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Perceived Threat and Authoritarianism

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There has been a long history of work on authoritarianism that has looked at the role of societal threat. Much of the empirical research in this tradition has relied on aggregate data to examine the relationship between societal threat and authoritarian attitudes and behaviors. Our analysis uses individual-level data and a range of perceived threat measures to better understand the dynamics of authoritarianism and threat. We also move beyond the hypothesis of a direct relationship between threat and authoritarianism, and hypothesize instead that the relationship involves interaction effects: societal threat activates authoritarian predispositions. As predicted, our analysis finds no evidence of a direct effect of societal threat but significant evidence of an interaction between authoritarian predispositions and perceived threat. We consider the implications of these results for our understanding of authoritarianism.

KEY WORDS: authoritarianism; societal threat; prejudice; punitiveness

It has long been hypothesized that various forms of threat will contribute to authoritarianism. In one of the first detailed discussions of the subject, Fromm (1941) argued that insecurity is the major factor in the development of authoritarianism. Faced with an uncertain world and lack of direction, people will "escape from freedom." One mechanism of escape is authoritarianism. In Fromm's analysis, this insecurity results from the rootlessness of the modern world and the

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consequences of capitalism. It is also possible to interpret the work of Adorno et al. (1950) in terms of threat and insecurity, although in this case the source of the threat is inconsistent child-rearing practices, and the consequences result from psychodynamic defense mechanisms. It is clear, however, that Adorno et al. were more concerned with socialization and psychodynamic processes than with the influence of social and economic threat on authoritarianism.

A more direct connection is evident in the work of Rokeach (1960), who hypothesized that anxiety stemming from external threat is the underlying cause of dogmatism and, therefore, intolerance. This theme reappears in the work of Wilson (1973) and his colleagues who argued that "conservatism"—defined in this research in a manner virtually indistinguishable from authoritarianism—is a response to generalized anxiety (fear of uncertainty) stemming from both external and intrapsychic causes. It is clear that there is a common tendency to implicate threat and anxiety in the development of authoritarian character traits, intolerance (Wilkinson, 1972), and even mass violence and genocide (Staub, 1989).

Although the hypothesis is well-known, there is surprisingly little empirical evidence on the connection between threat, authoritarianism, and intolerance. Rokeach (1960) offered some indirect but intriguing evidence on the relationship between perceived threat and the apparent level of dogmatism in religious groups. He also presented nonexperimental data showing a correlation between anxiety and dogmatism. Wilson and his colleagues (1973) offered a variety of correlational data that suggest a relationship between anxiety and (social) conservatism. For example, they found that increasing conservatism is associated with fear of death, lower levels of stimulus-seeking, and dislike of complexity.

The most concerted attempt to test this hypothesis has been the work of Sales (1972; 1973; Sales & Friend, 1973). The most compelling of his analyses used aggregate data to examine the relationship between environmental threat and authoritarianism. In one study, Sales (1972) examined the effect of the Great Depression on conversion rates among church denominations. He found that conversion rates from nonauthoritarian to authoritarian denominations increased during periods of presumed societal threat. In a second study, Sales (1973) found that a variety of archival indicators of authoritarianism were higher during periods of societal stress (the Depression Era 1930s and the late 1960s) than in the lower stress years immediately preceding. Although his results were not perfectly consistent with the research hypothesis, Sales found that many of his indicators of authoritarianism—size of police budgets, power themes in comic books, prison sentences for sex offenders, purchases of attack dogs—were significantly higher in the periods of societal threat than in the preceding lower threat years.

A recent study by Doty, Peterson, and Winter (1991) replicated the Sales study using 1978–1982 as the high-threat years and 1983–1987 as the low-threat period. In a useful variation on the Sales study, Doty et al. examined the transition from a

high-threat to a low-threat period, thus guarding against the alternative hypothesis that social indicators of authoritarianism simply tend to increase over time. As was the case in the original Sales study, Doty et al. found that many, but not all, of their archival indicators of authoritarianism registered higher values in the hypothesized period of societal threat than in the low-threat period. In all, 13 of their 20 measures showed significant change in the predicted direction across the two periods. The most notable deviations from the expected pattern occurred for measures of "authoritarian aggression" (size of police budgets and support for the death penalty), which may simply be a function of growing public fears about rising crime rates over the period studied.

A study by Sales and Friend (1973b) turned from aggregated measures of authoritarianism to individual level effects. In two reported experiments, subjects were induced either to succeed or to fail on purported measures of "intelligence and ability." Although the effects were not very large, failure increased, while success decreased, the subjects' levels of authoritarianism (as measured by F-scale items). And these effects were larger among subjects who attributed their performance on the tasks to internal causes. In one of the experiments, Sales and Friend also found that their manipulation of success and failure on the task led to differences in subjects' levels of obedience to an authority figure.

A recent study by McFarland, Ageyev, and Hinton (1995) examined the relationship between economic threat and authoritarianism using questionnaire data from samples in the U.S. and Russia. McFarland et al. constructed attitudinal measures to parallel at the individual level the social indicators of authoritarianism used by Sales and by Doty et al. in their aggregate analyses. Although these attitudinal measures of the social indicators were only weakly intercorrelated, as a scale they showed substantial correlation with authoritarianism. Measures of economic threat—unemployment, low income, and subjective measures of personal economic distress, as well as concern regarding the national economy—were weakly correlated with the social indicator items in the U.S. sample, and more strongly correlated in the Russian sample. Perhaps the most interesting finding was that economic threat appeared to have a polarizing effect on authoritarianism scores in the U.S. sample. High levels of threat seemed to drive some individuals toward higher authoritarianism scores while pushing other people toward lower authoritarianism. As a result of this increased variance, the correlations among the authoritarianism items were significantly higher for those individuals reporting economic threat than for those not so distressed.

Despite the popularity of the threat-authoritarianism hypothesis, the Sales and Friend and the McFarland et al. studies appear to be the only significant attempts to test the hypothesis with individual-level data. As suggestive as the archival data may be, the lack of support for the hypothesis at the individual level leaves a major gap in our understanding of authoritarianism. In order to address this deficiency, we must not only develop an appropriate research design, but also consider the

conceptualization of authoritarianism that would allow us to make sense of the observed relationship.[1]

THREAT AND AUTHORITARIANISM

The hypothesis entertained in most of the literature is that threat or anxiety produces higher *levels* of authoritarianism. This is a simplified version of Fromm's original argument. It is important, however, to make a distinction between long-term societal threat and short-term threatening events. Fromm's argument was based on the structural factors inherent in capitalism and modern society that may foster authoritarianism. On a somewhat less grand scale, Wilson (1973) hypothesized that generalized anxiety is the central determinant of (authoritarian) conservatism. In these arguments it is long-term, deeply felt threat and anxiety that contribute to the *development* of authoritarian character structures.

On the other hand, the studies of Sales and of Doty, Peterson, and Winter examine the effects of more transitory threat on authoritarianism. But, what does it mean if levels of authoritarianism—long presumed to be a personality characteristic—increase under conditions of short-term threat and then recede when that threat is removed? Only Sales and Friend (1973) seem to deal with this issue, conceding that the "notion that central personality traits, such as authoritarianism, might change in response to changes in the contemporaneous environment is hardly a commonplace in current personality theorizing" (Sales & Friend, 1973, p. 163). Although there are theorists who argue that personality traits are not fixed and may indeed exhibit significant short-term change, there is another possibility to consider: one which we believe provides a more satisfactory account of the relationship between transient threat and manifestations of authoritarianism. Perhaps it is not authoritarianism itself that increases in the face of transient environmental threat, but rather the *relationship* between authoritarianism and its attitudinal and behavioral manifestations or consequences, like intolerance. This implies that the typically observed consequences of authoritarianism result from an *interaction* between authoritarian predispositions and threat.

This hypothesis is consistent with the aggregate-level studies by Sales and by Doty, Peterson, and Winter. Since the researchers could not directly measure authoritarian personality traits, the changes in behaviors that they observed could well be a product of the *activation* of existing authoritarian traits by threat, rather than an increase in the traits themselves. And while Sales and Friend (1973) found some effect of threat (failure) on a measure of authoritarian "personality," the

[1] A recent study by Marcus et al. (1995) examined the effects of threat on intolerance, with threat operationalized as both perceptions of a specific threatening group, and of generalized threat from many groups. While their results are interesting and important for our understanding of intolerance, their focus is very different from the one pursued here.

observed changes in authoritarianism were fairly small. Moreover, since even paper and pencil measures of authoritarianism are still indirect indicators of an unobserved construct, it is possible that the observed increases in the scale scores reflect an increased salience of authoritarian predispositions—and thereby increased *manifestation* of authoritarianism—in the face of threat, rather than actual changes in the underlying trait. This argument gathers momentum as one considers that the most common measures of authoritarianism often tap rather specific manifestations of the trait, like prejudice and intolerance, which seem to us more akin to dependent variables, than to indicators of the independent variable: authoritarian *predisposition.*

We could find only one individual-level study that—although the authors were not concerned with our particular topic—provided evidence of an *interaction* between authoritarianism and threat. The study is one in a series that was designed to test a framework known as terror management theory (Rosenblatt et al., 1989; Greenberg et al., 1990). This theory posits that awareness of human mortality produces a "potential for overwhelming terror" (Rosenblatt et al., 1989, p. 681). In order to deal with this, societies develop cultural worldviews to provide their members with a sense of meaning in life. Threats to this cultural worldview—in the form of deviance from societal norms—must therefore be eliminated, especially if the threat of mortality becomes salient.

To test terror management theory the investigators used a fairly simple manipulation to increase the salience of the subjects' mortality. Specifically, subjects in the experimental condition were asked to answer two open-ended questions: one question requiring them to say what they think will happen to them when they die, and the second asking them to report the emotions that the thought of their death arouses in them. In a series of studies, Rosenblatt et al. (1989; Greenberg et al., 1990) found that the mortality salience manipulation increased subjects' rejection to outgroup members and the former's levels of punitiveness toward social deviants: reactions that are highly characteristic of authoritarians.

In one particular study, of greatest interest for our purposes, Greenberg et al. (1990) measured their subjects' levels of authoritarianism before the experimental manipulation. The dependent variable was attitude toward a person who was constructed to be either similar or dissimilar to the subject. The analysis found a pronounced interaction among mortality salience, authoritarianism, and reactions to a dissimilar target. High and low authoritarians differed in their reactions to the dissimilar target only under conditions of mortality salience. And the mortality salience manipulation influenced attitudes toward the target only among those high in authoritarianism. Thus, subjects in this study exhibited the greatest rejection of a dissimilar target person when they were both high in authoritarianism and faced with the reality of their mortality: clearly, a threatening situation.

Although these authors were not attempting to investigate the relationship between threat and authoritarianism, their results can be interpreted as clear evidence for an association between the two, and a particular kind of association

at that. In their latter study, we observe the effects of the *interaction* of threat and authoritarianism on the *manifestation* of authoritarian behaviors, rather than a direct effect of threat on *levels* of authoritarianism. This is consistent with the perspective we have adopted in this paper and suggests that the interaction hypothesis in worthy of further investigation. Moreover, since a wide variety of potential threats have been discussed in the literature—from threats to self-esteem, identity and meaning, to threats to economic security and the stability of the political world—we still need to understand better the specific types of threat that lead individuals high in authoritarianism to become more intolerant and punitive. Indeed, a major limitation of the aggregate-level studies is that they are unable to distinguish among different types of threats, which become confounded in the simple comparison of various years or periods of time.

Should there be strong empirical support for an interaction between threat and authoritarianism, we would have more than just evidence for an interesting little hypothesis. What would it indicate for our basic understanding of authoritarianism itself if its manifestations depend heavily on the presence of environmental threat and insecurity? Although it *might* be possible to interpret this result within the Adorno et al. conceptualization, the psychodynamic model does not seem to predict a central role for threat in the *activation* of authoritarianism. Altemeyer's (1988, 1996) social learning account can even less comfortably accommodate such an interaction effect. In fact, we suggest that empirical evidence of a central role for threat in the activation of authoritarianism would provide the basis for a wholly different interpretation of the origins and dynamics of authoritarianism itself.

STUDY DESIGN

For this investigation, we utilize data from the 1992 National Election Studies pre-post election survey. As with most secondary data analyses, this study is not ideal for the purpose at hand. The NES data allow us to construct a range of theoretically interesting measures of threat, but are less satisfactory in terms of the availability of good dependent variables. Unfortunately, the NES data do not directly measure intolerance or punitiveness: two presumed important consequences of authoritarianism. However, we can make up for the lack of ideal dependent variables by considering a set of variables that include measures of minority group attitudes, attitudes toward the use of force, and general social and political attitudes. Having multiple dependent variables across these categories enables us to determine if the phenomenon we are observing is in fact the syndrome typically identified as authoritarianism. If our results turn out to be consistent across this range of dependent variables, it will provide substantial evidence that the phenomenon we are studying accords with previous descriptions of authoritarianism.

The interaction hypothesis requires us to distinguish (more clearly than is typically the case) between authoritarian predispositions and the observed manifestations of authoritarianism in attitudes and opinions. One of the major problems with F-scale-type measures is that they include items that are often uncomfortably close to the consequences of authoritarianism that we are interested in explaining. The measure of authoritarian predispositions we use in our analysis taps the respondents' subscription to alternative child-rearing values. The measure arrays respondents on a dimension that runs from a belief at one end that children should be well-behaved, obedient, and respectful of elders, to a view at the other end that children should be independent, responsible, and curious (see Kohn, 1977, for a discussion of the development of measures of child-rearing values).

Although this is not a traditional measure of authoritarianism, it has long been noted that this dimension of child-rearing values is strongly related to other authoritarianism measures and to presumed consequences of authoritarianism. One of the original F-scale items, and one that has survived through the years to appear in Altemeyer's Right-Wing Authoritarianism scale, is "Obedience and respect for authority are the most important virtues children should learn." From a lengthy empirical study of intolerance, Martin (1964, p. 86) concludes: "There is probably no other question on which tolerants differ from intolerants more sharply than on child-rearing practices. Attitudes on this subject directly and efficiently reflect general ethnocentrism. How to 'bring up' or socialize children is a matter of profound consequences, involving basic human values and objectives." And, based on many years of studying child-rearing values, Kohn (1977, p. 201) argues that "a conformist orientation includes an unwillingness to permit others to step out of narrowly defined limits of what is proper and acceptable. Thus, a conformist orientation implies not only intolerance of deviant political belief, but also intolerance of any beliefs thought to be threatening to the social order—religious beliefs, ethnic and racial identifications, even beliefs about proper dress and deportment." We believe that this dimension of child-rearing values provides an excellent, nonobtrusive measure of authoritarian predispositions. It is particularly useful for our purposes since it does not include questions tapping presumed consequences of authoritarianism—like prejudice and intolerance—that make up our set of dependent variables.

ANALYSIS

Given the nature of some of our dependent variables, we excluded all minority respondents from the NES sample. Further, given that the variables of interest spanned both the pre- and postelection sections of the survey, and were addressed in their entirety only by those respondents who answered the "long-form" of the questionnaire, we further subsetted the data to include only those respondents who answered the long-form questionnaire for both sections of the survey. From an

original sample size of 2487, 2004 respondents meet these criteria, and of those, 1564 are white non-Hispanics.

What follows below is an outline of the dependent variables for the analysis, and of the independent variables we anticipated would be implicated in the tendency to hold stereotypical, punitive, and ethnocentric attitudes. We indicate how concepts were operationalized for inclusion in the model, and our expectations for their impact on the dependent variables.

Dependent Variables

As we have noted, a limitation of the NES data is that they do not include direct measures of constructs like intolerance or punitiveness that are typically examined as manifestations of authoritarianism. We have therefore chosen a range of dependent variables for our analysis. The variables fall into three general categories: attitudes toward minority groups, social and political attitudes, and attitudes toward the use of force. The vast literature on authoritarianism has shown strong connections between these categories of attitudes and authoritarian predispositions. We expect increasing authoritarianism to be associated with negative and stereotypical attitudes toward minority groups and to the willingness to use force, both domestically and internationally. Authoritarianism should also be related to key social orientations; ingroup versus outgroup attachments, a desire for order over freedom, and patriotism. If our empirical results are consistent across this set of dependent variables we will be able to relate with considerable confidence our findings to literature on authoritarianism.

Attitudes Toward Minority Groups

Negative racial stereotyping. The NES study included a battery of questions on perceptions of the traits of four groups: whites, blacks, Hispanics, and Asians. For each group, respondents were first asked to indicate on a seven-point scale the extent to which group members were typically violent or peaceful. They then rated each group on a scale of hardworking versus lazy, and finally intelligent versus unintelligent. For each of the three minority groups, difference scores were computed to indicate the extent to which group members were perceived to have more negative characteristics than whites on each of the three trait dimensions. This produced a total of nine indicators: three groups by three traits. In order to obtain a somewhat more normal distribution, we took the square root of each of these difference scores. We then averaged the nine indicators to produce a single measure of negative racial stereotyping. The measure has an estimated reliability (coefficient α) of .90.

Tendency to blame blacks. The second measure of attitudes toward minority groups is an item gauging the extent to which respondents thought that the relatively

impoverished circumstances in which blacks find themselves were due simply to lack of effort on the part of the latter. Specifically, the question asked respondents to indicate the extent to which they agreed or disagreed with the statement, "It's really a matter of some people not trying hard enough; if blacks would only try harder they could be just as well off as whites."

Gay rights. Respondents were asked, "Do you favor or oppose laws to protect homosexuals against job discrimination? Do you favor/oppose such laws strongly or not strongly?"

Social and Political Attitudes

Group attachments—ingroup versus outgroup. One of the major hypothesized characteristics of authoritarians is that they are inordinately attached to the dominant ingroups in society and reject the outgroups. In fact, Duckitt (1989) sees this as one of the defining characteristics of authoritarianism. The NES questionnaire asked people to indicate whether they feel close to a wide range of social and political groups, specifically, to indicate the people "who are most like you in their ideas and interests and feelings about things." We designated the middle class, whites, and business people as ingroups, and blacks, Hispanics, Asians, and poor people as outgroups. From these responses we constructed two separate measures, one of ingroup attachment and one of outgroup attachment, each scored 0 to 1, with 1 indicating that respondents felt close to all of the groups in the set, and 0 indicating that they felt close to none of the groups (with values between 0 and 1 indicating other intermediate levels of group closeness). Since we sought a measure that indicates the extent to which people *both* feel close to ingroups *and* do not feel close to (feel distant from) outgroups, we multiplied the ingroup attachment score by the reverse of the outgroup identification score. This yields a final measure ranging from 0 to 1, with a score of 1 indicating that the respondent feels close to all of the ingroups *and* none of the outgroups. A score of 0 would occur if the respondent *either* felt close to none of the ingroups, or felt close to all of the outgroups.

Order versus freedom. People high in authoritarianism should place a high value on order in society but not on individual freedom. We constructed a measure of this propensity from a value-ranking measure designed by Inglehart (1977). The question reads, "For a nation, it is not always possible to obtain everything one might wish. On page ten of the booklet several different goals are listed. If you had to choose among them, which one seems most desirable to you? Which one would be your second choice?. . . 1. maintaining order in the nation; 2. giving the people more say in important political decisions; 3. fighting rising prices; 4. protecting freedom of speech." We then created two variables representing the extent to which the respondent valued order and freedom. Each is scored 1 if that value was ranked most important, 0.5 if ranked second most important, and 0 if not chosen. As with the group closeness measure, we are interested in the extent to which people both

value order and do not value freedom. We therefore constructed the final measure as the product of the order variable multiplied by the reversed freedom variable.

True American. Authoritarians are expected to be both patriotic and inclined to demand social conformity. We might reasonably expect them to be concerned about the definition of citizenship and to define citizenship in a manner that requires subscription to and conformity with traditional norms and practices. Happily, one of the NES questions reads, "Some people say there are certain qualities that make a person a true American. Others say that there isn't anything that makes one person more American than another. I'm going to read some of the things that have been mentioned. For each of the following, tell me how important you think it is in making someone a true American—extremely important, very important, somewhat important, or not at all important . . . Believing in God."

Attitudes Toward the Use of Force

Support for the death penalty. A central aspect of authoritarianism is the willingness to use extreme measures to punish those who violate laws. In the U.S., the most extreme use of legitimate force is the death penalty. The relevant NES question asks whether respondents "favor or oppose the death penalty for persons convicted of murder" (and whether they favor/oppose the death penalty strongly or not strongly).

Defense spending. The willingness to use force can extend beyond the nation's borders, both to protect the country and to punish wrongdoers. One indicator of such willingness to use force is support for greater spending on defense. The NES question we employ is, "Some people believe that we should spend much less money for defense. Others feel that defense spending should be greatly increased. Where would you place yourself on this scale, or haven't you thought much about this?" The original measure ranges from 1 (defense spending should be greatly decreased) to 7 (spend much more money for defense).

Support for the Gulf war. Respondents were asked: "Do you think we did the right thing in sending U.S. military forces to the Persian Gulf or should we have stayed out?" Note that this is a retrospective judgment asked in the fall of 1992.

INDEPENDENT VARIABLES

Child-Rearing Values

The central explanatory variable is a measure of authoritarian values formed from responses to a series of questions concerning "child-rearing values." These questions presented respondents in turn with four pairs of qualities—independence or respect for elders; obedience or self-reliance; curiosity or good manners; and being considerate or well-behaved—and asked them to indicate which of the two

was the most desirable quality for a child to have. The four separate items were coded such that the "authoritarian" response to each pair of qualities (respect for elders, obedience, good manners, being well-behaved) was scored 1; the "nonauthoritarian" response (independence, self-reliance, curiosity, being considerate) was scored 0; and respondents who offered that they were uncertain of their choice, or thought that neither or both qualities were important, were scored 0.5. The authoritarianism measure is then a simple additive scale constructed by summing these four variables. The estimated reliability of the four item scale is .66.

The influence of authoritarianism on intolerance, punitiveness, and negative attitudes toward outgroups is expected to be contingent upon—specifically, magnified by—conditions of fear and threat. Thus, we constructed a range of variables measuring conditions which might be threatening to the individual, including political, economic, and personal threats. Then for each of the threat conditions represented by these variables, we constructed an interaction term for inclusion in the model, crossing each of the threat variables with the measure of authoritarianism. Since the previous literature has touched upon a wide range of potential threats that may contribute to authoritarianism, we have tried to sample broadly rather than precisely defining threat and measuring it narrowly. One goal of this analysis is to compare the impact of the various conditions that have been hypothesized to be threatening to authoritarians.

Political Threat

Perceived ideological distance from major political actors. This variable taps one aspect of what might be termed "political threat," here operationalized as the sum of a citizen's perceived "ideological distance" from each of four major political actors: the Republican and Democratic parties, and the Republican and Democratic presidential candidates. These represent the major objects on a citizen's political horizon and the main alternatives among which political choices are made. The variable was constructed by summing the four absolute distances between a respondent's own ideological position on a seven-point liberal-conservative continuum (self-placement), and the perceived positions of each of the two major parties, and the two major presidential candidates (Bush and Clinton).

Thus we are interested in the ideological distance that individuals perceive to exist between themselves and all of the major actors in the political arena, rather than how ideologically distant they feel from the nearest political alternatives (political parties and presidential candidates). We operationalize ideological threat in this manner because we anticipate that what is threatening to authoritarians is ideological diversity per se, notwithstanding that there may exist a party and/or candidate whose positions on important matters are proximate to their own. Given many empirical findings regarding the authoritarian's exaggerated need to protect the dominant culture, and consequent intolerance of unconventional, deviant

attitudes and behavior, we expect authoritarians to be fearful of the mere existence in the political arena of beliefs that are removed from their own. Moreover, given the tendency of people to perceive that the public as a whole shares their own opinions (Ross, Greene, & House, 1977), parties and candidates who are far from the respondent's ideological position are likely to be seen by that individual as diverging from the position of most people in the U.S.

Negativity of response to presidential candidates. Another potentially important aspect of "political threat" is the extent to which individuals react negatively to *both* of the major presidential candidates. We created a variable measuring this construct from responses to two groups of questions gauging positive and negative emotions aroused by the candidates and respondents' ratings of the candidates' possession of a variety of traits.

The first group of questions involved eight items dealing with positive and negative emotions aroused by Bush and Clinton. These questions asked respondents to report, in turn, whether each of the presidential candidates—"because of the kind of person he is, or because of something he has done"—had ever made them feel angry, hopeful, afraid, or proud. For each candidate we formed a variable that counts the number of reported negative emotions minus the number of reported positive emotions. These two variables were then multiplied together so that high scores indicate a preponderance of negative emotions toward *both* candidates. Thus, a respondent would achieve a low score on this component of the overall measure if he or she had largely positive emotions about *either* candidate.

The second component to our measure of negativity of response to political leaders involved individuals' ratings of the candidates' possession of each of nine traits. Considering Bush and Clinton in turn, respondents were asked to indicate how well a number of words or phrases described the candidate in question. Since these posed a series of positive traits—intelligent, compassionate, moral, inspiring, strong, caring, knowledgeable, honest, and "gets the job done"—our measure of negativity first reversed, and then summed the trait ratings for each of the candidates. We then multiplied the Bush and Clinton trait scores together so that, again, low scores would be obtained on this component if the respondent saw either of the two candidates as having largely positive traits.

Our *overall* measure of negativity of response to the presidential candidates then consisted of an equally weighted summation of the negativity of emotions aroused by the two candidates, and the negativity of their trait ratings. It is important to recognize that, by the way in which we have constructed this measure, high negativity scores cannot be produced by intense dislike of only one candidate, as might occur if the respondent was a very strong partisan. High negativity scores will only obtain if the respondent has strong negative feelings toward both presidential candidates.

Negativity of response to political parties. Just as people may be disturbed by the perception that both presidential candidates have predominantly negative characteristics, so too may negative perceptions of both political parties be threat-

ening. Unfortunately, we do not have available the same kind of emotion and trait items for parties that were available for the candidates, and most resort instead to the "feeling thermometer" scores for the Democratic and Republican parties. Respondents rated each of the major parties on a scale ranging from a very negative score of 0 to a highly positive score of 100. Since we are interested in the degree of negativity felt toward both parties, we reversed this scoring and then multiplied the two ratings. As before, high scores on this overall measure indicate strong negative reactions to both political parties.

Economic Threat

Beyond the concept of political threat, it is clear that there may be conditions of economic threat or insecurity that affect the extent to which people are intolerant and/or punitive. To investigate the threat potential of economic conditions, we included variables measuring each respondent's level of threat in three respects that we anticipate might affect one's sense of security and well-being: fear of unemployment and perceptions that the economic situation of one's household, and of the nation as a whole, had worsened.

We operationalized *fear of unemployment* by first forming dummy variables indicating whether the respondent, and his or her spouse (if one existed and was in the workforce) were "very worried" about losing their jobs, or (if unemployed) about not being able to find jobs in the near future. These variables were then each weighted by the extent to which the household was dependent upon that person's income—multiplying the dummy variable by the proportion of the family's income earned by the individual in question—and summed. The formula for constructing the variable thus varied according to the marital and employment circumstances of each respondent. High scores indicate a fear of unemployment combined with a high level of family dependence upon the income of the person in question.

Next, we formed a scale measure of *negativity of retrospective personal economic evaluation* by summing responses to two items gauging respondents' perceptions of the extent to which their household economic situations had gotten better or worse over the last year. The two questions are, "We are interested in how people are getting along financially these days. Would you say that you (and your family living here) are better off or worse off financially than you were a year ago?" and "Do you think that over the last year (your/your family's) income has gone up more than the cost of living, has it fallen behind, or has it stayed about even with the cost of living?" Since we are interested in perceptions that the respondent's economic situation has gotten worse, we dichotomized responses to both questions into "worse" versus "same" or "better." Our measure then combines responses to both questions.

Similarly, we constructed a scale measure of *negativity of retrospective national economic evaluation* by summing responses to three items gauging respondents' perceptions of the extent to which the national economic situation had

gotten better or worse: (1) "How about the economy. Would you say that over the past year the nation's economy has gotten better, stayed the same, or gotten worse?"; (2) "Compared to four years ago, would you say that the nation's economy has gotten better, stayed about the same, or gotten worse?"; and (3) "How about America's ability to compete in the world economy? Over the past year has that gotten better, stayed the same, or gotten worse?" As was the case for personal economic evaluations, we dichotomized responses for each question into "worse" versus "same" or "better," and formed a single measure by combining responses to the three questions.

Fear of War

Finally, we sought to operationalize an important concept raised in the discussion of terror management theory. The research we reviewed raised the possibility that authoritarianism may be a worldview and modus operandi formed in part to protect the individual from the terrifying recognition of his or her inevitable mortality. If authoritarianism does involve a fear of dying, then the threat of death ought to be a powerful magnifier of the effects of authoritarianism on hostile and intolerant attitudes. Even if the framework of terror management theory is not accepted—and here we are entirely agnostic—the threat of death may be sufficiently anxiety-provoking to disturb those high in authoritarianism. With this in mind, and given the destructive potential of nuclear warfare, we included a final threat variable which measured the extent to which respondents exhibit *fear of nuclear war*. This was based on a question that asked respondents to report how afraid they were that a nuclear war would occur in the near future.

Control Variables

There are a number of plausible rival influences on punitive and intolerant attitudes that need to be included in our analysis. We constructed variables measuring the most important concepts among these: moral conservatism, religiosity, Christian fundamentalism, political conservatism, years of education, political knowledge, and party identification. Finally, we included variables measuring family income (in thousands of dollars), age (in years), and gender (dummy variable indicating male). Details of the construction of these variables are provided in the Appendix.

Since the variables in this analysis mostly do not have any natural metric, all of the variables—with the exception of family income, age, and years of education—were rescored to range from a minimum of 0 to a maximum of 1 to aid in interpretation of the metric regression coefficients. Thus, a unit change in each of these variables involves movement from the lowest possible score to the highest possible score. To further assist in computing and interpreting effects, given the

many interaction terms in the model, each variable was centered on zero by subtracting the variable's mean.

For each of the nine dependent variables, we estimated a regression equation via ordinary least squares. The specification of these regressions included all of the independent variables described above as well as interaction terms between authoritarianism and each of the threat variables. By rescoring the authoritarian child-rearing values scale and the threat measures to have means of zero, prior to construction of the interaction terms, we have simplified the interpretation of the coefficients. The coefficient on authoritarian predispositions can thus be interpreted as the effect (partial slope coefficient) of this scale on the dependent variable when all of the threat variables are at the same means. This will be almost exactly the same coefficient for authoritarian child-rearing values that would be estimated in a simple linear, additive regression model with the sample independent variables (except for the interaction terms). The coefficients for the interaction terms then indicate the extent to which the *effect* of authoritarianism on the dependent variable varies as a function of each indicator of threat. In all cases, the threat variables are coded so that we expect positive interaction coefficients.[2]

With nine regression equations, we obviously need to be cautious in drawing conclusions about the impact of a particular independent variable or interaction. With this many coefficients, we could get statistically significant effects by chance. One strategy for dealing with this would be to combine these nine dependent variables into a smaller number of composite measures to reduce the number of estimated coefficients. We have not chosen this strategy because we are particularly interested in discerning the effects of authoritarian predispositions and threat across a wide range of dependent variables. Instead, we will look for consistent effects across the nine regression equations. If a variable or interaction really has no effect on authoritarian attitudes, we should observe coefficients randomly distributed around zero across the nine equations. Consistently *positive* interaction effects across the equations would be extremely unlikely to occur by chance.

RESULTS

Before we present the regression results, it is enlightening to consider first the simple relationship between authoritarian predispositions and the various measures of threat. According to the simple threat-authoritarianism hypothesis—which we earlier called into question—environmental threat should lead to increases in the observed levels of authoritarianism. Consistent with the perspective developed in

[2] Since we were including several interaction terms in the regression equations, we first estimated separate equations, including only one interaction term at a time, in order to guard against the chance that we were missing some significant effects due to possible multicollinearity. These additional regression estimates simply confirmed the results we present in the single equations.

this paper, we found no such relationship. The largest correlation between any of the threat measures and authoritarian child-rearing values was –.14, for the perceived ideological distance measure. Moreover, this correlation was negative: more authoritarian responses were associated with the perception of *less* ideological discord (as well as with less negative perceptions of the presidential candidates). The largest *positive* correlation was a mere .12, between authoritarian values and fear of nuclear war. The correlations between authoritarian values and each of the three economic threat variables were all statistically indistinguishable from zero. We thus find no evidence that these sorts of threats actually lead to significantly higher levels of authoritarian predispositions per se.[3]

The regression estimates for the dependent variables are shown in Tables I through III. Since we have rescored authoritarian values and all of the threat measures as deviations around their means, the coefficients for those variables (in the upper panel of each of the tables) are virtually the same as would be obtained from estimating linear additive regressions, without any interaction effects. More precisely, the estimated coefficient for authoritarian values is the effect of that variable on the dependent variable when *all* of the threat measures are at their sample means. Likewise, the coefficients for the threat variables give their effects on the dependent variable when authoritarianism is at its sample mean. Significant interaction coefficients indicate that the effect of authoritarianism on that dependent variable varies with level of threat (and conversely, that the impact of that threat condition on the dependent variable varies with level of authoritarianism).

Although the results are not perfectly consistent across the dependent variables, a number of the interaction terms are statistically significant and substantively large.[4] Only three interaction terms are significant with the wrong (negative) sign, and only one of those is substantively large. In contrast, twenty-one of the interaction terms are statistically significant in the predicted (positive) direction. This is *well* beyond what could be expected by chance. The most consistent result is the effect of the interaction of authoritarian predispositions and perceived ideological distance. This interaction is statistically significant and substantively large in seven of the nine equations. Recall that this measure taps the overall ideological distance that respondents perceive to exist between themselves, and each of the two major parties and presidential candidates. High scores indicate that respondents see *all* of these central political objects as being distant from their own position.

[3] Nor, alternatively, that authoritarian predispositions make it more likely that people will perceive various types of threat.

[4] Since there is no obvious reason to expect any of the coefficients for the interaction terms to be negative, we use one-tailed tests of significance for these coefficients ($p < .05$) and two-tailed tests elsewhere. Strictly speaking, no interaction coefficient with the wrong (here, negative) sign should be statistically significant using a one-tailed test. Nonetheless, we do indicate coefficients that would have been significant at $p < .05$ if we had used a two-tailed test.

Table I. Determinants of Attitudes Toward Minority Groups

Independent variables	Racial Stereotyping	Blacks Don't Try Hard	Gay Rights
Authoritarian values	.11 (.019)*	.11 (.026)*	.09 (.035)*
Perceived ideological distance	–.01 (.041)	–.18 (.057)*	.05 (.076)
Negativity of response to presidential candidates	–.11 (.046)*	–.13 (.065)*	.09 (.087)
Negativity toward political parties	–.14 (.040)*	.02 (.056)	.12 (.075)
Negativity of retrospective national economic evaluations	.05 (.016)*	.03 (.022)	–.06 (.030)
Fear of unemployment	.04 (.023)	.04 (.032)	–.01 (.042)
Negativity of retrospective personal economic evaluations	–.01 (.012)	–.03 (.017)	–.02 (.023)
Fear of nuclear war	.02 (.015)	.02 (.021)	–.06 (.028)*
Authoritarianism * Perceived ideological distance	.39 (.136)*	.84 (.190)*	–.09 (.254)
Authoritarianism * Negativity toward presidential candidates	–.10 (.152)	.02 (.213)	.51 (.285)*
Authoritarianism * Negativity toward political parties	–.20 (.132)	.37 (.184)*	–.24 (.246)
Authoritarianism * Negativity of national economic evaluations	.06 (.049)	.08 (.069)	.01 (.093)
Authoritarianism * Fear of unemployment	–.04 (.074)	.20 (.104)*	.02 (.139)
Authoritarianism * Negativity of personal economic evaluations	–.10 (.039)#	–.03 (.054)	.06 (.072)
Authoritarianism * Fear of nuclear war	.04 (.047)	.12 (.066)*	.14 (.088)*
Christian fundamentalist	.03 (.012)*	.02 (.017)	.08 (.022)*
Moral conservatism	.07 (.027)*	.22 (.038)*	.43 (.051)*
Political conservatism	.01 (.027)	.07 (.038)	.21 (.050)*
Party identification (Republican)	.00 (.018)	.04 (.024)	.13 (.033)*
Religiosity	–.04 (.020)*	–.10 (.028)*	.05 (.038)
Gender (male)	.01 (.010)	.04 (.015)*	.14 (.019)*
Age (10 years)	.02 (.003)*	.00 (.004)	.00 (.006)
Family income ($10,000s)	.00 (.002)	–.00 (.003)	–.00 (.004)
Education (10 years)	–.07 (.024)*	–.18 (.034)*	–.05 (.046)
Political knowledge	–.14 (.026)*	–.16 (.037)*	–.12 (.049)*
Constant	–.01 (.008)	–.02 (.011)	–.09 (.015)*
Adjusted R^2	.20	.21	.24

Note: Entries are unstandardized regression coefficients and standard errors. * = $p < .05$ (one-tailed test on interaction coefficients, two-tailed tests for other coefficients); # = $p < .05$ had a two-tailed test been applied to the interaction term instead.

Source: 1992 National Election Study, non-Hispanic whites completing both pre- and postelection questionnaires. N = 1564.

Table II. Determinants of Social and Political Attitudes

Independent variables	Ingroup/ Outgroup	Order vs. Freedom	True American
Authoritarian values	.00 (.028)	.02 (.040)	.13 (.028)*
Perceived ideological distance	–.05 (.061)	–.09 (.086)	–.22 (.061)*
Negativity of response to presidential candidates	–.20 (.070)*	–.36 (.098)*	.01 (.070)
Negativity toward political parties	–.06 (.061)	–.00 (.086)	–.09 (.061)
Negativity of retrospective national economic evaluations	–.01 (.024)	.02 (.034)	.03 (.024)
Fear of unemployment	–.04 (.034)	–.01 (.048)	.06 (.034)
Negativity of retrospective personal economic evaluations	–.02 (.018)	.03 (.026)	.01 (.019)
Fear of nuclear war	–.03 (.023)	–.02 (.032)	.09 (.023)*
Authoritarianism * Perceived ideological distance	.37 (.204)*	.17 (.289)	.38 (.205)*
Authoritarianism * Negativity toward presidential candidates	–.29 (.229)	.75 (.324)*	–.11 (.230)
Authoritarianism * Negativity toward political parties	–.07 (.198)	.02 (.280)	.42 (.199)*
Authoritarianism * Negativity of national economic evaluations	.18 (.075)*	.21 (.105)*	–.02 (.075)
Authoritarianism * Fear of unemployment	–.10 (.112)	.04 (.158)	–.08 (.112)
Authoritarianism * Negativity of personal economic evaluations	–.11 (.058)#	–.09 (.082)	–.04 (.058)
Authoritarianism * Fear of nuclear war	.14 (.071)*	–.06 (.101)	–.06 (.071)
Christian fundamentalist	–.02 (.018)	–.03 (.025)	.10 (.018)*
Moral conservatism	.05 (.041)	.20 (.058)*	.23 (.041)*
Political conservatism	.04 (.040)	.20 (.057)*	.17 (.041)*
Party identification (Republican)	.09 (.026)*	.08 (.037)*	–.00 (.027)
Religiosity	.01 (.030)	–.00 (.043)	.38 (.031)*
Gender (male)	.00 (.016)	–.07 (.022)*	.04 (.016)*
Age (10 years)	–.01 (.004)	–.02 (.006)*	.01 (.004)*
Family income ($10,000s)	.02 (.003)*	.00 (.004)	–.00 (.003)
Education (10 years)	.19 (.037)*	.03 (.052)	–.14 (.037)*
Political knowledge	.08 (.040)*	.09 (.056)	–.16 (.040)*
Constant	.00 (.012)	.05 (.017)*	–.05 (.012)*
Adjusted R^2	.15	.07	.43

Note: Entries are unstandardized regression coefficients and standard errors. * = $p < .05$ (one-tailed test on interaction coefficients, two-tailed tests for other coefficients); # = $p < .05$ had a two-tailed test been applied to the interaction term instead.

Source: 1992 National Election Study, non-Hispanic whites completing both pre- and postelection questionnaires. N = 1564.

Table III. Determinants of Attitudes Toward the Use of Force

Independent variables	Death Penalty	Defense Spending	Gulf War
Authoritarian values	.16 (.031)*	.04 (.020)*	.02 (.034)
Perceived ideological distance	–.16 (.067)*	.02 (.043)	–.14 (.075)
Negativity of response to presidential candidates	–.14 (076)	–.07 (.049)	–.68 (.085)*
Negativity toward political parties	.11 (.066)	.00 (.042)	–.05 (.074)
Negativity of retrospective national economic evaluations	.02 (.026)	–.04 (.017)*	.02 (.030)
Fear of unemployment	.08 (.037)*	.00 (.024)	–.02 (.042)
Negativity of retrospective personal economic evaluations	.01 (.020)	.01 (.013)	–.01 (.023)
Fear of nuclear war	–.00 (.025)	.05 (.016)*	–.01 (.028)
Authoritarianism * Perceived ideological distance	.59 (.224)*	.34 (.143)*	.55 (.250)*
Authoritarianism * Negativity toward presidential candidates	.48 (.251)*	–.04 (.161)	.44 (.281)*
Authoritarianism * Negativity toward political parties	–.15 (.217)	–.02 (.139)	.13 (.243)
Authoritarianism * Negativity of national economic evaluations	.07 (.082)	.10 (.052)*	.17 (.091)*
Authoritarianism * Fear of unemployment	.02 (.122)	–.12 (.078)	–.44 (.137)#
Authoritarianism * Negativity of personal economic evaluations	.05 (.064)	–.03 (.041)	–.01 (.071)
Authoritarianism * Fear of nuclear war	–.03 (.078)	–.03 (.050)	–.09 (.087)
Christian fundamentalist	–.02 (.020)	.02 (.013)	–.01 (.022)
Moral conservatism	.18 (.045)*	.13 (.029)*	.16 (.050)*
Political conservatism	.16 (.044)*	.05 (.028)	.13 (.050)*
Party identification (Republican)	.08 (.029)*	.08 (.018)*	.18 (.032)*
Religiosity	–.13 (.033)*	.03 (.021)	–.01 (.037)
Gender (male)	.06 (.017)*	.03 (.011)*	.07 (.019)*
Age (10 years)	–.01 (.005)	–.00 (.003)	–.03 (.006)*
Family income ($10,000s)	.00 (.003)	.00 (.002)	.00 (.004)
Education (10 years)	–.03 (.040)	–.08 (.026)*	–.04 (.045)
Political knowledge	–.03 (.044)	–.06 (.028)*	.09 (.049)
Constant	–.01 (.013)	–.02 (.008)*	–.02 (.015)
Adjusted R^2	.11	.15	.16

Note: Entries are unstandardized regression coefficients and standard errors. * = $p < .05$ (one-tailed test on interaction coefficients, two-tailed tests for other coefficients); # = $p < .05$ had a two-tailed test been applied to the interaction term instead.

Source: 1992 National Election Study, non-Hispanic whites completing both pre- and postelection questionnaires. N = 1564.

How does the effect of authoritarian values vary with perceived ideological distance? Let us take an example. Consider the case of support for the death penalty, which is about average for the size of this interaction coefficient. For someone at the 10th percentile of the ideological distance measure, the predicted effect of authoritarian values is just .08—very close to zero. On the other hand, someone scoring at the 90th percentile on the ideological distance measure has a predicted coefficient for authoritarianism of .26. Since all the variables are coded to be of unit range, a coefficient of .26 can be interpreted as the fraction of the range of the dependent variable (support for the death penalty) across which a respondent would be predicted to move if authoritarianism increased from its minimum to its maximum value (holding all else constant). It is clear both that authoritarianism has a substantial influence upon intolerant and punitive attitudes, and that the perception of ideological distance strongly moderates the influence of authoritarian values.

Apart from the ideological distance measure, the interaction with negative reactions to the presidential candidates is significant and correctly signed in four of the nine equations, as is the interaction with negative perceptions of the national economic situation, while the interaction with negative reactions to the political parties is significant in two equations. (And there are no significant negative interaction coefficients in any of these cases.) In sharp contrast, the interaction of authoritarian predispositions and personal economic conditions is not statistically significant (in the predicted direction) in any of the equations. The interaction with fear of unemployment does little better as it is significant (in the predicted direction) only once. The interaction with fear of nuclear war is statistically significant in three equations, but the coefficients are relatively small.

Since the largest and most consistent interaction effects emerged for the interaction of authoritarianism with the ideological distance measure, we ran additional analyses to assure ourselves that these significant effect were not spurious. It is possible that scores on the ideological distance measure are correlated with education, political knowledge, or ideological extremity. The significant interaction effects might then be a function of these other variables and have nothing to do with the perception of ideological diversity. We therefore re-estimated all of the equations adding, one at a time, interactions between authoritarian predispositions and education, political knowledge, and ideological extremity. None of these additions significantly altered the estimated interaction effect of authoritarian predispositions and ideological distance. Thus, this finding appears to be robust to alternative specifications.

These results provide support for our interaction version of the threat-authoritarianism hypothesis and no support at all for the simple hypothesis of a direct effect of short-term threat on authoritarian values. The largest and most consistent interaction effects are registered for variables that tap perceived societal threat. When people perceive that the political parties and presidential candidates hold ideological positions very different from them, or have very negative reactions to

the presidential candidates, or see a deteriorating national economy, the impact of authoritarian predispositions is greatly magnified. These results suggest, then, that rather than threats to individuals' immediate well-being—for example, to their household economic situation—it is perceived threat at the societal level that arouses the ire of authoritarians and amplifies the impact of authoritarian predispositions on intolerant and punitive attitudes.

Authoritarian Predispositions and the Effects of Threat

To this point we have discussed the regression results in terms of the extent to which various threats moderate the effect of authoritarian predispositions on a range of dependent variables. However, interaction effects can always be interpreted from two perspectives. We can also examine the extent to which the various threat measures affect the dependent variables as authoritarianism varies. One obvious hypothesis is that increasing perceptions of threat should be related to more ethnocentric and punitive attitudes for those high in authoritarianism. This effect of threat might then go to zero as authoritarianism decreases. That is, we might find that people high in authoritarianism are sensitive to and provoked by the perception of threat, while those low in authoritarianism predispositions are relatively unaffected by increasing threat.

Before re-examining the interaction effects from this alternative perspective, it is useful first to look at the coefficients for the threat variables. Recall that, by our coding, these coefficients yield the effect of each threat measure on the dependent variable when authoritarian values are at the sample mean. These estimates are very close to those that we would have obtained by estimating a model without the interaction terms. Looking across the dependent variables, we note that it is clear that the coefficients for the threat measures are typically close to zero. Where they are statistically different from zero, the coefficients are *negative.* Thus, if we had tested a simple model that predicts a direct, unconditional relationship between threat and authoritarian (intolerant and punitive) attitudes, we would have found no evidence at all in support of that prediction.

Turning now to the interaction of threat and authoritarianism, we find support for only half of the expected pattern. We do find the predicted effect of threat among those high in authoritarianism. Here, greater perceptions of threat are associated with more ethnocentric and punitive attitudes. Moreover, the results clearly show that it is only among those high in authoritarianism that threat has this effect. As we have just seen, even given average levels of authoritarianism, none of these threat variables has a significant positive effect on any of the dependent variables. And, among those low in authoritarianism, we observe a surprising result. Here, as perceptions of threat increase, we actually observe more *liberal* (libertarian) responses on our dependent variables. This pattern emerges for every one of the significant interaction effects across the nine equations. The role of threat is therefore more complex than we originally anticipated. High levels of perceived

threat tend to polarize the responses of those high and low in authoritarianism. Those high in authoritarianism become more punitive and ethnocentric under conditions of threat, while those low in authoritarianism become even *less* punitive and ethnocentric under these conditions.

We might be tempted to attribute these results to some methodological problem were it not for two others studies that find this same polarization effect. The first study comes from the terror management research that we discussed earlier (Greenberg et al. 1990). In one of the terror management studies, subjects were given a modified version of the F-scale. Recall that the threat manipulation here involved making the subjects' mortality salient. When the effects of this manipulation were examined separately for those high and low in authoritarianism, divergent results emerged. As predicted, among those high in authoritarianism the mortality threat was associated with more negative attitudes toward a target person constructed to be highly dissimilar to the subject. However, among those low in authoritarianism, mortality threat was associated (though more weakly) with more positive attitudes toward the dissimilar target person.

The second study, one we also discussed earlier, is the comparative analysis of the effects of economic threat on authoritarianism in the U.S. and Russia (McFarland, Ageyev, & Hinton, 1995). Using a 16-item short form of Altemeyer's Right Wing Authoritarianism scale—and bear in mind that we consider this more a measure of authoritarian attitudes (manifestations) than of authoritarian predisposition—these researchers found that economic threat leads to a polarization of scores on the authoritarianism measure. Compared to those in low-threat conditions, there were higher proportions of people registering both high and low authoritarianism among those experiencing threat. Interestingly, this result appeared in the U.S. sample but not in the Russian sample. Apparently, then, this polarization effect is quite real, emerging in three very different studies of the impact of threat on characteristic authoritarian attitudes in the U.S. The absence of the polarization effect in the Russian data indicates that more cross-national research is needed to determine the generalizability of this finding.

Perceived Threat and the Structure of Authoritarian Attitudes

The nine dependent variables we have examined in these regressions were chosen because we believe them to be characteristic manifestations of authoritarianism. If this is so, shouldn't these variables be strongly interrelated? If authoritarian predisposition is a common factor underlying these variables, we might reasonably expect to find a pattern of correlations among the variables reflecting this fact. However, the results just presented suggest that the picture may be far more complex than this. We have shown that certain types of threat polarize the attitudes of those high and low in authoritarianism, causing high authoritarians to become more intolerant and punitive, while low authoritarians become less so. Conversely, under conditions of low threat, the attitudes of those high and low in

authoritarianism are less distinguishable. Thus, since the correlation between authoritarian predisposition and authoritarian manifestations varies with levels of threat, the correlations among the attitudinal manifestations of authoritarianism should likewise depend upon threat.

Since the ideological diversity measure produced the largest and most consistent interaction effects with authoritarianism in the earlier analysis, we examined the correlations among the nine dependent variables separately for those respondents above and below the mean in perceptions of ideological diversity. These correlations are shown in Table IV. Correlations above the main diagonal are for those respondents reporting greater than average perception of threat, and those below the diagonal are for those respondents experiencing the low-threat condition. Overall, the correlations among the dependent variables—our manifestations of authoritarianism—are substantially lower for those below the mean in perceptions of ideological diversity. The average correlation is only .07 for this group. The average correlation among the dependent variables then increases to .20 for those above the mean in perceptions of diversity. Or consider just the correlations among the dependent variables of Table I: our three measures of attitudes toward minority groups. Under conditions of low threat the three correlations average .18, which rises to .30 when threat is above the mean.

Table IV. Correlations Among Authoritarian Attitudes

	Stereo-typing	Black Effort	Gay Rights	Ingroup	Order/ Freedom	True American	Death Penalty	Defense $	Gulf war
Racial Stereotyping	1.00	.42	.17	.05	.05	.36	.22	.24	.02
Blacks Don't Try Hard	.24	1.00	.30	.04	.11	.33	.29	.30	.13
Gay Rights	.15	.13	1.00	.11	.11	.33	.23	.35	.18
Ingroup/ Outgroup	.05	–.04	–.04	1.00	.15	.04	.13	.05	.19
Order vs. Freedom	.00	.03	.06	.06	1.00	.12	.14	.18	.22
True American	.20	.13	.14	–.13	.01	1.00	.22	.31	.15
Death Penalty	.08	.15	.02	.09	.07	–.01	1.00	.27	.18
Defense Spending	.05	.01	.09	–.02	.01	.13	.06	1.00	.26
Gulf war	.01	.05	.06	.12	.07	–.01	.15	.16	1.00

Note: Entries are correlation coefficients. Those correlations above the diagonal are for those respondents above the mean in perceptions of ideological diversity; those below the diagonal are for those below the mean in perceptions of ideological diversity.

Source: 1992 National Election Study, non-Hispanic whites completing both pre- and postelection questionnaires. N = 1564.

In addition to illustrating the polarizing effect of threat on authoritarian attitudes, these results raise serious concerns about the properties of F-scale-like authoritarianism measures. Since these measures typically include a goodly proportion of items that are fairly concrete manifestations of authoritarianism—like attitudes toward minority groups, conventional social behavior, and punitiveness—the observed internal consistency of such scales may be in part a function of levels of threat. This may account for Altemeyer's (1988) finding that the intercorrelations among the items of his Right Wing Authoritarianism scale (and hence, its estimated reliability) varied considerably over time.

On the other hand, our indicator of authoritarian predispositions—the child-rearing values measure—was chosen in large part because it is a relatively low-level, unobtrusive measure. As such, it should be far less sensitive to the effects of threat. In fact, the mean correlation among the four child-rearing items increases only slightly between the low- and high-threat conditions: from .28 to .34. This nicely reinforces our central conclusion that threat does not have a direct effect on authoritarian predispositions, but rather increases the connections between those predispositions and a variety of characteristic authoritarian attitudes and behaviors.

DISCUSSION

Although we cannot claim to have presented a seamless pattern of empirical evidence, this analysis has found some intriguing and often substantial interaction effects between various indicators of threat, authoritarian predispositions, and measures of stereotyping, intolerance, and punitiveness. What are the implications of these results? Let us summarize the major findings of this analysis one at a time, and consider their significance for our understanding of the impact of threat on authoritarianism. In so doing, we will also consider the broader implications of these findings for our understanding of the nature of authoritarianism itself.

We found no evidence to support the simple hypothesis that perceptions of threat increase levels of authoritarian predisposition. None of the correlations of the threat measures with authoritarianism was large and many were negative. Thus, the aggregate-level relationships between societal threat and indicators of authoritarianism do not result from a direct relationship between threat and individuals' levels of the trait. This does not mean, however, that we can reject the hypotheses of researchers like Fromm and Wilson, who argue that authoritarianism is shaped by the long-term consequences of threat and insecurity. These hypotheses are beyond the scope of the present study.

As we anticipated, threat appears to affect authoritarians by increasing the connection between their predispositions, and their political and social attitudes. This mechanism can account for the aggregate results showing effects of threat on authoritarian behaviors, without having to adopt a view of authoritarianism that expects possibly substantial short-term change in levels of the predisposition. From

the perspective adopted here, authoritarian predispositions may not change at all (although change is not precluded), but the manifestations of authoritarianism—intolerance, prejudice, punitiveness, and the like—will be more pronounced under conditions of threat.

Perhaps more importantly, it is not just that threat magnifies the effects of authoritarianism but that the observed consequences of authoritarianism depend heavily upon the presence of threat. In the absence of threat, we find little connection between authoritarian predispositions and the dependent variables. Thus, threat appears to be critical to the activation of authoritarianism. Any satisfactory explanation of authoritarianism must, therefore, account for the central role of threat. Although it might be possible to incorporate external threat into the Adorno et al. (1950) explanation of authoritarianism, their focus was on the role of childhood socialization and internal conflict. It is not obvious how this account could incorporate our findings. Threat was certainly not a central part of their explanation. It is even less clear how Altemeyer's (1988, 1996) social learning account could accommodate a central role for external threat. Altemeyer does argue that perceptions of a dangerous world help to *mediate* the effects of authoritarianism, but this is very different from the interactive effect of threat evidenced in our analysis. Moreover, there is nothing in Altemeyer's explanation to suggest why his acquired trait of authoritarianism should be activated only under conditions of threat.

What kind of explanations would fare better? In part the answer depends upon the types of threat to which authoritarianism is sensitive. Our analysis indicates that political threats are especially salient to authoritarians. The most substantial and consistent result was the pronounced interaction effect of authoritarianism with perceived ideological diversity. The more ideological distance authoritarians perceive between themselves and the two parties and the presidential candidates, the more prejudiced, intolerant, and punitive they become. We also found substantial effects for the interaction of authoritarianism with negative assessments of the presidential candidates. When people consider the candidates to be bereft of positive qualities, arousing feelings of anger and fear, the effect of authoritarian predispositions is greatly exacerbated. Should the political threats work in tandem, the magnitude of impact is very sobering indeed. For example, the influence that authoritarianism exerts on support for the death penalty is magnified by *both* perceptions of ideological diversity and fear and anger toward political leaders.

Economic threats also interacted with authoritarianism in several cases, but note that it is perception of a deteriorating *national* economy that is consequential. In sharp contrast, threats to *personal* economic conditions—whether unemployment or more general personal economic decline—appear to have no aggravating effect on authoritarians. Taken together, this pattern of results indicates that authoritarianism is activated and aggravated by threats to the political and social order but not by threats to personal well-being. We think this is a very critical finding. Authoritarianism is activated when there is a perception that the political

or social order is threatened. This is at odds with most previous discussions of the role of threat in authoritarianism, which have focused on direct personal threats.

So where does this line of reasoning lead us? It is no doubt premature to argue in favor of a particular conceptualization of authoritarianism on the basis of the analysis presented here. But we can single out what appear to be the most promising leads in previous discussions of authoritarianism.

We earlier noted that threat is central to Rokeach's (1960) theory of dogmatism. Rokeach argued that people develop closed-minded belief systems as a direct consequence of threat and anxiety. Although Rokeach did not explicitly consider the effects of transient threat on closed-mindedness, it is plausible that someone in possession of a rigid belief system that was generated to ward off threat would be most inclined to exhibit intolerance when faced with an anxiety-provoking situation.

One of Rokeach's central claims about belief systems is that they are organized around the distinction between belief and disbelief subsystems. Reactions to others are based, therefore, upon degrees of similarity-dissimilarity. Thus, intolerance is an outgrowth of the clash of beliefs. Although starting from a very different perspective, Duckitt (1989) has recently offered a comparable conceptualization of authoritarianism that is based on intense group identification, and the resulting "strain toward cohesion" (Duckitt, 1989, p. 63). Duckitt argues that group membership and conformity to group norms provide the basis for self-esteem. The more intense an individual's affective identification with their group, the more dedicated he or she is to its integrity and cohesion, resulting in conformity and conventionalism; respect for and submission to authority; and intolerance and punitiveness toward those who fail to conform to the ingroup norms (Duckitt, 1989, p. 70).

According to Duckitt, then, authoritarianism involves a heightened attachment to the ingroup and an associated rejection of the outgroup. This not only parallels Rokeach's distinction between belief and disbelief systems, it likewise marks out a central role for threat. Duckitt makes reference to the extensive literature in social psychology regarding how external threats can heighten attachment to the ingroup and rejection of outgroups. The parallel between Duckitt's focus on ingroup/outgroup distinctions and Rokeach's analysis of belief and disbelief systems may provide the basis for a more encompassing view of authoritarianism.

Another perspective that likewise highlights the role of threat in dynamics of authoritarianism focuses on the authoritarian's presumed need for order or structure in the world. Such arguments have been made in related, but somewhat different ways, by Gabennesch (1972), Kohn (1977), and Forbes (1985). Kohn emphasizes orientations toward conformity versus self-direction. His measure of child-rearing values—a direct antecedent of the measures used in this paper—taps the desire for conformity. Threat is thus defined in terms of challenge to this conformity. Forbes (1985) argues, likewise, that authoritarians are conformists, who tend to yield to the opinions of their ingroup in order to ward off the anxiety produced by the threat of "isolation and loneliness" (Forbes, 1985, p. 160). The authoritarian's anxiety is

apparently reduced by cleaving to the ingroup, uncritically submitting to the ingroup norms, insisting on the compliance of others, avoiding "disruptive contacts" with outgroup members, and exaggerating their differences.

Finally, Gabennesch argues that individuals with limited perspectives on the world around them—whether due to insularity, limited socialization, lack of education or experience—are left prone to a particular worldview that he calls "reification." Such individuals seem to understand social reality as "encompassing a superordinate normative dimension, an external locus where events are determined, where moral authority resides, and to which men must adapt themselves" (Gabennesch, 1972, p. 862–863). Thus, social institutions, customs and norms are understood not as human products, fashioned by humans and thus changeable by them, but rather as installed by God, nature, or the cosmos: the product of some external authority. Institutions and culture are thus accorded reverence and unquestioning obedience, being "superordinate and infused with transcendental authority" (Gabennesch, 1972, p. 864).

The connection between Gabennesch's notion of reification and authoritarianism as a worldview is readily apparent. Individuals who come to reify the social world are thereby inclined toward moral and cultural absolutism; to rigid conventionalism and unquestioning conformity to external authority; to disavow self-direction and to vilify the human. Most important for our purposes here, we imagine that those who uncritically submit to traditional moral authorities and the established social order are bound to judge harshly, and refuse to tolerate, individual deviance and diversity of public opinion. More generally, we can expect them to be threatened and disturbed by any events that challenge the self-evident truth of established beliefs and the integrity of the social order.

Although all of the perspectives we have mentioned here provide a way of integrating (with varying ease) the role of threat into a conceptualization of authoritarianism, there is one last result from our analysis that is more difficult to deal with, and hence more theoretically discriminating. It is not simply that people who are high in authoritarianism are aggravated by societal threat. Those who are low in authoritarianism are sensitive also, but they become *less* intolerant and punitive under conditions of threat. Unfortunately, it has been common in the authoritarianism literature to treat low authoritarianism as just the absence of the authoritarian trait (see Kohn, 1972). But the polarization effect we have identified here indicates that much more attention needs to be paid to *both* poles of this dimension.

Of the conceptualizations of authoritarianism that we have discussed here, only Duckitt (1989) explicitly considers both ends of the continuum. He defines authoritarianism as "the individual or group's conception of the relationship which should exist, that is, the appropriate or normative relationship, between the group and its individual members" (Duckitt, 1989, p. 71). From this definition he is able to provide a description of both ends of the authoritarianism dimension (Duckitt 1989, p. 71): "At one extreme would be the belief that the purely personal needs,

inclinations, and values of group members should be subordinated as completely as possible to the cohesion of the group and its members. At the other extreme would be the belief that the requirements of group cohesion should be subordinated as completely as possible to the autonomy and self-regulation of the individual member." This conceptualization thus defines "low" scores on authoritarianism in terms of a libertarian perspective on individual-group relations. The activation of this libertarian perspective by threat—just as the authoritarian perspective is activated by threat—would account for the polarization effects that we, and others, have observed. In addition, Duckitt's focus on authoritarianism as a group-related phenomenon leads naturally to the prediction that it is threats to group integrity, status, cohesion and/or identity that will activate authoritarianism, rather than threats to personal well-being.

The perspectives we have discussed here provide a different and enlightening way of looking at authoritarianism. Our analysis provides no way of clearly distinguishing among these viewpoints, but it does mark them out as some of the most fruitful avenues to pursue if we are to further our understanding of the origins and dynamics of authoritarianism. Each, given their shared concern with threat and anxiety, is capable of encompassing the empirical evidence regarding the interaction of authoritarian predispositions and threat. Duckitt's perspective appears, at this point, to most comfortably accommodate our findings regarding the importance of societal rather than personal threat, and regarding the activation of the libertarian position by threat. But it is far too soon to claim direct support for any one perspective based upon the evidence presented here. It is our hope that these findings regarding the central role of societal threat in activating authoritarianism will lead us to develop a more satisfactory formulation of one of the most enduring concepts in the social sciences, and to better account for some of the most important phenomena in social behavior.

APPENDIX: ADDITIONAL NES VARIABLES

The *moral conservatism* variable was constructed by summing four items measuring (1) the extent to which respondents believed that the "newer lifestyles" were contributing to the breakdown of our society; (2) the extent to which they believed that this country would have many fewer problems if there were more emphasis on traditional family ties; (3) the extent to which they disagreed that the world was always changing and we should adjust our view of moral behavior to those changes; and (4) the extent to which they disagreed with being more tolerant of people who chose to live according to their own moral standards, even if they were very different from their own.

Religiosity was measured by a simple additive scale created from five individual items tapping an array of religious attitudes and behaviors. These items measured whether respondents considered religion to be an important part of their

life; the extent to which they said their religion provided guidance in day-to-day living; and the frequency with which they prayed, read the Bible, and attended religious services.

Christian fundamentalist beliefs were measured by a dummy variable indicating a belief that the Bible was the actual word of God, "to be taken literally, word for word."

Political conservatism was measured by respondents' placement of their political views on a seven-point scale ranging from "extremely liberal" to "extremely conservative."

Finally, *party identification* was indicated by responses to the standard question "generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?" along with its follow-up probes gauging strength of partisanship (from professed partisans), or partisan "leaning" (from those who had denied partisanship). Thus the final scale ranged across five points, from a low of "0" for strong Democratic partisans, through to a high of "1" for strong Republicans.

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