

October 19, 1983

To: NES Board of Overseers  
1984 Planning Committee

From: Stanley Feldman

Subject: Report on Values in the 1983 Pilot Study

The pilot study contained items designed to tap three basic values: equality, economic individualism, and support for the free enterprise system. I will begin this report by discussing the basic characteristics of the scales and items. After gaining some sense about how well the items measure the underlying constructs, I will go on to examine the impact of the three constructed scales on various aspects of political opinion and candidate preference.

### Scale Properties

So that you do not have to go looking for your codebooks let me begin by listing the items included for each scale. All of the items had response categories running from agree strongly to disagree strongly.

#### Equality:

V2169 If people were treated more equally in this country we would have many fewer problems. (V3120)

V2172 We should give up on the goal of equality since people are so different to begin with. (V3122)

V2175 Our society should do whatever is necessary to make sure that everyone has an equal opportunity to succeed. (V3123)

V2178 Some people are just better cut out than others for important positions in society. (V3121)

V2250 Some people are better at running things and should be allowed to do so. (V3124)

V2253 All kinds of people should have an equal say in running this country, not just those who are successful. (Not in Wave II)

V2256 One of the big problems in this country is that we don't give everyone an equal chance. (V3125)

#### Economic Individualism:

V2170 Any person who is willing to work hard has a good chance of succeeding.

V2173 Hard work offers little guarantee of success.

V2176 Most people who don't get ahead should not blame the system; they really have only themselves to blame.

V2251 Even if people are ambitious they often cannot succeed.

V2254 If people work hard they almost always get what they want.

V2257 Even if people try hard they often cannot reach their goals.

Free Enterprise:

V2171 The less government gets involved with business and the economy, the better off this country will be.

V2174 There are many goods and services that would never be available to ordinary people without government intervention.

V2177 There should be no government interference with business and trade.

V2252 Putting government regulations on business does not endanger personal freedom.

V2255 Government intervention leads to too much red tape and too many problems.

V2258 Contrary to what some people think, a free enterprise system is not necessary for our form of government to survive.

The frequencies for these items show that a relatively small number of people were unable to register a position on any of the questions. As might be expected given the nature of the values being examined here, many of the item distributions are skewed. The distributions seem to be most badly skewed when the question asks the respondent to agree with a basic value. This underlines the importance of balancing the scales with equal numbers of agree and disagree items.

The top part of Table 1 shows the results of item analyses and reliability estimates for the three sets of items. The analysis for the equality items in wave I was replicated for the set of questions included in wave II. The best results for the full set of items is obtained for economic individualism. The mean inter-item  $r$  is .21 and the estimate of reliability (coefficient alpha) is .62. By deleting item V2251 the mean inter-item  $r$  increases somewhat to .25. The entire set of free enterprise items has a reliability of only .56 but deleting V2174 and V2258 increases the inter-item  $r$  to .30 and the reliability to .62. The equality items show the poorest results for the overall set of items. The mean inter-item  $r$  is .11 for the wave I questions and .14 for wave II. The reliabilities are correspondingly low. Three items out of the set do produce evidence of scale clustering: V2169/V3120, V2175/V3123, and V2256/V3125. In addition, V2172/V3122 correlates more strongly with the other three items in wave II than in wave I. The mean inter-item correlations are quite high for these three items in both waves ( $> .3$ ), although the

reliability estimates are still low because of the small number of items that scale.

Given the low reliability of the equality items and the possible close relationship between equality and economic individualism the combined set of items for these two values were examined further. First, an exploratory factor analysis was performed on the equality items. This produced two distinct factors with V2178 and V2250 forming a dimension only slightly related to the other items. (This is very similar to the results obtained with an initial pretest of these items. Those questions dealing with inequality of traits or inherent differences between people seemed to tap a dimension different from the amount of equality that is desired in society.) Based on these results, a confirmatory factor analysis was run using Joreskog's LISREL program. As shown in Figure 1, the model contains three unobserved factors labeled equality, differences and individualism. The results of the first LISREL analysis were examined for evidence of items correlated with latent factors other than the one initially specified. No such evidence was found. At the same time evidence of correlated error terms was also examined. Two significant correlations were detected for the set of individualism items.

The final model produces an excellent fit and strongly supports the three factor model. The two equality constructs are only slightly correlated ( $r = .2$ ) and, even correcting for measurement error, equality and individualism are only moderately correlated ( $r = -.32$ ). The results also elaborate the initial item analyses. One of the reasons the full set of equality items do not produce a highly reliable scale is that two of the items tap a very distinct dimension. Of the remaining five items, two are quite good indicators of equality (V2169 and V2256), one is a fair indicator (V2175), and the other two are very poor. Of the individualism set, V2170 is clearly the best indicator. On the other hand, V2251 is only weakly correlated with the underlying construct and V2257 is suspect because of its correlated measurement errors with two other indicators (including a negative correlation with V2170).

Since the equality items were included on both waves of the pilot study it is possible to examine them in even more detail. Two important questions can be dealt with: how stable is the commitment to equality over time, and to what degree are the error components for the equality items correlated over time? A substantial correlated error would suggest that people are responding to a particular question wording instead of the underlying value. To deal with this the model shown in Figure 2 was estimated using the LISREL program. For this part of the analysis the four best indicators of equality were used. The correlations between the indicators and the construct are very similar to the previous estimates. There does not seem to be a big problem with autocorrelated error terms. Two are very small and the worst produced only a modest correlation over the two waves. With random and correlated error factors taken into account the estimated correlation of equality over the two waves is .86. This is quite impressive given that the model removes any effect of people responding to the same question wording across the two waves.

Some conclusions can now be drawn about the quality of the items included in the pilot study to measure the three values. Most generally, the results to this point show that it is very possible to develop items that are good indicators of these values. Each set of questions contains several that are quite good indicators of that value. As a whole, however, the indicators do not produce scales that are as reliable as we would like. Clearly, additional work on indicator construction would be useful. It is important to remember, however, that we are setting very difficult standards for these items. By traditional psychometric standards these are not at all bad items. In the development of psychological scales it is usually expected that upwards of 12 to 15 items will be needed to form a reliable scale. In such cases each indicator needs to be only moderately correlated with the construct. Since we are constraining ourselves to develop fairly short scales the items must be much more highly correlated with the construct to produce high levels of reliability. This is a much more difficult task. We may have to make difficult tradeoffs between scale length and reliability.

### Correlates of the Three Values

In order to examine the correlates of equality, economic individualism and free enterprise, additive scales were constructed from the best indicators as shown by the preceding analysis. For economic individualism V2170, V2173, V2176, V2254 and V2257 were used. For free enterprise V2171, V2177, V2252, and V2255 were the acceptable items. For equality I took advantage of the two waves of the pilot study to produce a more reliable scale for further investigation. Specifically, V2169, V2175, V2256, V3120, V3123, and V3125 were combined to form one equality scale. This uses the three best equality items twice in the overall scale. The mean inter-item correlation for the six items is almost exactly the same as the inter-item correlations for each of the three items in the two waves. This effectively simulates a six item scale with three additional indicators of equality as good as the best three in the pilot study (coefficient alpha for the six item equality scale is .72). All of the scales were formed in a simple additive manner scored so that they range from +1 (most equalitarian, most individualistic, and most supportive of free enterprise) to -1. A simple additive format was used for two reasons. First, it is the most common approach to the task of scale construction. A somewhat more reliable scale could be generated, however, by weighting the items appropriately. Second, this scoring produces scales in exactly the same easily interpretable units. Each varies from -1 to +1 with 0 being the score that would occur if a respondent was neutral toward all of the items in the scale.

The bottom part of Table 1 gives the distributions of the scales (for comparison, the distributions for equality scales formed from just wave I and wave II items are also shown). All of the scales are skewed as should be expected given the nature of the values being measured here. The skewness is least obvious for free enterprise and most pronounced for equality. The extreme skewness of the equality scale is probably due in part to fact that the items that make up this

scale are all worded in the agree direction (for an equalitarian response). Response set is most likely a factor here. Even with the skewed distributions both equality and individualism show satisfactory levels of variation; the standard deviation for free enterprise is, by comparison, significantly lower.

Part I of Table 2 shows the intercorrelations of the three scales and the correlations of the scales with party identification and liberal-conservative self-identification (high scores for party identification are democratic responses and high scores for ideology are liberal). The three value scales are relatively independent; the correlation of equality and individualism is just slightly lower than the estimate obtained previously from the LISREL factor model. Free enterprise is virtually uncorrelated with the other two values. Equality and individualism are somewhat correlated with party identification and ideological identification in the expected direction. Most significantly, this shows that party and ideological identifications do not overlap so completely with these values as to capture a significant amount of the political impact these values may have.

The second wave of the pilot study also included sets of items designed to equality toward blacks and toward women, and individualism for blacks and for women. The correlations between the abstract values and the group specific values (part II of Table 2) are generally substantial. If they are corrected for unreliability the correlations between the general value of equality and the group values exceed .6 as does the corrected correlation between general individualism and individualism for women. The one exception is the relatively low correlation between individualism and black individualism. In three of the four cases examined here the values expressed at the group level appear to be substantially constrained by the more general forms of the values. On the other hand, it is clear that expressions equality for blacks or women are not identical to commitments to the general value of equality in society.

It is also necessary to consider the possibility that responses to these scales are largely a function of affect toward salient clusters of groups in society. An exploratory factor analysis was therefore performed on the group feeling thermometers contained in the first wave of the pilot study. Three clear factors emerged: FEMINISTS--feminists, women's liberation, and groups opposed to abortion; ADVANTAGED--white people, men, rich people, and business people; and UNDERDOGS--poor people, civil rights leaders, people on welfare, black people, and Chicanos. For each of these factors additive scales were constructed and correlated with the three values scales (part III of Table 2). There are moderate correlations only for equality, with those most equalitarian being more positive toward feminist and underdog groups. These values are thus not substantially contaminated by group affect.

Finally, the value scales were correlated with a number of social background and demographic factors (see part IV of Table 2). There are a few interesting patterns revealed here although none of the correlations are particularly high. Increasing income is associated

with more individualistic and less equalitarian values. Blacks are more equalitarian than whites although they seem to be just as individualistic. Women, on the other hand are both more equalitarian and less individualistic than men. This may indicate that the "gender gap" has at least some of its source in differences between men and women in basic values. The correlations between the values and race and gender raise the more general issue of the contribution of values to long standing social cleavages in society. Although these correlations are not large, they show that we do need to be careful to control for certain social and demographic factors (as well as party and ideological identifications) when examining the impact of equality and economic individualism.

### Values and Issue Positions

One of the obvious places to begin to look for the political impact of basic values is the preferences people hold on public policy issues. The combination of the data from the 1982 National Election Study along with the additional information collected in the pilot study provides a wealth of preference items to consider. One large pool of items involves respondents' positions on government spending for a number of social and economic problems. Those used in the forthcoming analysis are: the environment (V310), health (V311), big cities (V312), crime (V313), drug addition (V314), education (V315), blacks (V316), social security (V320), student loans (V322), unemployment compensation (V323), and the handicapped (V324). Two items were combined to form a single index of support for welfare spending: V319 and V321. Finally, the spending question on the military and defense was combined with the seven point scale version of defense spending (V407). A series of ten items in the second wave of the pilot study asked the respondents to rate on a scale from 0 to 10 the amount of effort and resources the government should devote to a series of goals. An analysis of these items showed that they were very highly intercorrelated and seemed to be tapping a single dimension (with the exception of the goal of reducing spending). This could have been the result of people responding to the general structure of the questions (how much effort and resources should the government devote to solving problems) instead of the particular goal specified. Or, this could have resulted from the generation of a strong response set. In any case, analysis of all ten questions separately would have been pointless. Rather than combining them into a single scale I decided to form three separate scales defined by the general nature of the goals cited: social class related (V3181, V3182, and V3184), those related to the status of blacks (V3183, V3186, and V3190), and those relating to women (V3185, V3187, and V3189). A number of the traditional seven point scales included on the 1982 study were also used: minority aid (V415), guaranteed jobs and living standards (V425), women's equality (V435), and government services (V443). Finally, questions asking whether the government in Washington should continue to have primary responsibility for social and economic problems (V458) and the combination of three items (V459, V460, and V461) relating to government involvement in various areas were also examined.

Each of the issue items (or combinations of items) was coded so

that 1 is the most extreme "liberal" response possible and 0 is the most "conservative" response. As was noted previously, the three value scales were coded from -1 to +1. In order to make the interpretation of the coefficients as uniform as possible, party identification and ideological self-identification were also coded on a -1 to +1 scale with +1 indicating a strong democrat and an extreme liberal. In order to minimize the number of cases lost through missing data, those who could not place themselves on the liberal-conservative scale were coded along with the moderates (at 0). In a larger data set this would not be necessary (there is very clearly a difference between those who call themselves moderates and those who cannot place themselves.) A comparison with results done without such a coding shows that the result is a very slight underestimate of the impact of ideological identification.

Table 3 presents the results of regressing each of the issue preferences on the three values, the two identifications, income, education, gender, and race. In order to make the table somewhat less cumbersome the coefficients for the latter four variables are not presented; the impact they have on the issue positions is not central to this report. (In a number of cases these variables do have substantial effects on the dependent variables. If anyone is curious I'll be happy to pass along those results.) All of the equations were estimated by OLS. Please keep in mind the potential effects of random measurement error on the coefficient estimates.

There are several major patterns evident in the reported coefficients. First, the free enterprise scale does not appear as a significant predictor in any of the equations. In some cases it comes close, but given the number of issues considered here its failure is quite striking. The results are just the opposite for the equality scale. It is very clearly the most consistent predictor of a wide variety of issues of the independent variables considered here. What is impressive is the wide range of issues in which equality is a significant predictor. Of the two political identifications, ideological self-placement has the most pronounced effect on issue preferences. Its largest coefficients suggest that it is major element in the debate over the role of the federal government. Party identification, on the other hand, has a very limited impact on the issues examined here.

From these results it seems as if economic individualism also has a very limited role in the prediction of issue preferences: it appears in five of the equations (four of them having to do with basic issues of economic policy and redistribution). Part of the explanation for the lack of impact of economic individualism may be the additive form of the models estimated. Given that equality and individualism are only slightly correlated, interaction effects between these two values are a very real possibility. It makes a very big difference if a person is nonindividualistic and equalitarian or nonindividualistic and nonequalitarian. Unfortunately, a sample of 314 people is not a very good vehicle for examining interaction effects (or nonlinearities, for that matter). In order to get some handle on this problem a new term was added to the equations estimated in Table 3 that permitted the effect of individualism to vary between those who

were equalitarian and nonequalitarian. Although the standard errors went up appreciably in these new estimates (due to sample size and multicollinearity), the effect of individualism was more apparent in several equations. In most cases it appears that variations in individualism are particularly consequential among those low in equality. Given the problematic nature of these estimates I will not present another set of 22 regression estimates for you to pour over. It is sufficient to note that there is the real possibility that substantial interaction effects among equality and individualism may be detected in a data set with a larger number of cases.

The results of this analysis suggest that the values of equality and economic individualism may play an important role in the development of people's positions on public policy questions. (There is no obvious way to test the possibility that the values are a function of people's issue preferences using these data.) The results presented here may also be conservative estimates of the impact of the values if ideological identification is to some extent a function of equality and individualism. In this case, ideological identification would be functioning as an intervening variable between values and issue positions.

### Evaluations of Government Performance

Values may affect people's evaluations of public policy issues not only through their issue positions but also in terms of their retrospective evaluations of government performance. Six retrospective evaluations of Reagan's job performance were included on the 1982 Election Study: inflation (V336), unemployment (V338), taxes (V374), nuclear arms (V455), the environment (V456), and the budget (V457). Each of these variables was regressed on the same set of variables used in the analysis of the issue positions. The results are presented in Table 4. As before, each dependent variable is coded 0-1, with 1 indicating strongest approval and 0 strongest disapproval.

Not too surprisingly, party identification has a pronounced effect on evaluations of Reagan's job performance (except for nuclear arms). What is interesting is the substantial impact of individualism on five of the six evaluations and the strong impact of equality on two (and a statistically significant impact on a third). All of the economic judgments and nuclear arms are strongly influenced by respondents' levels of equalitarianism, and evaluations of Reagan's performance on inflation, taxes, and especially the environment show a substantial effect of individualism. These results strongly suggest that people use these two basic values as standards in their evaluation of government performance in a number of areas.

The last equation in Table 4 demonstrates the pervasive impact that values may have on the perception of social conditions. The dependent variable is people's perceptions of the state of the national economy--whether it has improved or worsened (V2113). Although the equation does not explain a great deal of variance in these perceptions, equalitarianism, individualism, and party identification yield significant coefficients. Thus, Republicans, those who are more individualistic and those who are less equalitarian

are more likely to report that the economy has been improving.

### The Impact of Values on Candidate Evaluations

A last, but certainly not least, set of dependent variables to consider is candidate evaluation. In the absence of a salient election context, candidate evaluation serves as an excellent vehicle for examining the impact of values on the process of candidate choice. As research has recently shown, candidate evaluations predict vote choice to a high degree of accuracy and seem to do a good job of capturing the dynamics of the choice process. Moreover, candidate evaluations in the form of feeling thermometers are more appropriate dependent variables in regression analysis than is vote choice itself. The first wave of the pilot study contained feeling thermometer items for Reagan, Glenn, Kennedy, and Mondale. In addition to predicting these simple evaluations, choice preferences were simulated by taking differences among pairs of evaluations. This was done for Reagan and each of the three Democrats, and for each pair of the Democrats. Table 5 provides the results of regressing each of these variables on the same set of values, identifications, and demographics used in the previous analyses. As before, all of the equations were estimated by OLS. Note that the dependent variables for the simple preferences range from 0 to 100 while the range is -100 to +100 for the preference variables.

Looking first at the simple evaluations, the most distinctive results occur in the case of evaluations of Reagan. Both equality and individualism have quite substantial effects on respondents' evaluations of Reagan even holding party and ideological identifications constant. In fact, the unstandardized coefficients for these two values are almost as large as the unstandardized coefficient for party identification. The impact of values on evaluations of the Democrats is clearly more limited with only evaluations of Kennedy showing the effects of equality and free enterprise. There are several possible reasons why evaluations of Reagan are more closely tied to values than the three Democrats. Reagan has been a particularly ideological president and this may have increased the extent to which he is evaluated in terms of basic values. This would also help to explain why values seem to impact only on evaluations of Kennedy among these Democrats: more than the other two he has been associated with a clear set of liberal policies. A second possible explanation is familiarity. Until people know where a public figure stands in a number of respects values are unlikely to be very important in the evaluation process. Finally, an incumbent president may be more likely to be evaluated in terms of basic values because his actions in office have been viewed in those terms. The results presented in Table 4 showed that retrospective evaluations of Reagan's performance are heavily influenced by equality and economic individualism. The only way to compare the merits of these explanations is to gather data for a number of candidates across a variety of contexts.

The effects of values on candidate preference are quite apparent from the simulated Reagan-Democrat pairings in Table 5. The coefficients indicate that both equality and individualism would play

important roles in Reagan-Glenn and Reagan-Mondale contests, and that equality would strongly influence the outcome of a Reagan-Kennedy election. Several of the coefficients for these two values in the preference equations are quite large, especially considering that party and ideological identifications are also included in the estimated equations.

It is possible to examine the manner in which values influence candidate evaluation in much more detail for Reagan by incorporating into the analysis more proximal determinants of evaluations. For this analysis six new variables were constructed. An overall measure of retrospective judgments of Reagan's performance was constructed by summing the six performance items examined previously. An issue proximity measure was constructed by summing the absolute values of the differences between the respondents' positions on five issues and their perceptions of Reagan's position. The five issues used are defense spending (V407, V408), aid to minorities (V415, V416), guaranteed jobs and living standards (V425, V426), women's rights (V435, V436), and government services (V443, V444). Separate measures of positive (hopeful and proud) and negative (angry and afraid) emotions were created as were two trait measures: competence/leadership and integrity. All were scored 0 to 1 with 1 indicating high performance evaluations and high issue proximity, strong expressions of positive and negative emotions, and endorsements of Reagan's competence and integrity.

A model was constructed that posited performance, issue proximity, competence, integrity, and emotions as immediate determinants of evaluations. Values (equality and individualism), party and ideological identifications, income, education, race, and gender were specified to be one step back in the evaluation process. Thus, in addition to estimating the effects of all of these variables on evaluations of Reagan, the effects of values, identifications, and demographics on the proximal determinants must also be evaluated. All of this leads to estimation problems, however. The proximal determinants of evaluations may be strongly determined themselves by evaluations of Reagan. Moreover, the proximal determinants are very likely reciprocally related to each other. To overcome these estimation problems, the entire system of equations was estimated using full information maximum likelihood procedures (employing the LISREL program). This accomplishes two things. First, the set of values, identifications, and demographics are taken as exogenous to the proximal determinants and evaluation and are used as instrumental variables in a two stage estimation procedure. This produces consistent estimates of the effects of the proximal determinants on evaluations without the bias that would be created by the simultaneous effects of evaluations. Second, estimating the several equations simultaneously allows for the specification of correlations among the error terms for the equations involving the prediction of the proximal variables. Although it would be desirable to specify the nature of the relationships among these variables, employing the correlated error approach will produce consistent estimates of the impact of the values, identifications, and demographics on the proximal variables. (Since the entire model is just identified, the maximum likelihood estimates will be identical to two-stage least squares estimates.)

The first column of Table 6 provides the results of the Reagan evaluation equation. The  $R^2$  for this equation is .72 which is probably approaching the reliability of the feeling thermometer. The coefficients show that evaluations of Reagan are primarily determined by evaluations of his performance, integrity, and competence, and positive emotions about him. Negative emotions and issue proximity seem not to play a significant role in the evaluation process. With the proximal determinants held constant, only ideological identification have a barely significant effect on evaluations of Reagan. We need to look now at the equations for the proximal variables to see how the exogenous variables impact on evaluations of Reagan (see Table 7).

The most obvious feature of these estimates is that party identification has a pronounced effect on all of the proximal variables. This is of course not terribly surprising. What is more interesting are the substantial effects of equality and individualism on many of the dependent variables. Equality has significant effects on retrospective performance evaluations, issue proximity, competence, and negative emotions. Individualism appears in the equations for performance, issue proximity, and positive emotions, and especially strongly in the equations of competence and integrity. In several of the equations one of the two values has a coefficient rivalling that of party identification. This analysis shows the different ways in which equality and individualism influence evaluations of Reagan. Equality is most important in evaluations of Reagan's performance and in issue proximity--it is very much policy based. Individualism, on the other hand, is more influential in people's perceptions of Reagan's competence and integrity. This value seems to have more of a bearing on image than on policy.

It is also possible to compute the total effects of this set of variables on evaluations of Reagan (total effects are direct plus indirect effects). These coefficients are shown in both standardized and unstandardized terms in the second column of Table 6. In standardized units, the largest effects are registered for party identification, integrity and positive emotions. Both equality and individualism show substantial total effects on evaluations. In unstandardized units, the coefficients for the total effects of equality and individualism are only slightly lower than the total effects of party and ideological identifications.

## Conclusions

For those of you who made it through all of this analysis (and those who skipped immediately to the conclusion), let me briefly summarize the major findings. Item analysis and factor analysis shows that all three of the values included in the pilot study can be measured with standard attitude items. The pilot study contains some very good indicators of equality, individualism, and support for free enterprise. Using scales constructed from the items included in the pilot study, the accumulated evidence strongly suggests that equality and economic individualism have substantial effects on political opinion and candidate preferences. This is reflected in people's

preferences on public policy issues, their retrospective assessments of the performance of the President, and overall evaluations of the incumbent President and at least some challengers. The effects of equality and individualism on evaluations of Reagan are widespread, including substantial influences on trait evaluations and emotional reactions. The results for free enterprise are consistently negative, however. With only a few rare exceptions, there was no real evidence that support for the free enterprise system--at least as measured here--has a significant effect political preferences or evaluations.

The results of the pilot study do indicate that we could profit by doing additional work on item development for equality and individualism. Although the evidence presented here shows that scales built just from the best items already developed provide a sound basis for examining the impact of these two values, more reliable scales would clearly be desirable. However, it must be recognized that if a decision is made to include fairly short scales (4 to 6 items) in future surveys highly reliable scales will not be the result. For example, by psychometric standards a set of items designed to measure a particular trait are considered "good" if the inter-item correlations average about .25. Yet even in this case, a four item scale would have a reliability of .57, a six item scale of .66, and a ten item scale would have a reliability of .77. If the average inter-item correlations are increased to .3 the reliability of a four item scale would be just .63, and it would take ten items to reach the .8 level. Clearly, except in rare cases, highly reliable scales will not be produced with relatively small numbers of items. Again, let me emphasize that the results of the pilot study show that even short scales of equality and individualism can yield interesting findings.

Based on all of this I suggest that there is good reason to include measures of equality and economic individualism on the forthcoming election study. If a choice needs to be made between the two values, equality shows more consistent effects across a range of issues and evaluations. However, the results of the candidate evaluation equations demonstrated that individualism can be a most powerful determinant of evaluations of political candidates. Moreover, there is some evidence from the pilot study that there may be significant interaction effects between equality and individualism. A final reason to include measures of both values is to allow us to begin to answer a critical question: how do different values influence the development of a range of political attitudes and opinions?

TABLE 1  
SCALE PROPERTIES

| EQUALITY<br>WAVE 1 |                         | EQUALITY<br>WAVE 2 |                         | INDIVIDUALISM |                         | FREE<br>ENTERPRISE |                         |
|--------------------|-------------------------|--------------------|-------------------------|---------------|-------------------------|--------------------|-------------------------|
| Item               | Item-<br>Total<br>Corr. | Item               | Item-<br>Total<br>Corr. | Item          | Item-<br>Total<br>Corr. | Item               | Item-<br>Total<br>Corr. |
| V2169              | .37                     | V3120              | .44                     | V2170         | .51                     | V2171              | .46                     |
| V2172              | .14                     | V3121              | .14                     | V2173         | .34                     | V2174              | .20                     |
| V2175              | .22                     | V3122              | .32                     | V2176         | .31                     | V2177              | .32                     |
| V2178              | .15                     | V3123              | .27                     | V2251         | .19                     | V2252              | .31                     |
| V2250              | .13                     | V3124              | .13                     | V2254         | .39                     | V2255              | .43                     |
| V2253              | .17                     | V3125              | .24                     | V2257         | .36                     | V2258              | .10                     |
| V2256              | .35                     |                    |                         |               |                         |                    |                         |
|                    | $\bar{r} = .11$         |                    | $\bar{r} = .14$         |               | $\bar{r} = .21$         |                    | $\bar{r} = .18$         |
|                    | alpha= .47              |                    | alpha= .49              |               | alpha= .62              |                    | alpha= .56              |
| V2169              | .44                     | V3120              | .53                     | V2170         | .53                     | V2171              | .46                     |
| V2175              | .30                     | V3122              | .25                     | V2173         | .35                     | V2177              | .40                     |
| V2256              | .43                     | V3123              | .39                     | V2176         | .34                     | V2252              | .29                     |
|                    |                         | V3125              | .36                     | V2254         | .41                     | V2255              | .47                     |
|                    |                         |                    |                         | V2257         | .36                     |                    |                         |
|                    | $\bar{r} = .30$         |                    | $\bar{r} = .27$         |               | $\bar{r} = .25$         |                    | $\bar{r} = .30$         |
|                    | alpha= .57              |                    | alpha= .58              |               | alpha= .63              |                    | alpha= .62              |
|                    |                         | V3120              | .52                     |               |                         |                    |                         |
|                    |                         | V3123              | .34                     |               |                         |                    |                         |
|                    |                         | V3125              | .43                     |               |                         |                    |                         |
|                    |                         |                    |                         |               |                         |                    |                         |
|                    |                         |                    | $\bar{r} = .35$         |               |                         |                    |                         |
|                    |                         |                    | alpha= .60              |               |                         |                    |                         |

DISTRIBUTIONS

|                       | Minimum | Maximum | Mean | Standard<br>Deviation | Skewness |
|-----------------------|---------|---------|------|-----------------------|----------|
| EQUALITARIANISM (1)   | -1.00   | 1.00    | .42  | .52                   | -.66     |
| EQUALITARIANISM (2)   | -1.00   | 1.00    | .55  | .45                   | -1.09    |
| EQUALITARIANISM (1+2) | -1.00   | 1.00    | .47  | .45                   | -.68     |
| INDIVIDUALISM         | -1.00   | 1.00    | .10  | .46                   | -.41     |
| FREE ENTERPRISE       | -1.00   | .50     | -.18 | .28                   | -.15     |

TABLE 2

## SCALE CORRELATIONS

## PART I:

|                 | (V393)<br>LIBERAL-<br>CONSERVATIVE | (V2203)<br>PARTY<br>IDENT. | EQUALITY | INDIVIDUALISM |
|-----------------|------------------------------------|----------------------------|----------|---------------|
| INDIVIDUALISM   | -.23                               | -.19                       | -.21     |               |
| FREE ENTERPRISE | .01                                | -.11                       | .03      | .09           |
| EQUALITARIANISM | .29                                | .26                        |          |               |

## PART II:

|                          | EQUALITY | EQUALITY<br>WOMEN | EQUALITY<br>BLACKS | INDIVIDUAL. | INDIV.<br>WOMEN | INDIV.<br>BLACKS |
|--------------------------|----------|-------------------|--------------------|-------------|-----------------|------------------|
| EQUALITARIANISM          | 1.00     | .41               | .48                | -.21        | -.26            | -.31             |
| EQUALITY-WOMEN           |          | 1.00              | ----               | -.13        | -.34            | ----             |
| EQUALITY-BLACKS          |          |                   | 1.00               | -.09        | ----            | -.54             |
| INDIVIDUALISM            |          |                   |                    | 1.00        | .44             | .27              |
| INDIVIDUALISM-<br>WOMEN  |          |                   |                    |             | 1.00            | ----             |
| INDIVIDUALISM-<br>BLACKS |          |                   |                    |             |                 | 1.00             |

## PART III:

|                 | FEMINISTS | ADVANTAGED | UNDERDOGS |
|-----------------|-----------|------------|-----------|
| EQUALITARIANISM | .18       | .07        | .24       |
| INDIVIDUALISM   | -.05      | -.01       | -.13      |
| FREE ENTERPRISE | .03       | -.07       | .02       |

## PART IV:

|                 | (V535)<br>AGE | (V542)<br>EDUCATION | (V762)<br>GENDER | (V2354)<br>INCOME | (V2355)<br>RACE | (V735)<br>RELIGIOUS<br>SERVICES |
|-----------------|---------------|---------------------|------------------|-------------------|-----------------|---------------------------------|
| EQUALITARIANISM | -.04          | -.15                | .18              | -.20              | .23             | .15                             |
| INDIVIDUALISM   | .04           | -.08                | -.11             | .15               | -.04            | .04                             |
| FREE ENTERPRISE | .02           | -.05                | .02              | .07               | -.05            | .02                             |

TABLE 3

REGRESSIONS OF ISSUE POSITIONS ON VALUES,  
IDENTIFICATIONS, AND DEMOGRAPHICS

| ISSUE                     | EQUALITY       | INDIVIDUAL       | FREE<br>ENTERPRISE | PARTY<br>IDENT. | LIBERAL-<br>CONSERV.<br>IDENT. | R   |
|---------------------------|----------------|------------------|--------------------|-----------------|--------------------------------|-----|
| SPENDING:<br>ENVIRONMENT  | .11**<br>(.16) | -.02<br>(-.04)   | -.08<br>(-.07)     | .02<br>(.04)    | .06<br>(.07)                   | .41 |
| SPENDING:<br>HEALTH       | .18**<br>(.28) | -.05<br>(-.07)   | -.05<br>(-.04)     | -.04<br>(-.08)  | .17**<br>(.22)                 | .45 |
| SPENDING:<br>CITIES       | .20**<br>(.20) | -.04<br>(-.05)   | -.05<br>(-.05)     | .03<br>(.06)    | .07<br>(.07)                   | .33 |
| SPENDING:<br>CRIME        | .08*<br>(.13)  | .04<br>(.07)     | -.11<br>(-.10)     | -.04<br>(-.10)  | .02<br>(.02)                   | .25 |
| SPENDING:<br>DRUGS        | .09*<br>(.12)  | .03<br>(.04)     | -.07<br>(-.06)     | .01<br>(.02)    | -.01<br>(-.01)                 | .18 |
| SPENDING:<br>EDUCATION    | .07<br>(.10)   | -.02<br>(-.03)   | -.01<br>(-.01)     | .02<br>(.03)    | .10*<br>(.12)                  | .33 |
| SPENDING:<br>BLACKS       | .21**<br>(.26) | -.01<br>(-.02)   | -.09<br>(-.07)     | .02<br>(.04)    | -.01<br>(-.01)                 | .45 |
| SPENDING:<br>SOC. SEC.    | .12**<br>(.16) | .03<br>(.04)     | -.05<br>(-.04)     | -.01<br>(-.02)  | .03<br>(.03)                   | .37 |
| SPENDING:<br>STUD. LOANS  | .13*<br>(.15)  | -.06<br>(-.07)   | -.01<br>(-.01)     | .03<br>(.05)    | .11<br>(.10)                   | .31 |
| SPENDING:<br>UNEMPLOYMENT | .13**<br>(.17) | -.13**<br>(-.17) | .02<br>(.02)       | .03<br>(.05)    | .14**<br>(.15)                 | .50 |
| SPENDING:<br>HANDICAPPED  | .06<br>(.10)   | -.07<br>(-.11)   | -.09<br>(-.09)     | .02<br>(.05)    | -.02<br>(-.03)                 | .30 |
| SPENDING:<br>WELFARE      | .11*<br>(.15)  | -.11**<br>(-.15) | -.02<br>(-.01)     | .00<br>(.01)    | .17**<br>(.19)                 | .44 |
| SPENDING:<br>DEFENSE      | .05<br>(.08)   | -.09*<br>(-.15)  | -.01<br>(-.01)     | .09**<br>(.20)  | .11*<br>(.15)                  | .48 |
| GOVT GOALS:<br>CLASS      | .20**<br>(.40) | .01<br>(.02)     | .02<br>(.02)       | .01<br>(.04)    | .09**<br>(.18)                 | .63 |
| GOVT GOALS:<br>BLACKS     | .22**<br>(.39) | -.01<br>(-.02)   | .07<br>(.07)       | .02<br>(.05)    | .12**<br>(.18)                 | .64 |

TABLE 3 (CONTINUED)

| ISSUES                      | EQUALITY       | INDIVIDUAL       | FREE<br>ENTERPRISE | PARTY<br>IDENT. | LIBERAL-<br>CONSERV.<br>IDENT. | R   |
|-----------------------------|----------------|------------------|--------------------|-----------------|--------------------------------|-----|
| GOVT GOALS:<br>WOMEN        | .21**<br>(.41) | .01<br>(.03)     | .02<br>(.02)       | .00<br>(.00)    | .15**<br>(.23)                 | .59 |
| MINORITY AID                | .14**<br>(.25) | -.05<br>(-.09)   | -.01<br>(-.01)     | .02<br>(.06)    | .09*<br>(.14)                  | .46 |
| GUAR. JOBS &<br>LIVING STD. | .15**<br>(.25) | -.08*<br>(-.14)  | .05<br>(.06)       | .04<br>(.09)    | .09*<br>(.13)                  | .53 |
| WOMEN'S<br>EQUALITY         | .06<br>(.09)   | -.04<br>(-.07)   | .10<br>(.10)       | .04<br>(.09)    | .05<br>(.07)                   | .28 |
| GOVERNMENT<br>SERVICES      | .06<br>(.06)   | -.03<br>(-.05)   | -.03<br>(-.03)     | .04<br>(.09)    | .17**<br>(.26)                 | .46 |
| FED/STATE<br>PROBLEMS       | .00<br>(.00)   | -.15**<br>(-.16) | .09<br>(.06)       | .10**<br>(.15)  | .19**<br>(.16)                 | .35 |
| GOVERNMENT<br>INTERVENTION  | .08*<br>(.12)  | .03<br>(.05)     | .03<br>(.03)       | .04<br>(.09)    | .26**<br>(.34)                 | .47 |

Note: Entries are unstandardized regression coefficients with standardized coefficients in parentheses. All coefficients are calculated holding education, income, race, and gender constant.

\* =  $p < .05$

\*\* =  $p < .01$

TABLE 4

REGRESSIONS OF PERFORMANCE EVALUATIONS ON  
VALUES, IDENTIFICATIONS, AND DEMOGRAPHICS

| EVALUATION   | EQUALITY         | INDIVIDUAL     | FREE<br>ENTERPRISE | PARTY<br>IDENT.  | LIBERAL-<br>CONSERV.<br>IDENT. | R   |
|--------------|------------------|----------------|--------------------|------------------|--------------------------------|-----|
| INFLATION    | -.17**<br>(-.15) | .11*<br>(.10)  | -.03<br>(-.02)     | -.26**<br>(-.34) | -.09<br>(-.07)                 | .59 |
| UNEMPLOYMENT | -.19**<br>(-.19) | .03<br>(.03)   | .07<br>(.03)       | -.16**<br>(-.23) | -.14*<br>(-.11)                | .48 |
| TAXES        | -.24**<br>(-.22) | .15*<br>(.14)  | -.06<br>(-.03)     | -.15**<br>(-.19) | -.10<br>(-.07)                 | .51 |
| NUCLEAR ARMS | -.32**<br>(-.29) | .04<br>(.04)   | .13<br>(.07)       | -.08<br>(-.11)   | -.19*<br>(-.14)                | .47 |
| ENVIRONMENT  | -.11<br>(-.10)   | .23**<br>(.21) | .00<br>(.00)       | -.11*<br>(-.15)  | -.15<br>(-.11)                 | .47 |
| BUDGET       | -.17**<br>(-.16) | .10<br>(.10)   | -.02<br>(-.01)     | -.26**<br>(-.34) | -.11<br>(-.08)                 | .51 |
| ECONOMY      | -.06*<br>(-.09)  | .07*<br>(.12)  | .04<br>(.05)       | -.07**<br>(-.17) | .02<br>(.03)                   | .36 |

Note: Entries are unstandardized regression coefficients with standardized coefficients in parentheses. All coefficients are calculated holding education, income, race, and gender constant.

\* =  $p < .05$

\*\* =  $p < .01$

TABLE 5

REGRESSIONS OF CANDIDATE EVALUATIONS ON  
VALUES, IDENTIFICATIONS, AND DEMOGRAPHICS

| EVALUATIONS         | EQUALITY          | INDIVIDUAL      | FREE<br>ENTERPRISE | PARTY<br>IDENT.   | LIBERAL-<br>CONSERV.<br>IDENT. | R   |
|---------------------|-------------------|-----------------|--------------------|-------------------|--------------------------------|-----|
| REAGAN              | -9.6**<br>(-.17)  | 9.9**<br>(.18)  | 1.0<br>(.01)       | -10.7**<br>(-.27) | -14.9**<br>(-.21)              | .62 |
| GLENN               | -1.2<br>(-.04)    | -2.5<br>(-.08)  | -1.9<br>(-.07)     | 3.0*<br>(.14)     | -.5<br>(-.01)                  | .17 |
| KENNEDY             | 6.2*<br>(.11)     | 4.0<br>(.07)    | -9.2*<br>(-.10)    | 13.5**<br>(.36)   | 4.2<br>(.06)                   | .54 |
| MONDALE             | 1.4<br>(.04)      | -2.1<br>(-.05)  | 3.9<br>(.03)       | 8.1**<br>(.29)    | 8.1**<br>(.15)                 | .43 |
| REAGAN-<br>GLENN    | -7.2*<br>(-.12)   | 11.8**<br>(.21) | -.3<br>(-.00)      | -12.3**<br>(-.30) | -15.6**<br>(-.21)              | .60 |
| REAGAN-<br>KENNEDY  | -15.4**<br>(-.17) | 6.3<br>(.07)    | -3.5<br>(-.04)     | -23.7**<br>(-.38) | -20.4**<br>(-.22)              | .68 |
| REAGAN-<br>MONDALE  | -10.2**<br>(-.13) | 12.3**<br>(.17) | -4.5<br>(-.07)     | -18.6**<br>(-.35) | -22.7**<br>(-.24)              | .67 |
| GLENN-<br>KENNEDY   | -7.7**<br>(-.15)  | -4.5<br>(-.09)  | -2.6<br>(-.06)     | -8.3**<br>(-.23)  | -7.8*<br>(-.12)                | .45 |
| GLENN-<br>MONDALE   | -3.8<br>(-.09)    | -.2<br>(-.00)   | -2.4<br>(-.06)     | -4.6**<br>(-.15)  | -7.4*<br>(-.14)                | .34 |
| KENNEDY-<br>MONDALE | 3.9<br>(.07)      | 5.9*<br>(.11)   | 2.6<br>(.03)       | 4.2<br>(.12)      | -.8<br>(-.01)                  | .24 |

Note: Entries are unstandardized regression coefficients with standardized coefficients in parentheses. All coefficients are calculated holding education, income, race, and gender constant.

\* =  $p < .05$

\*\* =  $p < .01$

TABLE 6

## ESTIMATES FOR THE REAGAN EVALUATION EQUATION

|                      | Direct Effects  | Total Effects   |
|----------------------|-----------------|-----------------|
| PERFORMANCE          | 12.8**<br>(.19) | 12.8<br>(.19)   |
| POSTIVE EMOTIONS     | 12.6**<br>(.21) | 12.6<br>(.21)   |
| NEGATIVE EMOTIONS    | -1.9<br>(-.03)  | -1.9<br>(-.03)  |
| COMPETENCE           | 18.0**<br>(.15) | 18.0<br>(.15)   |
| INTEGRITY            | 29.5**<br>(.27) | 29.5<br>(.27)   |
| ISSUE PROXIMITY      | 8.1<br>(.06)    | 8.1<br>(.06)    |
| EQUALITY             | -1.9<br>(-.04)  | -9.6<br>(-.18)  |
| INDIVIDUALISM        | .4<br>(.01)     | 9.3<br>(.18)    |
| PARTY IDENTIFICATION | -2.0<br>(-.05)  | -10.4<br>(-.28) |
| LIBERAL-CONSERVATIVE | -5.0*<br>(-.07) | -12.8<br>(-.19) |
| INCOME               | 0.0<br>(.01)    | 0.0<br>(.00)    |
| EDUCATION            | 0.0<br>(.00)    | .8<br>(.07)     |
| RACE                 | -3.7<br>(-.04)  | -9.6<br>(-.11)  |
| GENDER               | -1.6<br>(-.03)  | -4.7<br>(-.10)  |

Note: All coefficients are maximum likelihood (two-stage least squares) estimates. Standardized coefficients are in parentheses.

\* =  $p < .05$

\*\* =  $p < .01$

TABLE 7

Regression of Proximal Vote Determinants on  
Values, Identifications, and Demographics

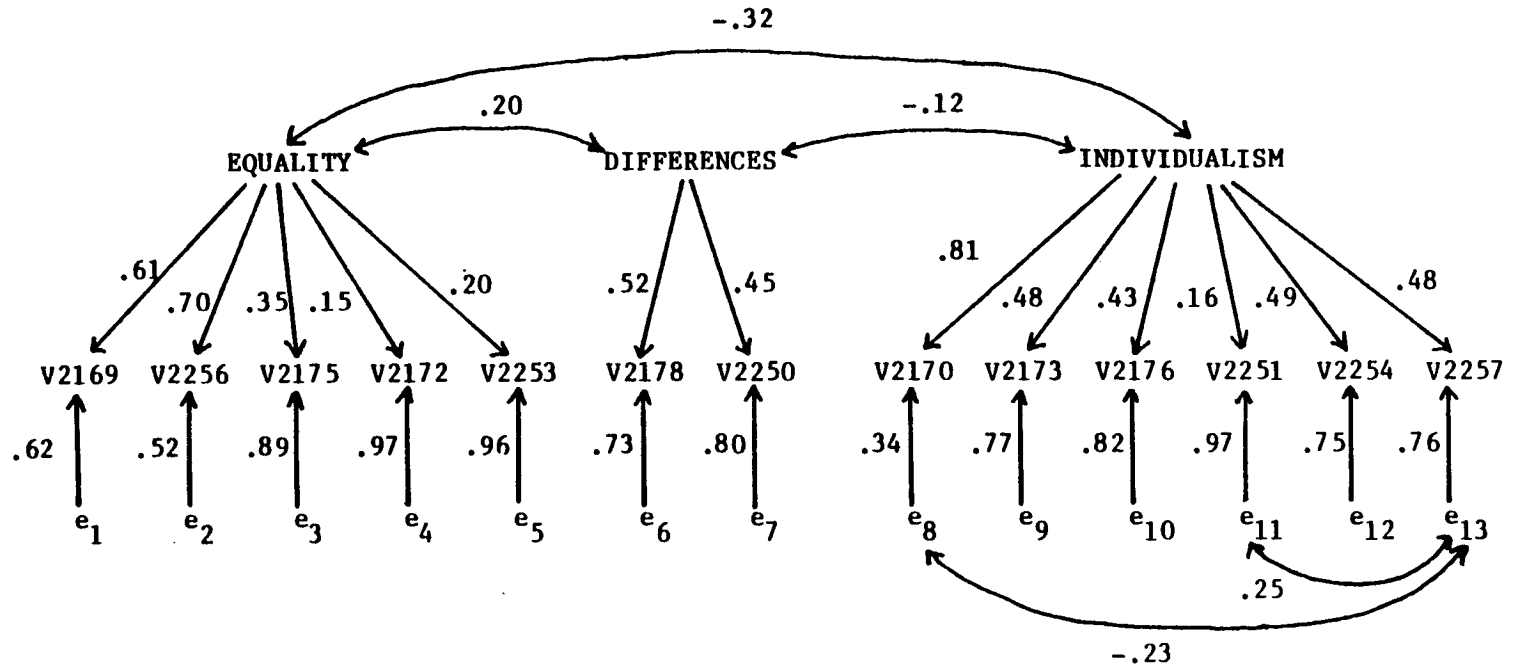
|                   | <u>EQUALITY</u>  | <u>INDIVIDUAL</u> | <u>PARTY<br/>IDENT.</u> | <u>LIBERAL-<br/>CONSERV.<br/>IDENT.</u> | <u>INCOME</u>  | <u>RACE</u>     | <u>GENDER</u>    | <u>EDUCATION</u> |
|-------------------|------------------|-------------------|-------------------------|---|----------------|-----------------|------------------|------------------|
| PERFORMANCE       | -.18**<br>(-.22) | .10*<br>(.13)     | -.16**<br>(-.29)        | -.16**<br>(-.15)                        | .00<br>(.00)   | -.08<br>(-.06)  | -.11**<br>(-.15) | .01<br>(.06)     |
| POSITIVE EMOTIONS | -.11<br>(-.12)   | .13**<br>(.15)    | -.15**<br>(-.25)        | -.12<br>(-.10)                          | .00<br>(.05)   | -.09<br>(-.06)  | -.02<br>(-.02)   | .02<br>(.11)     |
| NEGATIVE EMOTIONS | .13*<br>(.16)    | -.09<br>(-.12)    | .10**<br>(.18)          | .07<br>(.06)                            | .00<br>(.03)   | .06<br>(.05)    | .06<br>(.08)     | .02*<br>(.15)    |
| COMPETENCE        | -.07*<br>(-.14)  | .09**<br>(.21)    | -.07**<br>(-.23)        | -.07*<br>(-.11)                         | -.00<br>(-.08) | -.07<br>(-.10)  | -.06**<br>(-.14) | .01<br>(.07)     |
| INTEGRITY         | -.07*<br>(-.14)  | .12**<br>(.26)    | -.08**<br>(-.24)        | -.07*<br>(-.12)                         | -.00<br>(-.01) | -.06<br>(-.08)  | -.01<br>(-.03)   | .01*<br>(.13)    |
| ISSUE PROXIMITY   | -.08**<br>(-.19) | .05*<br>(.13)     | -.06**<br>(-.19)        | -.10**<br>(-.19)                        | .00<br>(.02)   | -.08*<br>(-.12) | .01<br>(.04)     | -.01<br>(-.09)   |

Note: All coefficients are maximum likelihood (two-stage least squares) estimates. Standardized coefficients are in parentheses.

\* =  $p < .05$

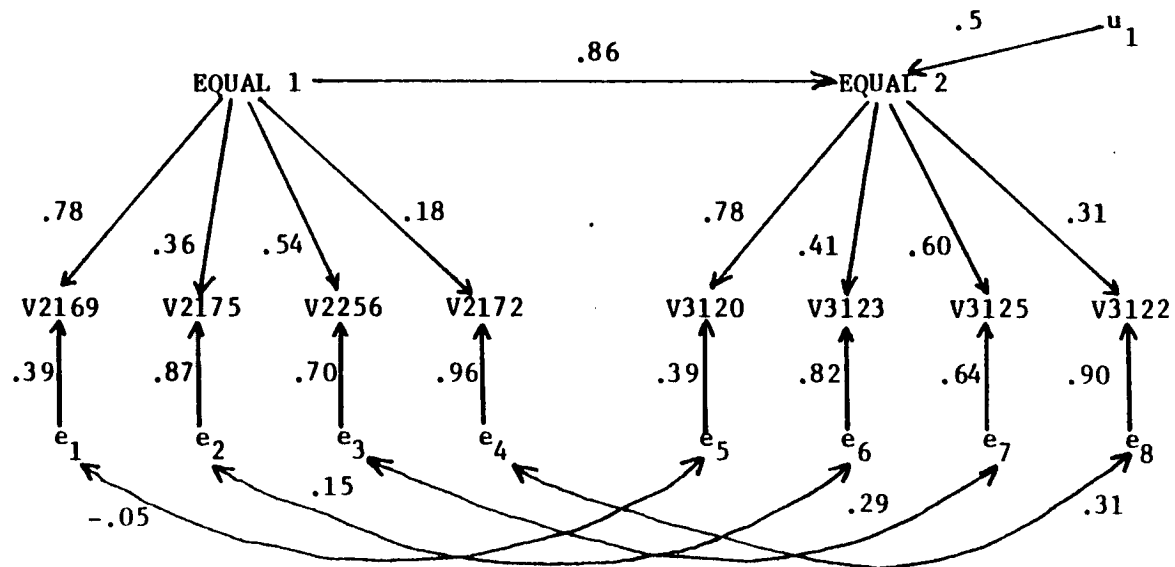
\*\* =  $p < .01$

FIGURE 1  
 Factor Structure of Equality  
 and Individualism Items



chi-square = 145.8  
 degrees of freedom = 60  
 goodness of fit index = .93

FIGURE 2  
Stability of Equality



chi-square = 26.9  
degrees of freedom = 15  
goodness of fit index = .94