge, behavioral intent, and communicative responsiveness are configured for Acquired Immunodeficiency Syndrome (AIDS). The classic model of the adoption process expects that knowledge about a subject will lead to a favorable evaluation of it, which in turn will lead to a decision to act. But the decision to help a sick person with a mysterious disease is difficult. Fifty-three students enrolled in two sections of a basic speech communication course responded to a survey measuring image, knowledge, and behavioral intent about three diseases: AIDS, Toxic Shock Syndrome, and Legionnaire's Disease. Results suggest that the communication configuration of AIDS is different from the configuration of other diseases in the respect that as knowledge about AIDS increases, the stigma of AIDS increases. If this is so, then the task of moderating hysteria and panic through an educational campaign will fail. Under these circumstances, it might be appropriate to aim at getting individuals involved in help projects prior to educational efforts, so that through the act of helping, selective attention and perception may work to promote a more favorable image of and a tolerance for the facts about AIDS. (Tables and figures are appended.) (SRT)
ABSTRACT

A COMMUNICATION CONFIGURATION OF AIDS

by

Jim D. Hughey

This paper uses a nonmetric multidimensional scaling technique to map the relationships among communication variables for stigmatized and nonstigmatized diseases. Fifty-three respondents from a midwestern state participated in the study. Critical elements in the adoption process—image, knowledge, and behavioral intent—were considered for AIDS and two other diseases that have appeared within the past ten years (Toxic-Shock Syndrome and Legionnaire's Disease). In addition, seven measures of communicative responsiveness were included in the analysis. Although the alignment of image, knowledge, and behavioral intent was different for AIDS and the other diseases, communicative responsiveness variables were related to behavioral intent for both stigmatized and nonstigmatized diseases.

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New Hampshire Newspaper Labels Hudson 'Deviant' (October 4, 1985)

MANCHESTER, N.H. (UPI) — New Hampshire's largest daily newspaper said in an front-page editorial today the late actor Rock Hudson "practiced a deviant sexual behavior" and said "homosexuality is not a victimless crime."

"Rock Hudson has been praised as courageous, a kindly man, a hero. What is not being mentioned by his eulogizers, however, is the knowledge that in private life he practiced a deviant sexual behavior that is the leading cause of the spread of AIDS," the editorial said.

"Homosexuality has become a real and present danger to this nation," the newspaper said.

AIDS represents a double stigma. It most often strikes people who have been branded as 'a real and present danger to this nation,' and it is a mysterious disease (Gallin & Fauci, 1985; Siegal & Siegal, 1983).

"Hysteria" and "panic" are terms used by the press to describe reactions to the AIDS epidemic. Even in low-risk states where the number of diagnosed cases has been less than 30 for the seven years since 1978, fear prevails. In New Hampshire a total of five cases have been reported. This summer, the Red Cross in this state issued an urgent plea for blood donors to overcome their unfounded fear that AIDS can be contracted through the act of giving blood. New Hampshire's blood reserves had fallen to an all time low.

This paper focuses on the way that image, knowledge, behavioral intent, and communicative responsiveness are configured for AIDS and two other diseases in a low-risk state. Image, knowledge, and behavioral intent correspond to critical elements in the classical model of the adoption process; communication responsiveness represents a characteristic of the early adopters in that process (Rogers, 1983). The comparison of the configuration of these elements for AIDS to the configuration for Toxic-Shock Syndrome and Legionnaire's Disease allows one to visualize the
difference between stigmatized and nonstigmatized objects.

The classical model of the adoption process (Rogers, 1983) fosters the expectation that knowledge leads to a favorable evaluation, and this favorable image leads to a decision to act. Furthermore, we would expect those who decide to help early in the process would be more responsive in their communication behavior than later adopters.

But the decision to help a sick person with a mysterious disease is fraught by uncertainty. Every day the media bring new developments to our attention that may serve to increase rather than reduce uncertainty. Whether the tenets of the adoption process are salient for a stigmatized disease such as AIDS is problematic. Considerable research has documented the hazards of inducing helping behavior from those interacting with the stigmatized (for an excellent literature review, see Jones, Farina, Hastorf, Markus, Miller, & Scott, 1984). And often knowledge and image are conflicted, resulting in ambivalence and unpredictable behavior (Katz, 1981).

Two questions are explored in this paper.

Q1. How are image, knowledge, behavioral intent, and communicative responsiveness configured for stigmatized and nonstigmatized diseases?

Q2. What are the appropriate regression models for predicting behavior associated with stigmatized and nonstigmatized diseases?

Fifty-three college students from a midwestern state participated in the study. Image, knowledge, behavioral intent, and communicative responsiveness were operationalized by two paper-and-pencil instruments. Image was defined by dimensions drawn from the literature on stigma. Knowledge included estimates of awareness-knowledge, principles-knowledge, and sources of that knowledge. Behavioral intent was gauged by the willingness to help a person with the disease in question. Communicative
responsiveness was measured by the Conversation Self Report Inventory (Rugheyi, 1985). A repeated measures design was used to allow for the comparison of stigmatized and nonstigmatized diseases. The study was conducted during the summer of 1985, the day the media carried the confirmation that Rock Hudson had AIDS.

Review of the Literature

This literature review is organized around the two questions and suggests the expectations we had as we entered into the study.

The model of the adoption process as developed by Rogers (1963) served as the conceptual framework for this study. The first three stages of the revised model are knowledge, persuasion, and decision-making (followed by implementation and confirmation).

Rogers (1983) makes a strong case for the connection between knowledge and decision-making. He breaks the knowledge construct into awareness-knowledge, how-to knowledge, and principles-knowledge. In terms of a decision to help a person with AIDS, awareness-knowledge occurs when attention is directed toward the disease and the adopter becomes cognizant of the general nature of the disease and people with the disease. Principles-knowledge occurs when the adopter actively searches for additional information and comes to know details about AIDS and how the disease relates to other diseases. How-to knowledge was not considered in this study but might include details about the nature of the helping duties themselves. Rogers argues that mass media play a key role in awareness-knowledge, and personal sources of information such as friends and acquaintances play a central role in developing principles-knowledge.

In the persuasion stage, a favorable evaluation or image is formed.
In the decision stage, knowledge and image come together and interact with personality factors resulting in the acceptance or rejection of the advocated behavior. Rogers also argues that the personality and communication behavior of the decision-maker have a direct bearing on the early adoption of a behavior or product. He cites twenty-two characteristics of the early adopter that have been verified in replicated studies (Rogers, 1983, pp. 260-261). These characteristics taken together describe the early adopter as an active, positive-responsive communicator.

The model postulates a linear progression of stages beginning with knowledge, followed by image formation and the decision to accept or reject the advocated behavior. However, competing models suggest knowledge plays a different role in the adoption sequence; e.g., that information level may be altered as a consequence of engaging in a behavior. Krugman (1965) makes the case that the issue of "involvement" is the key to determining which model is applicable. He argues that under conditions of high involvement, where the advocated behavior touches on many spheres of personal importance, the classical model is salient. In this case the advocate should work to increase awareness in order to alter the image and/or attitudes associated with the advocated behavior. Under conditions of "low involvement," he argues that the advocate should work for a person to engage in the behavior; for instance, as a consequence of working with a sick person on a trial basis, perceptions may change and information level may increase.

Festinger (1954) makes a similar point when he discusses the notion of post-decisional dissonance. Information or awareness may be more critical after engaging in a behavior than before an action is taken. But regardless of where they place awareness in their models, theorists
recognize the importance of the construct.

This study explores how different dimensions of knowledge impinge upon the perceptions of AIDS and other diseases. It was felt that knowledge might configure itself according to the classical model for the other diseases but play a different role for AIDS.

Images marked by stigma are not easily addressed through a knowledge of the facts. Katz (1981) and Sontag (1978) write of the myths and punitive fantasies surrounding frightful diseases like cancer: the stigma of cancer evokes a sense of horror, a dread of contamination, an image of corruption and decay, and an irrationality rivaled only by the moral condemnation of leprosy in the Middle Ages. These images persist in spite of educational efforts of the National Cancer Society and governmental agencies to eradicate them. And there are indications that AIDS tops the list of diseases that are "too degrading or threatening to talk about" (Black, 1985a; 1985b; Daniels 1985).

The literature suggests that the stigmatized is seen as a marked person—an object of great shame (Goffman, 1963). Furthermore, ambivalence is the overriding reaction to the stigmatized (Katz, 1981; Schur, 1983). This mixed attitude is characterized by the feeling of sympathy or pity on the one hand and the belief that the person is somehow responsible for his/her fate and deserves what he/she gets. In addition, the stigmatized is viewed as a threat and arouses the unsettling fear that "what happened to the stigmatized could happen to me."

The literature offers cues for developing dimensions for tapping the image of AIDS and the other diseases. The dimensions include shame, morality, responsibility, sympathy, fright, risk, and ambivalence. To be stigmatized is to be the object of great shame. Stigma carries with it the perception that the object is immoral and somehow responsible for his/her...
plight. Pity and sympathy is a common reaction along with the perception that the object is a threat. These perceptions evoke mixed emotions and a feeling of ambivalence.

Stigma as a barrier to helping behavior is conceptualized by Katz (1981) and Jones, Farina, Eastorf, Markus, Miller, and Scott (1984). Acquiring a commitment to help the sick is difficult enough. Rushton and Sorrentino (1981) underscore the complexities of inducing prosocial behavior: the interaction of modeling and socialization, internal mediators (norms, empathy, and emotion), personality, and social constraints makes for a less than predictable outcome. Considerable research has documented the hazards of inducing helping behavior from those interacting with the stigmatized (Katz, 1981; Jones, Farina, Eastorf, Markus, Miller, & Scott, 1984). Securing a commitment to work with the stigmatized is a challenge.

However, it was felt that communicative responsiveness would facilitate helping behavior regardless of the stigma. Although there are many theories regarding the development of prosocial behavior (Eisenberg, 1982), Rushton (1980) argues that altruism is embedded in the personality and is exhibited by individuals across situations and contexts. Others posit that comforting behavior covaries with stable personality constructs like cognitive complexity (Burleson, 1983, 1984; Burleson & Saeter, 1985; Saeter & Burleson, 1984).

In essence, we expected that the decision to help a person with a disease, regardless of its degree of stigmatization, would be influenced by image, knowledge, and responsiveness of the adopter. But we believed the configuration would be different for AIDS and the other diseases with the classical model of the adoption process being more salient for
nonstigmatized diseases. We believed that communicative responsiveness would be salient to the decision to help victims of any of the diseases.

Procedures and Method

This section describes the sample and instrumentation used in the study. It concludes with a discussion of the statistical procedures used in the exploration.

Fifty-three students enrolled in two sections of a basic speech communication course during the summer of 1985 served as respondents in this study. Both males (57%) and females (43%) agreed to participate and were awarded extra credit for their participation.

Students responded to the Survey of Three Diseases, the measure of image, knowledge, and behavioral intent, during the last week of class. The responsiveness measure, the Conversation Self Report Inventory (CSRI), was administered during the first week of class. Each instrument is considered in the discussion that follows.

The Survey of Three Diseases

The survey consists of 42 items framed in an agree-disagree format and one open-ended question. These items deal with three major constructs: image, knowledge, and behavioral intent. Each construct is considered for three diseases: AIDS, Toxic-Shock Syndrome, and Legionnaire's Disease. All but 3 of the items dealing with AIDS are matched with items directed toward Toxic-Shock Syndrome and/or Legionnaire's Disease. These three items are not included in this analysis. Although the items had not been tested prior to the study, they appeared to have high content validity in terms of the literature from which they were drawn.

The image items deal with the degree of stigmatization associated with the diseases (e.g., "I would be the object of great shame if I were to come
down with $\text{i}$," and "Moral people' seldom contract $\text{i}$"), the degree of ambivalence associated with the diseases (e.g., "I have mixed feelings when I hear about people with $\text{i}$"), and the degree of risk and fright posed by the diseases (e.g., "It would be impossible for me or my friends to get $\text{i}$," and "$\text{i}$ is the most frightening disease of our time"). Two items tap the degree of responsibility attributed to those with the diseases (e.g., "I must admit that I believe that people who get $\text{i}$ usually deserve the illness they get" and "A person who comes down with $\text{i}$ probably has not been living right") and the degree of sympathy felt for people with the diseases (e.g., "A person with $\text{i}$ deserves and gets all my sympathy" and "When I hear of people who have come down with $\text{i}$, I cannot muster very much sympathy for them").

A preliminary oblique factor analysis produced a six-factor solution with eigenvalues greater than one. Since the Toxic-Shock and Legionnaire's items clustered together and three factors had significant intercorrelations, it was decided a more parsimonious solution could be achieved by using the semantic differential scoring technique. The difference between paired items produced a three-factor solution and had the advantage of reducing the redundancies in the scales.

Table 1 presents the three-factor solution for the image items. Factor 1 includes those items that clearly evaluate the people with the disease and is referred to as the "People" factor in subsequent tables. Factor 2 includes two items expressing personal reactions to the diseases and is referred to as the "Shame and Ambivalence" or "Shame" factor. Factor 3 includes two items dealing with the threat of the diseases and is labeled the "Risk and Fright" or "Risk" factor.
Items in the People factor produce an alpha of .92 with the Shame items producing an alpha of .60 and Risk items producing an alpha of .45. Correlations among factors are not significant (p > .05) and are presented in Table 3. In subsequent statistical procedures, the factor scores for each factor scale are used.

The knowledge items deal with awareness-knowledge, principles-knowledge, and sources of that knowledge. Awareness-knowledge level is tapped by items like "I know very little about Z" and "I know quite about Z." Also, accuracy in naming a risk group associated with each disease is measured by an open-ended question (e.g., "Indicate what groups of people have the greatest risk of contracting Z").

Seven "factual" items are included to assess the respondent's principles-knowledge about the diseases. They are listed below.

1. AIDS is a disease of the blood.
2. More people recover from Legionnaire's Disease than from AIDS.
3. Both Toxic-Shock Syndrome and Legionnaire's Disease currently affect more people than AIDS.
4. More people die from Toxic-Shock Syndrome than from AIDS.
5. All three diseases are transmitted in essentially the same way.
6. Legionnaire's Disease is easier to cure than AIDS.
7. Like Toxic-Shock and Legionnaire's Disease, AIDS is a bacterial infection.

Two items suggesting mass media and friends/acquaintances as sources of information were included (e.g., "I have heard quite a bit about Z from radio, television, newspapers, and magazines").

A preliminary oblique factor analysis produced a seven-factor solution with eigenvalues greater than one. It was decided to use the semantic differential scoring technique for the awareness and sources items. The
difference between paired items produced a four-factor solution and had the advantage of reducing the redundancies in the scales.

Table 2 presents the four-factor solution for the knowledge items. Three of the factors include principles-knowledge items, and one factor includes the awareness-knowledge items. Two of the three items in Factor 1 concern all three disease and is labeled "Know1." Factor 2 includes the awareness items along with the item concerning friends as a source of information; it is referred to as "Know2" or "Awareness." Factor 3 a principles item about AIDS and the item concerning mass media as a source of information; it is referred to as "Know3." Factor 4 contains three principles-items, two of which focus on Legionnaire's Disease and AIDS; it is called "Know4."

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Alphas for the four scales are .63, .79, .42, and .51. Correlations among factors are not significant (p > .05) and are presented in Table 3. In subsequent statistical procedures, the factor scores for each factor scale are used.

Behavioral intent is measured by two items taking this form: "I would eagerly help a person with I in any way that I could." Items of this nature have been demonstrated to have satisfactory validity when correlated with such indices as willingness to join an association, pay money, and allow one's name to be used for promotional purposes (r = .60 to .80); test-retest reliabilities, after a four-week period, are typically in the .60 to .70 range (Hughes, 1965).
The Conversation Self Report Inventory

The CSRI is a forced-choice instrument that catalogs various communication patterns. The CSRI taps the type and degree of involvement or responsiveness a person exhibits in a typical conversation along with media preference. Each of the first fifty-four items in the CSRI asks the test-taker to consider how he/she responds to a conversational responsibility or requirement in a specified context or situation. Three modes of responsiveness are considered: mastery responsiveness, a 'take charge' orientation; flexible responsiveness, a harmonizing mode; and neutral responsiveness, a 'laid back' approach. The three modes are considered for six conversational responsibilities exercised by people engaged in communication: conversants are responsible for (1) their purpose, (2) the climate they generate, their (3) speaking and listening behavior, (5) the coherence of the encounter, and (6) their management of problems during the encounter. Nine different contexts or situations are specified in the CSRI. In addition, the media preference scale estimates the preference for face-to-face, telephone, and computer-mediated conversations.

The Purpose scale considers the intention to influence, the intention to inquire into the feelings of others, and the intention to avoid conversations as the three modes of responsiveness. Alphas for the nine item scales (n = 126) are .80, .72, and .72.

The Climate scale considers frankness, trust-gaining, and protection of privacy as representing the mastery, flexible, and neutral modes. Alphas are .78, .82, and .83.

Transmission is broken into visual directness while speaking, calmness while speaking, and nonspeaking. Alphas are .85, .73, .85.
For Reception, two nonverbal orientations are pitted against a verbal orientation: depending on vocal cues for meaning, depending on visual cues for meaning, and depending on words for meaning. Alphas are .89, .91, and .94.

Coherence considers responsiveness in confusing situations. The options are being organized, being flexible and adaptable, and enduring confusing situations by turning inward. Alphas are .88, .72, and .79.

Problem Management considers responsiveness to conversational conflict. The three modes are problem handling, problem preventing, and problem avoiding. Alphas are .83, .78, and .75.

Media Preference is defined by face-to-face, telephone, and computer-mediated conversations. Alphas are .92, .95, and .96.

The development of the CSRI and validation studies for the inventory are summarized by Hughey (1985). Studies have found scales from the inventory to relate to communication satisfaction, management style, decision-making effectiveness, violence proneness, teaching effectiveness, student competence, empathy, as well as other variables.

One of the features of the CSRI is that a respondent's responsiveness patterns can be displayed using a charting technique employed by Kluckhohn and Strodtbeck (1961). Figure 1 displays the chart that is formed when three axes, representing the three conversational options, are arranged with reference to an x-axis so that

- (the mastery option) has a positive direction of 90 degrees;
- (the flexible option) has a positive direction of 210 degrees;
- (the neutral option) has a positive direction of 330 degrees.

The grid is formed by lines constructed perpendicular to the x and y axes. When plotting patterns, the intersection of only two perpendiculars are
necessary to pinpoint a communication pattern.

Insert Figure 1 About Here

Figure 1 displays the pattern for a respondent who scored +8 for the influence option for the Purpose requirement (a), 0 for the inquire option (b), and -8 for the avoids conversations option (c). The pattern is defined by the intersection of the perpendicular associated with the +8 point on the A-axis and the perpendicular associated with the -8 point on the C-axis.

The pattern is located in sector 6. This means that the respondent has a "M > F > N" pattern; i.e., the respondent prefers influence (Mastery option) over inquire (Flexible option) which is preferred over avoid conversations (Neutral option). Patterns are defined as

M > N > F in sector 1,
N > M > F in sector 2,
N > F > M in sector 3,
F > N > M in sector 4,
F > M > N in sector 5,
M > F > N in sector 6.

The distance that the pattern is from the origin of the graph indicates the consistency with which the respondent ranks the options over the nine items. This radius can be converted into Kendall's S-statistic or the more familiar W (coefficient of concordance). At the origin W = 0; and when intersections occur at the perimeter of the graph, W = 1.0.

In order to transform a responsiveness pattern into a single score
that ranges from complete endorsement of the mastery and flexible options to the complete endorsement of the neutral option, a respondent's scores on the \(a\), \(b\), and \(c\) axes are converted into Cartesian coordinates. Kluckhohn and Strodtebeck (1961) demonstrate that

\[
x = \frac{\sqrt{3}}{2}(c - b),
\]

\[
y = \frac{b + c}{2} - x
\]

Furthermore, \(y - x\) yield a responsiveness score with a positive value indicating a preference for responsive options and a negative value indicating a preference for neutral responsive options.

**Statistical Procedures**

This study uses factor analysis as a data reduction tool. Factor scores are used in the calculation of statistics for image and knowledge relationships. The raw item score is used for behavioral intent. The seven responsiveness scores using the transformation described above are employed when communicative responsiveness is related to other variables.

A nonmetric multi-dimensional scaling technique is used to illustrate the configuration among the variables in the study. A two-dimensional solution is used. A correlation matrix for the variables is displayed in Table 3. Stepwise multiple regression is used to answer the second question in the study.

**Findings**

This section presents the results of the study. The findings are organized around the two questions posed at the outset of this paper.

Q1. How are image, knowledge, behavioral intent, and communicative responsiveness configured for stigmatized and nonstigmatized diseases?

The configuration for AIDS and the other diseases is depicted in
Figure 2. Even a cursory examination of the configuration reveals some obvious clustering of variables. At the left of center are six of the seven measures from the CSRI. At the top and to the right of center are two knowledge and one image factors. Moving down, willingness to help a person with Toxic-Shock is clustered with a principles-knowledge factor. However, willingness to help a person with AIDS is clustered with two of the three image factors. And at the bottom, a responsiveness measure from the CSRI is clustered with a knowledge factor.

In essence, the visual inspection highlights the distinction between helping a person with a nonstigmatized disease and a stigmatized disease. Helping a victim with a nonstigmatized disease covaries with the level of knowledge the helper has; helping a victim with a stigmatized disease covaries with how the helper views the people with the disease.

In terms of the adoption model, knowledge appears to be more salient for nonstigmatized diseases than for AIDS. Table 3 reveals $r = .46 \ (p < .001)$ for Toxic Shock but $r = -.21 \ (p > .05)$ for AIDS. Image of the people with the diseases seems to be more salient for AIDS than the other diseases ($r = .43, \ p < .001$ compared to $r = -.14, \ p > .05$).

Moreover, there is not evidence for a positive, linear progression of steps in the decision to help people with AIDS; ie, knowledge impacts on
image, and image influences behavior. Although there is a significant link between Know1 and the image of people with AIDS ($r = -0.27$, $p < 0.05$), the relationship is negative. This finding suggests that a knowledge of how AIDS works in relation to other disease tends to reinforce the stigma rather than diminish it. Respondents with more knowledge tended to have a more negative evaluation of the people with AIDS.

What is not obvious from a visual inspection of the configuration is the role played by communicative responsiveness in helping behavior. An inspection of the correlation matrix presented in Table 3 shows that behavioral intent for both diseases is related to communicative responsiveness. For the nonstigmatized disease, trust gaining and frankness rather than protection of privacy facilitates helping behavior ($r = 0.33$, $p < 0.02$). For AIDS, coherence is related to helping behavior ($r = 0.33$, $p < 0.02$). In addition, nonverbal responsiveness in the Reception area is correlated with Shame and Ambivalence ($r = 0.29$, $p < 0.05$).

Other findings suggest that perceptions of Risk and Fright may be mediated by knowledge variables ($\text{Know}1 \ r = 0.30$, $p < 0.05$; $\text{Know}4 \ r = -0.30$) with some types of knowledge increasing perceptions of threat and other types lowering it. Also low Shame and Ambivalence facilitates a decision to help people with Toxic-Shock Syndrome ($r = 0.28$, $p < 0.05$).

Q2. What are the appropriate regression models for predicting behavior associated with stigmatized and nonstigmatized diseases?

A two variable regression model is appropriate for predicting willingness to help a person with Toxic-Shock Syndrome. The stepwise procedure (with $p < 0.05$ for entry) produced $R = 0.55$ ($p < 0.0001$) when Know1 and Climate were entered into the equation. Know1 was entered at step one ($R = 0.45$, $p < 0.001$), and Climate was entered at step two.

This finding suggests that a principles-knowledge variable and a
responsiveness variable explain 30% of the variance in the behavioral intent to help a Toxic-Shock victim. Those with a greater knowledge of how the three diseases are spread, the death rate associated with the diseases, and the causative agents of the diseases plus a greater propensity to be frank and to build trust in communication encounters are more inclined to help the nonstigmatized.

A two variable regression model is also appropriate for predicting willingness to help a person with AIDS. The stepwise procedure (with p < .05 for entry) produced R = .55 (p < .0001) when the People factor and Coherence were entered into the equation. People was entered at step one (R = .43, p < .001), and Coherence was entered at step two.

This finding suggests that an image variable and a responsiveness variable explain 30% of the variance in the behavioral intent to help a person with AIDS. Those with a more favorable evaluation of the people with AIDS plus a greater propensity to be organized in confusing communication encounters are more inclined to help the stigmatized.

The relationship between coherence and helping is especially interesting because of the role that adaptation to confusing situations plays in predicting an intent to help. Figure 3 shows how the patterns of coherence relate to the willingness to help a person with AIDS. The chart shows how the respondents ordered the three alternatives for the coherence requirement. Respondents who choose to be organized in confusing conversations are located in the upper region of the map; those who choose to adapt to confusing conversations are located in the lower left region of the graph; and those who choose to endure confusion and turn inward are located in the lower right. Those who have chosen to be adaptable as their second choice have been designated on the map.
An "A" represents a respondent who agreed to help a person with AIDS; a "D" represents a disagreement to help, and an "N" represents a respondent who expressed no opinion on the matter. A "S" indicates two or more respondents with the same position on the map.

It is interesting to note that those who chose the adaptation alternative as a first order preference tended to be nonhelpers as well as those who expressed a third order preference for the alternative. The chart suggests a curvilinear relationship for the flexible mode of responsiveness. If the data are transformed to achieve linearity, the correlation for coherence and behavioral intent increases from $r = .33$ to $r = .44$, an increase that raises confidence from the .02 level to the .001 level. This finding may suggest that oversadapting to a confusing situation or underadapting may signal a type of individual with a low prosocial orientation toward the stigmatized.

Conclusions

As low-risk areas encounter additional cases of AIDS, the need to understand the communication configuration of AIDS increases. This understanding is important because AIDS has become a symbol that has profound behavioral consequences in both public and personal domains. For instance, schools are boycotted; insurance companies alter coverage; the military and employers require AIDS testing; funeral homes refuse to bury victims; health care professionals chain patients to beds; police wear rubber gloves when raiding gay bars; politicians recommend quarantines for homosexuals; religious leaders urge repentance; and those suspected of
having AIDS commit suicide.

This study suggests that the communication configuration of AIDS is different from the configuration of other diseases in important respects. Although image is bonded to behavior, the connection between knowledge and image is a tenuous one. What is most disturbing is the valence of the relationship. If indeed, the more that one knows about how AIDS operates increases the stigma associated with people with AIDS, the task of moderating "hysteria" and "panic" via an educational campaign is doomed to failure.

Under these circumstance, it might be appropriate to aim at getting people involved in help projects prior to educational efforts in low-risk states. Through the act of helping, selective attention and perception may work to promote a more favorable image and a tolerance for the facts about AIDS.

The study also suggests that communicative responsiveness is a good predictor of helping behavior for both stigmatized and nonstigmatized diseases. The unanticipated finding that those with both a first order and third order preference for the adaptation mode of responding to confusing situation is of particular interest. Perhaps a first order preference signals an overadapter or vacillator who would really take no action for a frightening disease. A third order preference may signal an underadapter with a rigid personality structure akin to that described by the F-Scale (Christie & Jahoda, 1954). Researchers of prosocial behavior often link helping behavior with a liberal orientation (Eisenberg, 1982). At any rate this finding needs further inquiry.

The fact that AIDS helpers are organized and do not turn inward when faced with confusion is consistent with our expectations. Research relating locus of control to helping behavior has documented a tie between
a helping orientation and a mastery-over-nature orientation (Kushton, 1980; Gottlieb, 1981, 1983; Garber & Seiligman, 1980).

From an information processing standpoint, respondents with a propensity toward being organized in confusing situations seem better equipped to deal with the conflicting information presented in the media than those who turn inward and endure the confusion. We submit that the coherent communicator stands a better chance of combating the uncertainty and deciding to help. The people who turn inward may give up in the face of conflicting data. Rogers (1983) has found consistently that early adopters are better able to cope with uncertainty than nonadopters.

As an exploratory study, this investigation suggests how one small sample in one low-risk state responds to AIDS. Some of the factor scales suggest that a refinement of the instrumentation is indicated. As was mentioned at the outset, the survey of diseases was administered the day that the media carried the confirmation that Rock Hudson had AIDS. The data from a follow-up study conducted one month later has not been analyzed completely; but to date, no significant differences have been detected for the items dealing with Toxic-Shock Syndrome and AIDS. Although it is not a statistically significant difference, the percentage of those willing to help with AIDS has fallen from 36% to 30%. The need to understand the communication configuration of AIDS is great.
REFERENCES


Daniels, J. (1985, July). The new victims: AIDS is an epidemic that may change the way America lives. Life, pp. 6, 12-19.


Table 1. Oblique factor analysis of image items

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<th>Factor</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
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<td>Not Living Right**</td>
<td>.88725</td>
<td>-.25302</td>
<td>-.01141</td>
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<td>Moral People Seldom**</td>
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<td>Shame***</td>
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<td>Fright****</td>
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<td>.71442</td>
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<td>** Eigenvalue</td>
<td>3.45</td>
<td>1.39</td>
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<td>Cumulative % of Variance</td>
<td>38.30</td>
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Notes: **These items were reverse scored so that a high score reflects a favorable attitude toward people with AIDS.

***These items were scored so that a high score reflects high shame and ambivalence toward AIDS.

****These items were scored so that a high score reflects high risk and fright of AIDS.
Table 2. Oblique factor analysis of knowledge items

<table>
<thead>
<tr>
<th></th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
<th>FACTOR 3</th>
<th>FACTOR 4</th>
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<td>Spread in Same Way**</td>
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<td>-.04275</td>
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<td>Knows Little</td>
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<td>Knows a Lot</td>
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Notes: Items are scored so that a high score reflects accurate responses, high knowledge, and high use of personal and mass media sources.

*These items are accurate statements related to a knowledge of principles.

**These items are inaccurate statements related to a knowledge of principles.
Table 3. Correlation matrix

<table>
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<tr>
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<td>IMAGE3</td>
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<td>-.046</td>
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Note: * p < .05, ** p < .02, *** p < .01, **** p < .001.
Table 3 Cont'd. Correlation matrix

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Note: * p < .05, ** p < .02, *** p < .01, **** p < .001.

Table 3 Cont'd. Correlation matrix

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<th>Problem</th>
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<td>MANAGE</td>
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| Problem MANAGEMENT | .466**** |
| Media Preference  | .248  .246 |

Note: * p < .05, ** p < .02, *** p < .01, **** p < .001.
Figure 1. Plotting communicative responsiveness

Legend:

Sector 1: M>N>F
Sector 2: N>M>F
Sector 3: N>F>M
Sector 4: F>N>M
Sector 5: F>M>N
Sector 6: M>F>N
Figure 2: A communication configuration of AIDS.
Figure 3: Coherence patterns and argument to help with AIDS.

Legend:
A: Agree to help
D: Disagree with helping
N: No opinion about helping
$: Multiple plots