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MEMO TO: NES Planning Committee and Board

FROM: Jon Krosnick, Department of Psychology,  
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RE: NES Pilot Study of Issue Position Centrality Measures

Over the years, the National Election Study has included a variety of questions measuring the centrality, ego-involvement, or importance of attitudes on political issues. There is no shortage of theory linking these variables to others of general interest, but few empirical tests of those notions have been conducted. The small amount of evidence we have suggests that this family of variables will be very helpful for understanding the part played by issue positions in political cognition. For example, attitude centrality seems to specify the strength of relationships between attitudes and other related attitudes (e.g., Smith, 1982), voting (e.g., Schuman and Presser, 1981), and distortions in perceptions of candidates' issue positions (e.g., Brent and Granberg, 1982). Attitude centrality also seems to specify preference for middle alternative on attitude questions (Schuman and Presser, 1981), Guttman scalability of a set of related attitudes (Smith, 1982), issues salience (Krosnick, 1983), and attitude polarization (Ibid.; Brent and Gransberg, 1982). However, these tests have been rather small in scale, some methodologically flawed, and have addressed few of the many hypotheses which can be studied. A

comprehensive incorporation of centrality in considering the role of issue positions in the voting decision has yet to be attempted.

One reason that such work has not been done is that few national sample data sets include useful measures of the centrality of the political attitudes measured. And, unfortunately, the measures included in past National Election Studies have important flaws. The measures used in 1970 produced highly skewed response distributions, and the measures in 1974 and 1976 were only somewhat useful since respondents ranked issues relative to one another instead of rating attitudes on an absolute scale. The 1980 measure had two important drawbacks. First, it is based upon a comparison of the respondent's self-placement on the issue to his or her placement of the Federal Government. If the respondent did not place the Federal Government for any reason, he or she was not asked the centrality question. Thus, some respondents who reported an attitude were not able to report its centrality. Second, the procedure of administration is time-consuming and demanding for the interviewer. He or she must examine the respondent's self-placement and government-placement on the issue, determine whether they are the same or different, and select the appropriate version of the centrality question to read next. An error may be made at any of these steps, of course. But despite the flaws inherent in these various measures, they have been the basis of some useful empirical study (e.g., Judd and Krosnick, 1982; Krosnick, 1983).

Because of attitude centrality's potential for enhancing our understanding of the roles of issue positions in political cognition, it seemed worthwhile to try to develop a more acceptable measure of

centrality to be included in the 1984 National Election Study. Such a measure was developed and included in the 1983 Pilot Study. It was phrased as follows:

How important is it to you that the Federal Government do what you think is best on this issue of \_\_\_\_\_? Is it extremely important, very important, somewhat important, or not important at all?

This question has three important advantages. First, it addresses political importance, which John Jackson's analyses of centrality measures included in the 1979 NES Pilot Study suggested is important. Second, it does not require respondents to rate the Federal Government's position on the issue. Third, it is quickly administered, particularly as compared to the 1980 version.

In the 1983 Pilot Study, this measure was asked in tandem with measures of two political activities; one addressing the Federal Government's role in achieving racial integration in schools and the second addressing the tradeoff between reducing federal spending and providing social services. The former was measured trichotomously and the latter was measured on a 7-point scale. Unfortunately, the centrality measure was not asked of respondents in the pretest if they failed to report the Federal Government's position on the issue. The questions asked were:

1. Some people say that the government in Washington should see to it that black children attend schools with white children. Others claim that this is not the federal government's business. Have you been concerned enough

about this question to favor one side or the other?  
 [If yes:] Do you think the government in Washington should see to it that white and black children go to the same schools, or should the government stay out of this, as it is none of its business?

2. This next question deals with government services and government spending. Some people think the government should provide fewer services even in areas such as health and education, in order to reduce spending. Suppose these people are at one end of a seven-point scale, at point 1. Others feel it is important for the government to provide fewer services even in areas such as health and education, in order to reduce spending. Suppose these people are at the other end of the seven-point scale, at point 7. And, of course, some other people have opinions somewhere in between at points, 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven't you thought much about this?

This memo reports a series of rough and ready analyses I performed to evaluate the validity and usefulness of this new centrality measure. The measure was evaluated according to the following criteria. First, it should produce a non-skewed distribution of respondents. Second, it should behave as other measures of centrality have and theory leads us to expect it should. Therefore, it should specify attitude polarization (Judd and Krosnick, 1982; Krosnick, 1983) and associations between attitudes and behavior (Peterson and Dutton, 1975) or related attitudes (Smith, 1982). And it should not specify over-time consistency of attitudes measured on continuous scales (Krosnick, 1983), nor should it be highly correlated with measures of education, political interest, or political involvement (Schuman and Presser, 1981).

### Results

Both implementations of the centrality measure provided useful distributions of respondents (see Table 1). Sizable proportions failed

to report attitudes on the issues at all, all of whom were not asked the centrality measure, of course. A few respondents who did report an attitude were not asked the centrality measure because they failed to report the federal government's position on the issue (4% for racial integration of schools, 19% for government spending). A few respondents (3%) said "don't know" to the government spending centrality measure; none said "don't know" to the integration centrality measure. But among the respondents who did answer the centrality measures, the distributions appear vaguely normal.

The only dissatisfactory characteristic of the distributions is that almost no respondents placed themselves in the lowest centrality category. It might have been useful to draw some respondents from the two middle categories to the lowest centrality category by rephrasing it, "not very important at all." Without an additional pretest, though, it might not be wise to make such a change for the 1984 NES. In some of the analyses that are reported below, the bottom two categories were collapsed into one.

Table 2 displays tau-B coefficients summarizing the associations between the centrality measures and measures of education, general political interest, and political participation (voting in the 1980 and 1982 elections). None of these relationships are very strong, as we expect. The two centrality measures are moderately correlated with each other ( $\text{Tau-B} = .27$ ), but not enough to question their discriminant validity. In general, then, these correlations are consistent with past conceptualizations of attitude centrality.

As Table 3 shows, the centrality measures specify attitude

polarization quite effectively, as theory and empirical research suggest they should. The government spending centrality measure was used to specify polarization on the 7-point attitude scale and on an 11-point item asking:

People have very different goals for the government in Washington. And even when people agree that the government should do something, they disagree about how much the government should do. I am going to read a list of goals for the government in Washington and I would like you to rate the amount of effort and resources that, in your opinion, the government should devote to each. To do this you will use a scale that runs from 0 to 10. "Zero" means that you think the government should put zero effort and resources in that goal; "ten" means that the government should invest the greatest amount of effort and resources possible in that goal. Of course, you can use any number between 0 and 10 in your answer. How much effort and resources, from 0 to 10, should the government in Washington put into making sure black children attend schools with white children?

The school integration centrality measure was used to specify polarization on the following 11-point item:

How much effort and resources, from 0 to 10, should the government in Washington put into reducing government spending even if it means cuts in services.

In the case of each of the three attitudes, the proportion of respondents at an extreme attitude position increases with increasing centrality. The proportion of respondents at the midpoint of the attitude scale decreases with increasing centrality. Thus, these measures of attitude centrality successfully specify attitude polarization as we expect they should.

I was able to test the hypothesis that centrality specifies over-time consistency of attitude self-reports with only the government spending item. This was so because the government spending item was asked in the 1982 NES and the racial integration item was not. The

percentages of respondents in each centrality group who gave a response to the government spending item in the 1983 Pilot within one point of the response they gave in 1982 are displayed in Table 4. As expected, there is no trend for the high centrality respondents to give a consistent response more often than the low centrality respondents. In fact, a trend is present in these data running slightly in the opposite direction. This finding also conforms to our expectations (Krosnick, 1983).

Finally, I examined the hypothesis that the centrality measure should specify the relationships between an attitude and related attitudes, candidate preference, and predicted vote in trial heats. Tables 5 and 6 display statistics summarizing these tests. Presented there are unstandardized regression coefficients estimating the effect of the attitudes on measure of other attitudes; unstandardized coefficients were computed because standardized coefficients will differ between groups if the variances of the attitudes differ, as Table 3 demonstrates they do.

Table 5 shows that the association between one's attitude on integration and one's opinion on how much government effort should be devoted to ensuring racial integration in schools increases as centrality increases, as expected. The association between one's attitude on racial integration and one's liberal/conservative ideology self-rating increases as the attitude's centrality increases, as well. This is consistent with the notion that attitudes reflect basic values more strongly as the attitude's centrality increases.

Next, we turn to candidate evaluations. Here we see that one's

attitude on racial integration predicts evaluations of Walter Mondale better as centrality increases. However, centrality does not specify the relationship between racial integration attitude and evaluations of Ronald Reagan. This pattern of results seems reasonable in light of the degree to which the candidates have taken clear stands on the issue. Reagan has not taken a clear stand, so we would not expect individuals for whom the issue is more important to weigh related attitudes more heavily in deriving evaluations. In contrast, Mondale has taken a clearer stand on the issue, which therefore might reasonably serve as a basis upon which to evaluate him. Finally, in a trial heat between these candidates, one's attitude is more strongly related to one's vote prediction as the centrality of the attitude increases.

Table 6 shows the comparable statistics for attitudes toward cutting government spending. Again, the association between this attitude and a related attitude and one's ideology self-rating increase as the centrality of the attitude increases. However, while centrality specifies the association between the attitude and evaluations of Reagan, it does not specify the degree to which Mondale evaluations are based upon that attitude. This seems reasonable again because Reagan has taken a strong public stand on the issue, whereas Mondale has not. Again, predicted vote in the trial heat is more a reflection of one's attitude on reducing government spending as the centrality of the attitude increases.

#### Summary

In sum, the new centrality measure behaved as we expected it to on



the basis of theory and empirical evidence. It therefore seems to validly measure the construct of interest. Unfortunately, I have no information with which to evaluate the item's reliability, which would certainly be desirable. Nonetheless, because it would not consume much time in the interview schedule, I would like to recommend that it be appended to each issue position question asked in the 1984 NES. It seems best that, in contrast to the 1983 NES pilot study procedure, respondents be asked the centrality of an attitude regardless of whether they rated the federal government's position on the issue or not. Inclusion of this item thusly will provide a powerful tool for a fresh investigation of the importance of voters' political attitudes.

## References

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Table 1

## Distributions of Centrality Measures

| <u>Response</u>   | <u>Racial Integration</u> | <u>Government Spending</u> |
|---|---------------------------|----------------------------|
| Extremely important   | 7%                        | 18%                        |
| Very important  | 17%                       | 30%                        |
| Somewhat important  | 21%                       | 23%                        |
| Not important at all  | 5%                        | 1%                         |
| Don't know  | 0%                        | 3%                         |
| Don't know federal<br>government's position<br>on the issue | 4%                        | 1%                         |
| No opinion on the issue                                     | 46%                       | 24%                        |
| Total   | 100%<br>(N=271)           | 100%<br>(N=278)            |

Table 2

Tau-Bs Measuring the Association Among Centrality Measures and  
Between Them and Measures of Education, Political Interest,  
and Political Participation

|                                   | Racial<br>Integration<br>Centrality<br>----- | Government<br>Spending<br>Centrality<br>----- |
|-----------------------------------|--|---|
| Education                         | .05 (N=135)                                  | .12*(N=203)                                   |
| Interest in 1982<br>campaign      | .02 (N=135)                                  | .18*(N=202)                                   |
| Follow government<br>affairs      | .01 (N=135)                                  | .15*(N=203)                                   |
| Vote in 1980                      | .01 (N=129)                                  | .09*(N=200)                                   |
| Vote in 1982                      | .04 (N=135)                                  | .18*(N=203)                                   |
| Government spending<br>centrality | .27*(N=115)                                  |   |

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\*Coefficient significant (p<.05). Algebraic signs are omitted  
from coefficients.

Table 3

## Specification of Attitude Polarization by Attitude Centrality

| Respose on<br>Attitude<br>Scale | Gov't Spending |             |             | Gov't Action<br>to Reduce<br>Spending |             |             | Gov't Action<br>to Assure<br>Integration |             |             |
|---------------------------------|----------------|-------------|-------------|---------------------------------------|-------------|-------------|--|-------------|-------------|
|                                 | High<br>Cent   | Med<br>Cent | Low<br>Cent | High<br>Cent                          | Med<br>Cent | Low<br>Cent | High<br>Cent                             | Med<br>Cent | Low<br>Cent |
| Extremes                        | 42%            | 19%         | 14%         | 44%                                   | 17%         | 20%         | 74%                                      | 49%         | 29%         |
| In Btw.                         | 48             | 45          | 64          | 38                                    | 56          | 52          | 15                                       | 35          | 48          |
| Midpoint                        | 10             | 17          | 22          | 18                                    | 27          | 28          | 11                                       | 16          | 23          |
| Total                           | 100%           | 100%        | 100%        | 100%                                  | 100%        | 100%        | 100%                                     | 100%        | 100%        |
| N                               | 50             | 84          | 69          | 50                                    | 84          | 69          | 19                                       | 45          | 70          |

Table 4

Specification of Over-Time Consistency of Attitude Self-Reports  
on Government Spending Item by Attitude Centrality

| Centrality<br>-----                | N<br>--- | Percent of Respondents<br>Providing 1983 Response<br>Within 1 Point of 1982<br>Response<br>----- |
|------------------------------------|----------|--|
| Extremely Central                  | 47       | 62 %   |
| Very Central                       | 79       | 65 %   |
| Somewhat and not at<br>all central | 61       | 66 %   |

Table 5

Specification of Attitude Constraint by Centrality for  
Racial Integration Attitude

|  | Racial Integration Centrality |                          |   |
|--|-------------------------------|--------------------------|---|
|  | Extremely<br>Central<br>----- | Very<br>Central<br>----- | Somewhat and not<br>at all Central<br>----- |
| Effect of racial<br>integration attitude on:                                 |                               |                          |   |
| Related Attitudes<br>-----   |                               |                          |   |
| Attitude on gov't<br>Effort Devoted to<br>Ensuring Integration<br>of Schools | 1.92*                         | 1.40                     | .80*  |
| Liberal/Conservative<br>Self-Reporting Scale                                 | .50*                          | .13                      | .22   |
| Candidate Evaluation<br>-----  |                               |                          |   |
| Reagan Thermometer   | 3.38                          | 4.18                     | 3.00  |
| Mondale Thermometer  | -4.90                         | -3.33                    | -3.01                                       |
| Trial Heat<br>-----  |                               |                          |   |
| Reagan vs. Mondale   | .46                           | .30                      | .22   |

\*Coefficient is significantly or nearly significantly different from that of the comparable very central group.

Table 6

|  | Government Spending Centrality |                 |                                    |
|--|--------------------------------|-----------------|------------------------------------|
|  | Extremely<br>Central           | Very<br>Central | Somewhat and not<br>at all central |
| Effect of reducing government<br>spending attitude on: |                                |                 |                                    |
| Related Attitudes                                      |                                |                 |                                    |
| Attitude on gov't effort<br>to reduce spending         | .86                            | .54             | .30                                |
| Liberal/conservative<br>self-rating scale              | -.35                           | -.23            | -.08                               |
| Candidate Evaluations                                  |                                |                 |                                    |
| Reagan Thermometer                                     | -7.72                          | -6.60           | -1.99*                             |
| Mondale Thermometer                                    | 4.66                           | 2.14            | 4.28                               |
| Trial Heat   |                                |                 |                                    |
| Reagan vs. Mondale                                     | .60*                           | .31             | .41                                |

\*Coefficient is significantly or nearly significantly different from that of the comparable very central group.