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The Structure of Affect and Trait Judgments of Political Figures

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The roles of affective and cognitive processes in judgment have been the focus of much recent research and theoretical debate. This study was designed to investigate the structure of voters' affective reactions and trait attributions to national political figures. Three-mode factor analysis was used to determine the structure of the affect and trait scales. Politician factors and subject types were also derived, as were the interrelationships among these modes. Positive and negative affect factors, and affect and trait factors, were distinct but correlated; Democratic and Republican politician factors were uncorrelated. Information on the subject types moderated these relationships.

Recently there has been increased interest in the role of affect in many forms of human behavior. For example, human emotions are expected to be relevant in comparative evaluations of one's own performance and another's (Tesser & Collins, 1988). Social evaluation in impression formation has been investigated by researchers interested in assessing the effectiveness of varying affect as well as trait descriptors in priming tasks (Erdley & D'Agostino, 1988). Researchers have used affect-induction to study effects on various phenomena such as risk-taking behavior (Isen, Nygren, & Ashby, 1988) and memory (Ehrlichman & Halpern, 1988).

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Affect is not being studied at the exclusion of cognition however, in contrast to the prior dramatic movement of cognition overtaking behaviorism. Instead, this recent increased focus on affect seems to be well-tempered with current issues in cognition. At the very least, psychologists have been asking questions about the relationship between affect and cognition. Some theorists posit that affect and cognition might sometimes occur independently of each other, or that affect may precede cognition (Zajonc, 1980, 1984), and others maintain that some cognitive processing must occur prior to an affective reaction (Lazarus, 1984).

Of particular interest in this article, Abelson, Kinder, Peters, and Fiske (1982) have studied the relationship between affect and cognition within the domain of political figures. In their study, subjects were asked whether each of several American political figures had ever made them feel angry, happy, or hopeful, for example. Subjects were also asked to make judgments of the extent to which traits such as honest, warm, knowledgeable, and weak characterized each of the politicians. Subjects also made global evaluations of each of the politicians along the *thermometer* scale developed by the Center for Political Studies at the University of Michigan.

One of the primary findings in the Abelson et al. (1982) study was that ratings of positive and negative affect were nearly independent, at least more so than positive and negative trait attributions. In their analyses, the data for each politician was factored separately, and the two factors extracted in each analysis were only moderately negatively correlated; the median correlation coefficient was -.26 (Abelson et al., 1982, p. 623). These results were used to support the first part of the finding stated above — that positive and negative affect were nearly independent. The independence of negative and positive affect is consistent with recent empirical findings on affect in other applications, such as in the context of self-reported mood (e.g., Diener & Emmons, 1985; Watson & Tellegen, 1985).

The second part of the finding stated above — the comparison of the relationships of positive and negative valenced affect rating scales to the valenced trait ratings — was supported using a different strategy. They computed a positive affect scale by counting the number of positive affect words a subject checked as applicable to the stimulus politician, and a negative affect scale by counting the number of negative affect words the subject checked, and then correlated these scores over subjects. They computed a correlation for positive and negative trait attributions in a similar manner. The mean correlation for the traits was r=-.50 which is of greater magnitude than the mean correlation for the affect words, r=-.26 (Abelson et al., 1982, p. 623).

In this article, we continue in the spirit of the Abelson et al. (1982) study, examining the structure of affect and trait ratings of politicians, with several

modifications. First, we are interested in the extent to which the independence of positive and negative valenced affect or trait attributions generalize to other subsets of politicians and to other subsets of affect and trait words. That is, we would hope these structural findings would not depend entirely on the stimuli in the chosen domain. Similarly, we would hope the independence of the positive and negative affect or trait factors would be a finding descriptive of the construct level, not entirely dependent on the particular indicator variables chosen to tap the underlying factors. Thus, the subsets of politicians, affect words, and traits differ in our study compared to the Abelson et al. study (although there is some overlap for comparability) and we hope the findings in the Abelson et al. study would be robust enough to be present in our own treatment of the problem.

A second modification we have made is to extend the binary checklists of the Abelson et al. (1982) study to nine point rating scales for both the ratings of the affective reactions and of the trait attributions. We are hoping to see results similar to those in the Abelson article, using more continuous-level data so that factor analytic methods would be more appropriate. It would be unfortunate if their theoretically interesting results on the structure of affect and traits had been due to some artefactual combination of binary data and factor analysis. (For a description of some difficulties in combining the two, and recent proposed solutions, the reader is referred to the Christofferson, 1975 and Muthen, 1978.)

The third modification we have made is in our modeling approach to address the issues raised. We focus on results from within the factor analytic framework for all our comparisons. For example, we will examine factor intercorrelations for both the affect factors and for the trait factors to see if positive and negative valenced words are separable, and to see if affect and trait ratings are separable. In particular, we will be using a three-mode factor analytic model, which we describe in detail later in this article.

If affective and trait factors are in fact separable, it would be interesting to assess the relative contributions of these factors in predicting preferences for the political figures. A finding in the Abelson et al. (1982) study was that the affect ratings seemed to contribute more than the trait attributions to the prediction of the global evaluations of the politicians. They based this statement on the comparison of regression coefficients, but they did not report the intercorrelations between the sets of affect and trait predictors.

The relative contributions of affect and trait ratings might also depend on the context of the evaluation (Millar & Tesser, 1986), which might take the form of the party affiliation of the subject and candidate. Political party affiliation and strength of identification with that party are likely to be characteristics of individuals that will affect their perceptions and the roles of affect and traits in forming their preferences. Although we do not explicitly address the former

issue of prediction, we do consider the latter issue of individual differences in our modeling, because these differences have been shown to be important in the perceptions and preferences for political candidates (Nygren & Jones, 1977).

General statements summarizing the relationship between affect and cognition will undoubtedly require qualifications that incorporate these individual differences variables and others, as well as situational contexts, and specifications of the domain of stimuli to which the individuals are reacting. For example, the structure of affect and trait ratings of stimuli such as automobiles or motion pictures might well be different from results on the perceptions of politicians. These additional factors increase the complexity of the relationship between cognition and affect, and an empirically-based theoretical framework might prove useful in understanding these interrelations and in forming hypotheses for further study.

Three-mode factor analysis provides a framework that we think seems especially well-suited to understanding these issues. A three-mode model would allow us to derive factors for the politicians, enabling us to study the perceptions of the political figures. In addition, we would be able to derive factors for the affect and trait ratings, which would allow us to study the structure of affect and cognition for these stimuli. The final set of factors would be the subject factors, which would allow us to study the individual differences in these perceptions. These subject factors might indicate patterns of perceptions that covary with attributes of subjects like political party, conservativism, gender, or socio-economic status. Finally, the three-mode factor analytic model allows for the estimation of the interrelations among the politicians' factors, the affect and trait ratings' factors, and the subjects' factors.

Brief Introduction to the Three-Mode Factor Analytic Model

The three-mode model introduced by Tucker (1963, 1964, 1966) and variants on the model have been of great interest to many researchers (e.g., Carroll & Chang, 1970; Kroonenberg, 1983; Law, Snyder, Hattie, & McDonald, 1984). Details on the models and different approaches to parameter estimation are presented in these references and others (e.g., Bentler & Lee, 1978, 1979; Kroonenberg & deLeeuw, 1980; Sands & Young, 1980), so our presentation will be brief.

In standard principal components analysis or factor analysis, the researcher begins with a data matrix that is two-dimensional and *two-mode*, meaning that the rows of the data matrix depict something different from the columns. Often the rows depict subjects and the columns, measurements taken on those subjects. Standard procedure for principal components analysis or factor analysis would be to correlate over subjects and derive components or factors on the variables or ratings mode.

A three-mode data matrix could be depicted as a three-dimensional array, where for example, rows represent subjects, columns are rating scales, and layers represent different stimuli or concepts rated by the subjects. The three-mode extension of principal components or factor analysis allows the researcher to study the structure within each of the three modes, as well as the interrelationship among these three modes.

Procedurally, a sums of squares and cross products (SSCP) matrix is obtained for each of the three modes in turn, aggregating over the remaining two modes. Thus, for example, the matrix entries in the politicians' SSCP matrix are computed over the subjects and rating scales. Each of these three matrices is decomposed into an eigenvalue-eigenvector solution. The relative sizes of the eigenvalues help determine the number of eigenvectors retained to describe each of the three modes. We denote the number of vectors retained in the modeling by q_p, q_r, and q_s, for the politicians', ratings', and subjects' modes, respectively.

The four-mode model, follows in summation notation.

$$(1) \qquad \hat{x}_{prs} = \sum_{i=1}^{q_p} \sum_{j=1}^{q_r} \sum_{k=1}^{q_s} P_{pi} R_{ij} S_{sk} G_{ijk},$$

where the data from the sth subject rating the pth politician on the rth rating scale is modeled as a sum of a multiplicative term. The indices i, j, and k represent the politicians', ratings', and subjects' modes, and they range from 1 to q_p, q_r, and q_s, the number of eigenvectors retained in each of the three modes. The parameters P, R, and S are elements of the matrices **P**, **R**, and **S** containing, as columns, the eigenvectors of the politicians', ratings', and subjects' modes, respectively. The number of columns of **P**, **R**, and **S** is q_p, q_r, and q_s, and the number of rows is simply the number of politicians presented as stimuli, the number of rating scales, and the number of subjects, respectively.

In addition to these eigenvector matrices, the three-mode model includes the elements in the *core* matrix, **G**, which is interpretable analogously to a standard factor pattern matrix. This is the matrix that contains the information on how the vectors derived for the three modes are related, and it is computed as follows.

$$(2) \qquad \mathbf{G} = [(\mathbf{S} \otimes \mathbf{P}) \otimes \mathbf{R}]\, \mathbf{X}$$

where $\otimes$ denotes the Kronecker product. The data matrix **X**, is arranged so that columns represent rating scales, and the rows represent the combination of subjects and politicians. The politicians form the inner loop, changing fastest, and the subjects form the outer loop. Thus, row by row, the ratings of each politician is listed and when the list of politicians is complete, the rows begin for a new subject. If a solution is sought to satisfy a least squares criterion, all

eigenvectors corresponding to nonzero eigenvalues must be retained, or one may use Kroonenberg's alternating least squares algorithm to find a solution to the three-mode problem (Kroonenberg, 1983; Kroonenberg & deLeeuw, 1980).

We expect this three-mode model to be informative with respect to the structure of the affect and trait ratings. In addition, the three-mode model will allow us to gain information on the structure of the politicians themselves, and the types of subjects we sample.

Method

We now proceed to describe the data we collected. We will describe each of the three modes in turn, the politicians we chose as stimuli, the affect and trait ratings we chose to describe them, and the subjects we sampled.

Subjects

During the Spring and Summer of 1984, data were collected from three groups: students in an introductory Psychology course, students who had been recruited from upper-level undergraduate Political Science courses, and students enrolled in an advanced undergraduate Psychology course.

Six subjects were eliminated from both the first and third samples. These subjects were judged to be insufficiently familiar with the set of political figures because they were not able to correctly identify the party affiliations of at least two-thirds of the political figures. The remaining 78 subjects were analyzed as one sample.

One might expect differences between these groups to the extent that the Political Science students were expected to be more politically aware than the other students. Nevertheless, the results addressing the relationship between affect and trait ratings were consistent whether the analyses were made across samples, within samples, or even within politicians. For these reasons, the 78 subjects comprised a single sample for the analyses presented here.

We want to point out that this sample is small and rather homogenous, and we interpret our results accordingly. This is not a huge number of subjects, but the estimation of parameters on the politicians or ratings modes aggregates over the combination of the other two modes. Thus, for example, in deriving the eigenvectors from the politicians' SSCP matrix, the sums of squares and cross products had been computed over subjects crossed with rating scales (78×27 entities). However, this is not to say that these elements are independent — most probably they are not. The 78 subjects are assumed to be independent in the modeling, but it is likely (and pointedly of interest) that there is a correlational

structure in the affect and trait ratings. Still, there are more data points than the number 78 would suggest. Finally, we offer that the number of subjects is not so small given the exploratory nature of the study. In addition, the consistency found among the results within each of the three subsamples suggests that although the subjects might not be great in number, they seem to be fairly reliable in quality. The results should be considered as exploratory and suggestive, rather than confirmatory or definitive.

Politicians

The stimuli in this study were sixteen political figures who were a subset of current, or recent, American politicians. Most of these politicians had been president or a candidate for the presidency. The politicians are listed in Table 1. Most subjects (except the Political Science students) were unfamiliar with Jesse Helms, so he was discarded from these analyses. The candidates common to our study and the Abelson et al. (1982) study included: Carter, Ford, Reagan, and John Kennedy.

Table 1
Politicians Used as Stimuli

1.	Walter Mondale
2.	Jimmy Carter
3.	Dan Crane
4.	Ted Kennedy
5.	Jesse Helms
6.	Richard Nixon
7.	Lyndon Johnson
8.	Jesse Jackson
9.	Tip O'Neill
10.	Ronald Reagan
11.	George McGovern
12.	John Anderson
13.	Gary Hart
14.	Charles Percy
15.	John Kennedy
16.	John Glenn

Rating Scales

The affect words, which included a subset of the words in the Abelson et al. (1982) study, are listed in Table 2. The ratings made were estimations of frequencies (e.g., "How often has Nixon made you feel proud?"), which is an extension of the binary checklist format used by Abelson et al. It should be noted that these ratings represented subjects' recollections (perhaps cognitive) of affective reactions to the politicians, not attributes characteristic of the politicians themselves. The affect words common to our study and the Abelson study included: angry, uneasy, hopeful, afraid of him, proud, disgusted, and happy.

The traits were chosen to include markers of several dimensions important in general theories of interpersonal perception and behavior, such as those in Rosenberg (1977) or Wiggins (1979), and are listed in Table 3. The trait ratings were also made on 9-point bipolar scales, and they were intended to represent perceived attributes of the politicians (as opposed to the subjects' more affective reactions). The traits common to our study and the Abelson study included: warm (to cold), weak (to strong), honest (to dishonest). And although they had included words such as smart, unstable, and power-hungry, we included similar words such as intelligent, unreliable, and dominant. Subjects rated each politician on all affect words and on all trait scales.

Table 2
Affect Words

1.	Angry
2.	Uneasy
3.	Hopeful
4.	Afraid of him
5.	Helpless
6.	Proud
7.	Disgusted
8.	Threatened
9.	Happy
10.	Frustrated

Questions were phrased, "How often has (name of politician) made you feel (affect word from list above)?"

almost never 1 2 3 4 5 6 7 8 9 almost always

Table 3
Trait Pairs

"Which word better describes (name of politician)?"										
(left anchor)	1	2	3	4	5	6	7	8	9	(right anchor)
1. intelligent										unintelligent
2. effective										ineffective
3. inexperienced										experienced
4. tense										relaxed
5. lazy										energetic
6. reliable										unreliable
7. unlikable										likable
8. attractive										unattractive
9. warm										cold
10. threatening										not threatening
11. interesting										boring
12. insensitive										sensitive
13. submissive										dominant
14. weak										strong
15. honest										dishonest
16. sincere										insincere
17. bad judgment										good judgment

Experimental Procedure

The data were collected via an interactive computer session. Subjects were first asked to identify the party affiliations of the 16 politicians. Subjects then rated all the politicians on the 10 affect words and then on the 17 trait scales. We also collected additional judgments from the subjects. For example, two global evaluations of all politicians were included: the thermometer scale described earlier, and the likelihood with which the subject would vote for the politician for President if the politician were a viable candidate. Finally, subjects were asked for responses to demographic and attitudinal questions, including responses to the items on the Comrey and Newmeyer (1965) "Radical-Conservatism" scale.

Results

Three-Mode Factor Analysis

The $15 \times 27 \times 78$ (politicians, affect and trait scales, subjects) data matrix was analyzed according to version III of Tucker's three-mode factor analytic methods which allows for the estimation of uniquenesses (Tucker, 1966). Maximum correlations were used as initial estimates of communalities to provide for a factor analytic approach rather than a principal components analysis. Maximum correlations were used rather than squared multiple correlations because of the multi-mode nature of the data; we did not want to overfit the data by possibly overestimating the communalities.

The eigenvalues for each of the three modes of the data matrix were plotted in order to determine the number of factors to retain for each of the modes. The eigenvalue plots are contained in Figure 1.

Two factors were considered appropriate for the description of the politician mode. The factors for the politician mode are plotted in Figure 2. The first factor was marked by liberals and Democratic political figures, such as Mondale, Carter, McGovern, and Ted Kennedy, and the high loadings on the second factor were primarily due to the Republican politicians, especially Reagan. Note that these formed two distinct factors rather than opposite ends of one continuum. Furthermore, an oblique rotation suggested that these two factors were uncorrelated (r=.04). The few politicians with substantial loadings on both factors (Johnson, Percy, and Glenn) were frequently misidentified by subjects as belonging to the opposite political party. Clearly, the projections of the loadings onto a single dimension would result in a simple bipolar liberal, Democrat to conservative, Republican factor. However, we retained the second factor because of the relative magnitudes of the eigenvalues. We could call these factors "Democrats" and "Republicans", or interchangeably, "liberals" and "conservatives".

We now turn to the factors describing the affect and trait ratings. The I-II plane of the factor solution is plotted in Figure 3; the III-IV plane in Figure 4. The first factor was characterized by favorable interpersonal traits: honest, sincere, sensitive, and warm. The second factor consisted of the negative affect scales: angry, uneasy, afraid of, helpless, disgusted, threatened, and frustrated. The third factor was characterized by traits concerned with effectiveness as a politician and political image, including: dominant, strong, effective, energetic, experienced, interesting, and intelligent. The final factor consisted of the positive affect words: hopeful, proud, and happy.

Positive and negative affective reactions, and affect and trait ratings were distinct in the sense that they were described by separate factors. (We retained four distinct factors because of the relative magnitudes of the eigenvalues.)

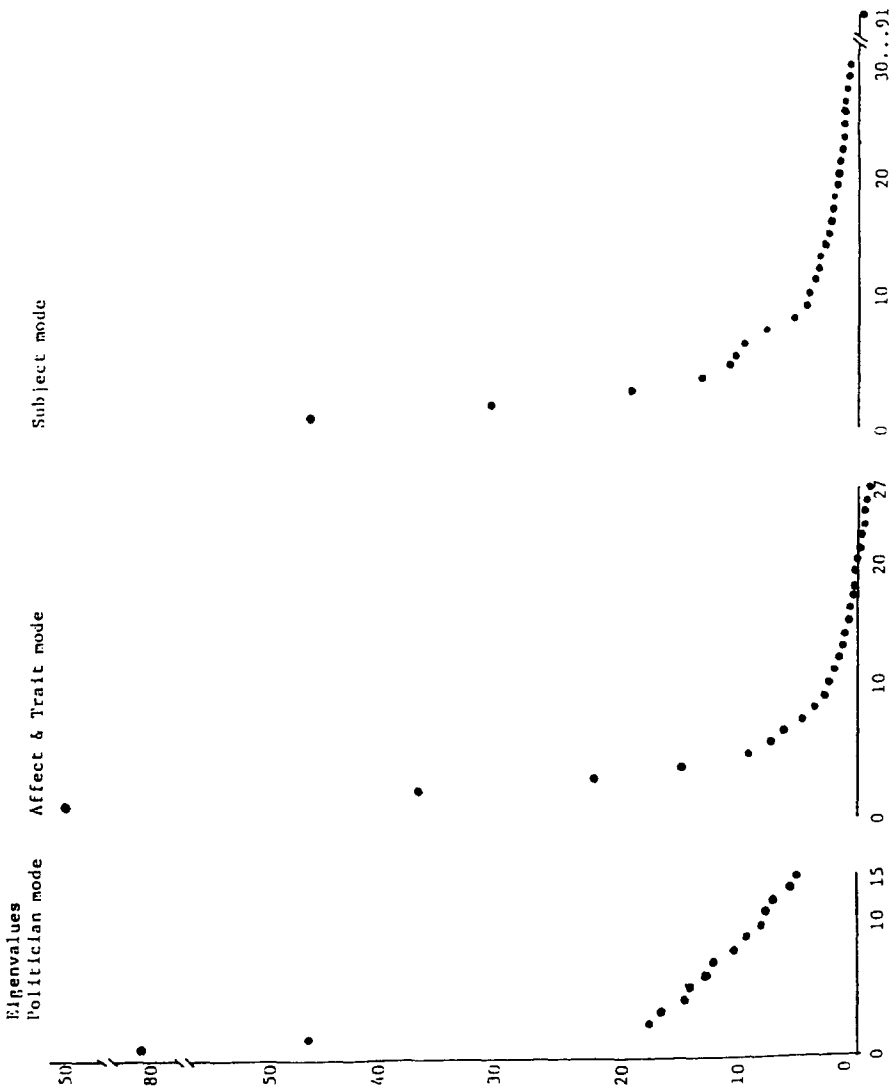

Figure 1.
Eigenvalues for each of the Three-Modes

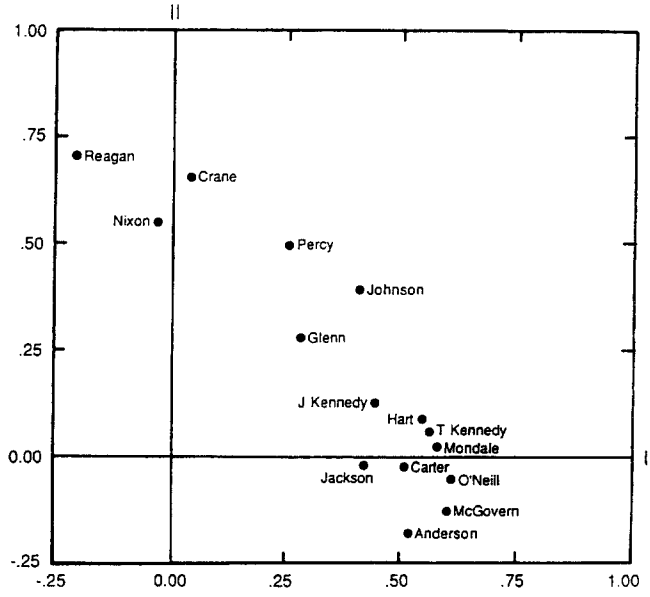

Figure 2.
Three-Mode Factor Analysis: Politician Mode

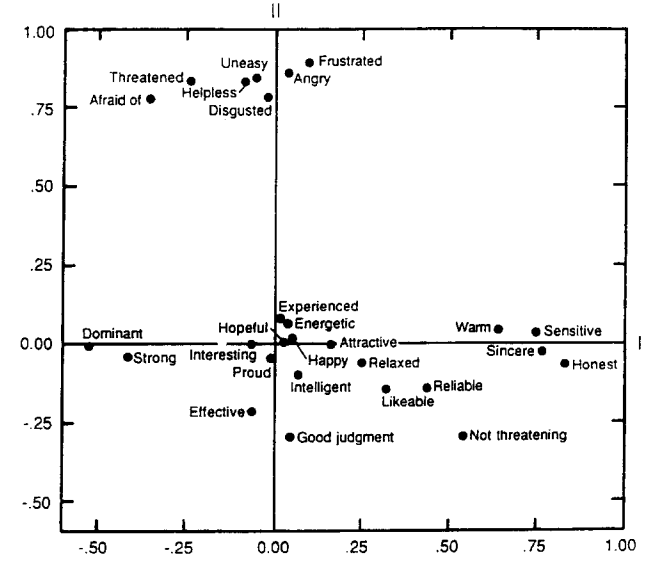

Figure 3.
Three-Mode Factor Analysis: I-II Plane of the Affect and Trait Words Mode

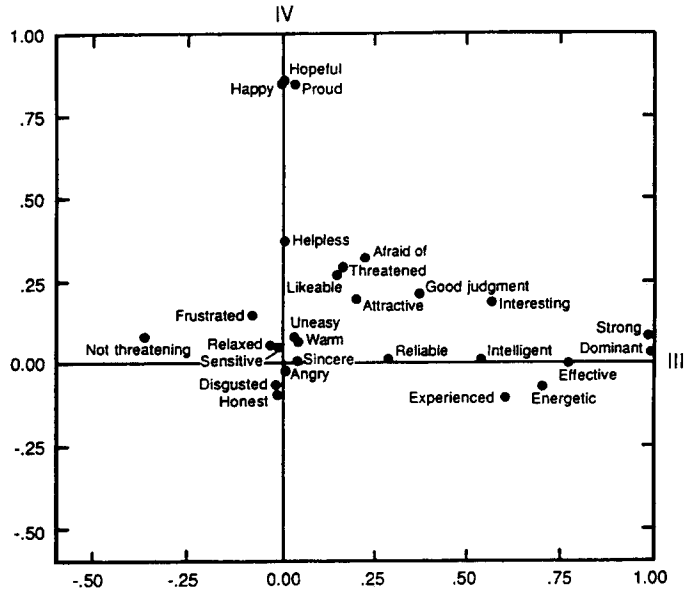

Figure 4.
Three-Mode Factor Analysis: III-IV Plane of the Affect and Trait Words Mode

Nevertheless, the factor intercorrelations were substantially nonzero (see Table 4). For example, the correlation between the positive and negative affect factors was -.54. In fact, a higher-order factor analysis of these affect and trait factors results in a single bipolar evaluative factor, with negative affect at one end (with a factor loading of -.68) and positive affect, and favorable effectiveness and interpersonal traits at the other end (loadings were: .72, .75, .83). We will return to this issue.

Table 4
Affect and Trait Factor Intercorrelations

		Factors			
		I	II	III	IV
Interpersonal Traits	I	1.00			
Negative Affect	II	-.58	1.00		
Effectiveness Traits	III	.69	-.50	1.00	
Positive Affect	IV	.61	-.54	.54	1.00

The core matrix is presented in Table 5 and is interpreted analogously to a standard factor pattern matrix. The first block of four rows corresponds to the first political figure factor, which was characterized primarily by the liberals/Democrats. The second block of four rows corresponds to ratings on the second political figure factor, conservative/Republican. The four rows within each block correspond to the factors associated with the affect and trait scales. The columns of the core matrix correspond to the four subject factors found for these data. The correlations among these subject factors are given in Table 6.

Studying Table 5, one can see that the first subject factor was characterized by those subjects who rated the liberal/Democratic politicians favorably on interpersonal and effectiveness traits. The second type of subject rated the conservative/Republican politicians favorably on all the affect and trait scales. The third subject factor was characterized by ratings indicating negative affective reactions to both liberal/Democratic and conservative/Republican politicians. The final subject factor consisted of positive affective reactions to the liberal/Democrats and negative affective reactions to the conservative/Republicans.

These interpretations based on Table 5 suggest the four subject factors were each distinct and unique. The intercorrelations between the subject factors in Table 6 suggest that the third and fourth subject factors are somewhat correlated with the first two subject factors. However, these intercorrelations do not imply

Table 5
Core Matrix

	Subject Factors			
	I	II	III	IV
Democrats				
Interpersonal traits	.890	-.079	-.019	.047
Negative affect	.004	.003	1.268	-.011
Effectiveness traits	.823	.103	.016	.336
Positive affect	.358	-.041	-.015	1.020
Republicans				
Interpersonal traits	.092	1.336	-.282	-.041
Negative affect	.039	-.985	.506	.698
Effectiveness traits	.276	1.002	.000	-.073
Positive affect	-.088	1.016	.017	.133

Table 6
Subject Factor Intercorrelations

		Factor			
		I	II	III	IV
Subject Type	I	1.00			
	II	-.09	1.00		
	III	-.60	.47	1.00	
	IV	.45	-.44	-.31	1.00

that the four subject factors were redundant. First, the scree plot of the subjects eigenvalues suggest a break between four sensible factors and five or more random factors. Second, the patterns that these four subject factors represented in the core matrix (i.e., columns of the matrix in Table 5) are distinct. By distinct, we are implying that the four columns in the matrix in Table 5 are linearly independent. For example, although the pattern in the bottom four entries in the third and fourth columns look similar, the top four entries for these two subject types are not derivable from each other. Third, the intercorrelations of these four subject factors are not ± 1, or near this magnitude. The mean of the absolute correlation between the subject factors is .39, compared to .58 for the factors on the affect and trait scales.

To better understand these subject factors, simple correlations were computed between the estimated subject factor scores and the data on the subjects' attitudes and demographics (see Table 7, next page). The first type of subject was associated with being Democratic, liberal, and admired John Kennedy, Johnson, and Carter, but not Nixon or Reagan. The second subject factor was Republican, conservative, admired Nixon and Reagan, but not Carter.

No subject information correlated with the third subject factor. The interpretation of this third subject factor based on the entries in Table 5, is that the subjects perceived all the politicians only with negative affect. Perhaps this was simply a group of subjects who do not care for politicians. We had not included measures of political involvement, so this interpretation is just a hypothesis.

The fourth subject factor was Republican and conservative, and strongly identified with the Republican party. In addition, this fourth type of subject frequently watched campaign coverage. A researcher studying the potentially biasing effects of the media might be especially interested in being able to identify these types of persons (cf. Mullen et al., 1986). Finally, this fourth

Table 7
Simple Correlations Between Estimated Subject Factor Scores and Subjects' Attitudinal and Demographic Variables

	Subject Factor			
Correlates*	I	II	III	IV
Political Party (1=Dem, 2=Repub)	-.447	.672	-.134	.385
36-item Liberalism scale	.466	-.710	-.002	-.529
Strength Identify w. Party	-.116	.288	.238	.354
Frequently Watch Campaign	.153	-.269	-.151	.304
Amount Admire:				
J Kennedy	.401	-.086	.183	-.317
Johnson	.413	.064	-.075	-.264
Nixon	-.379	.492	-.073	.363
Carter	.491	-.472	-.154	-.445
Reagan	-.365	.767	-.038	.517
Sex	.124	-.072	-.143	-.248
Membership in Subsample				
1 (Psych 100)	.042	-.027	-.134	-.246
2 (Political Sci)	-.194	.029	.101	.319
3 (Advanced Psych)	.134	-.001	.035	-.057

* Correlations with absolute magnitude greater than .300 are underlined.

subject factor also admired Nixon and Reagan, but not John Kennedy or Carter, and was somewhat more likely to have been one of the political science students we recruited.

The variety of patterns of subject correlates across the four subject factors again indicate the distinctions between the four subject factors. The information on the subject factors, in the core matrix in Table 5, the factor intercorrelations in Table 6, and subject correlates in Table 7, indicate how the individual differences affected the subjects' perceptions of the politicians and the ways in which they used the affect and trait words to describe those politicians. The three-mode model allows for these individual differences to be studied. If a researcher expects some attribute such as sex or political party or intelligence test scores to affect the other modes, these differences could be examined by studying the subject factors. This analysis would be preferred to splitting the sample by the attribute in question. For example, one approach might be to split the sample into Democratic and Republican students, and proceed to model the judgments within subsamples. However, this procedure decreases the effective

sample sizes. Furthermore, the sample would have to be redivided along each subject characteristic of interest. Instead, all subjects may be analyzed together and the model still allows that these differences may come through.

Discussion

The factor analysis of the affect and trait judgments suggested that positive and negative affect are distinguishable, but related, constructs. Factors for affect and trait ratings were also distinct, but correlated. In these data, the correlation between the positive and negative affect factors was r=-.54, which shows a stronger relationship than the Abelson's et al. (1982) r=-.26. That is, in our study, although the two affect factors were still distinct, the correlation between the factors was greater. In addition, the positive and negative-valenced trait ratings did not form distinct factors. We extracted two trait factors, but they differed in content, interpersonal or effectiveness, not in valence.

The three-mode factor analytic framework allowed examination of the politicians-mode and the subjects-mode in addition to examination of the structure of affect and traits for these stimuli. Two distinct political figure factors emerged, one for liberal/Democratic politicians and one for conservative/Republican politicians. Furthermore, the two political figure factors were uncorrelated.

It is interesting that for both the two politician factors and the two affect factors, a concept that might be thought to be bipolar was actually best described as two-dimensional. That is, these results were not descriptive of one-dimensional, bipolar scales like liberal/Democratic to conservative/Republican, or positive to negative affect. Instead, the attribute of a politician's being strongly identified as a liberal or belonging to the Democratic party was separate from the attribute of the politician being strongly identified as a conservative or belonging to the Republican party. Similarly, the concepts of positive affect and negative affect were separable and unipolar. Simplifying either of these two-dimensional structures is probably unwarranted, and may be detrimental to data description and model prediction. It is interesting to note that in both of these contexts, the results are similar to results on the measurement and conceptualization of androgyny, where a stimulus or person is described more completely as having some degree of masculinity as well as some degree of femininity, rather than having some characteristics of one sort at the expense of the other.

However, having stated that these concepts are separable, it is clearly also the case that these constructs are related (e.g., the factor intercorrelations listed in Table 4 ranged in magnitude from .50 to .69). Perhaps the arguments surrounding the unidimensional bipolarity of positive and negative valence

versus the bidimensionality of the constructs are really arguments that are both accurate, at different levels. That is, for the affect and trait scales, the first order factor analytic structure showed distinct yet correlated factors. The second order factor analytic structure collapses the multidimensional construct to a single bipolar evaluative scale. It would be beneficial to keep this distinction in mind when discussing *the structure* of affect and traits, rather than assuming one stand or the other is always more appropriate.

A final point we would like to make with respect to the results on the affect and traits mode concerns the possibility of assessing their relative effectiveness in predicting more global evaluative judgments, such as voting likelihood scales. The point is simply this: the affect predictors are clearly correlated with the trait predictors, so assessing their relative contributions will be difficult. This will be true whether we compare different sets of models (one that is affect-based to one that is trait-based), or we try to compare their predictive utility based on regression weights in a common model.

In addition to the politician mode and the affect and trait rating scale mode, the subject mode was also informative. That is, although the overall analyses included four separate factors for affect and traits, these factors were not used in the same way by all four types of subjects. For example, these factors were not distinguished by the second type of subject; these predominantly Republican respondents evaluated the Republican politicians favorably on all affect and trait scales, as if processing by an overall halo-effect.

Information on individual differences could be used to help design more incisive mood-induction experiments. For example, the third type of subject rated politicians only in terms of negative affect. This third type of subject could be identified, brought into the lab, and made to experience positive, negative, or neutral affect. If this third subject factor consisted of persons whose cognitive (or affective) processing style was focused on negative affect, one might expect that they would make negative affective ratings that were even more extreme than ratings made by other types of subjects.

The results obtained describing the affect and trait mode, and those describing the politician mode are qualified by the subject mode; that is, certain relationships hold for the perceptions of certain politicians by certain subjects. It is the complexity of these relationships that is interesting and that might advance our understanding of the relationship between affect and cognition.

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