

Public Mood in the 1998 Elections:
A View from the 1998 NES Pilot

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This report provides a preliminary assessment of the performance of four items included on the 1998 NES pilot study to measure public mood. As outlined in the proposal for these items (Rahn 1998), we believe that measures of public mood might be worthwhile to carry on NES production studies for two reasons: one, public mood should be sensitive to differences in campaign tone; and second, public mood should have some impact on turnout. Based on analysis thus far, the 1998 pilot data do not provide much support for the first contention. There is, however, more support for the second.

In the 1998 pilot, respondents were asked: Thinking about the United States, at this moment, do you feel angry [enthusiastic, upset, hopeful]? No follow-ups were asked.¹ Frequencies appear in Table 1. The measures generate little missing data. On balance, respondents feel more positive than negative emotions, which is consistent with other data we have collected.

In psychology, the conceptualization and measurement of affect states are contentious issues. Last year, two of the discipline's prominent journals, *Journal of Personality and Social Psychology* and *Psychological Science*, devoted special issues to this topic. Even before these issues appeared, we had become convinced that the concept of public mood was best represented as two bipolar dimensions, a valence factor defined by pleasant and unpleasant (or positive and negative), and an activation or arousal factor, defined by high levels of energy versus low (see e.g., Barrett and Russell, 1998; Russell and Barrett 1999; Yik, Russell and Barrett 1999; Green and Salovey 1999) rather than by separate positive and negative dimensions (as in Marcus and MacKuen 1993, or in our earliest work on this topic, Rahn, Kroeger and Kite 1996). The following analysis is based on the assumption that public mood is represented by two dimensions, valence and arousal.²

¹ We are not sure why the follow-ups were not included as it our understanding that an intensity follow-up would be asked of respondents who said yes to the emotion items. The dichotomous measures will be less reliable and less sensitive to variation than measures that allow for more differentiation of intensity.

² We estimated a LISREL model based on the assumption that all four items were indicators of both the arousal and the valence factors. Because the 98 pilot included only 4 emotion items, we had to fix all the loadings on the arousal factor to be 1 in order to be identify this two-dimensional model. In other words, we had assume that each of the four items represented the arousal dimension equally well, an unrealistic assumption. When we have had more measures at our disposal (e.g., in the 1996 General Social Survey, see Rahn 1998), we have been able to

In keeping with the measurement model that informs our work, two variables were constructed from the four public mood items. *Net affect* measures the balance of positive to negative feelings, and so reflects the valence dimension of public mood. *Total affect* is the sum of all four affects, and so reflects the arousal dimension.

Table 2 presents the means of these variables and other variables by state (see measurement appendix for definitions). There are no significant differences across the states in net affect toward the country; Illinois respondents, however, show more total activation, a pattern that does not seem readily explicable by any of the campaign-related differences in Table 2.

Table 3 presents the correlation of total and net affect with several other variables in the pilot (see measurement appendix). Net affect is related to the positivity of feelings toward the gubernatorial candidates, political efficacy, perceptions of the tone of the governor's race, need to evaluate, average feeling thermometer rating, and attention to the campaign on local news. Total affect, on the other hand, is related to total affect towards the candidates, political interest, need to evaluate, attention to the campaign on local TV, and turnout, when the latter is measured with the 101-point probability scale. Only two variables, need to evaluate and attention to the campaign on local news, are significantly related to both dimensions of public mood. People high in the need to evaluate are both more emotional and more negative. On the other hand, people who pay more attention to the campaign on local news are both more emotional and positive about the country. The correlations in Table 3 seem sensible, if small, and suggest that the two dimensions of public mood are measuring different things, one having to do with the direction of feelings, the other, with motivational level.

Based on previous work, we argued in our pilot proposal that variation in exposure to political ads should result in variation in the valence of public mood, with more exposure to negative ads resulting in less positive mood (see Rahn and Hirshorn 1999).³ Given this hypothesis, a correlation of .08 between net affect and perception of campaign tone is disappointing. The causal status of the correlation is also in doubt,

free some of the loadings on the arousal factor. In these analyses, hope and upset appear to less arousing affect states than either enthusiastic or angry. Even given the constraints of the pilot data, however, a two-dimensional model produced a respectable fit to the data, with P^2 of 12.13 ($p < .003$) and an AGFI of .97.

³ We also expect that more exposure to political advertising, regardless of its tone, will increase people's level of arousal.

given that perceptions of campaign tone, in the aggregate, do correspond to professional observations about the tenor of these three campaigns, but public mood does not (see Table 2).

We have many reasons to believe that the correlation between perceptions of campaign tone and public mood is a rather limited test of our hypothesis. The question about tone is not a good measure of exposure to advertising, for respondents could have answered the campaign tone question without ever seeing an ad, based on news accounts, generalizing from existing attitudes about campaigns, or other nonadvertising factors (see Ansolabehere, Iyengar and Simon 1999). In addition, the tone measure is asks about only one political contest, and respondents were potentially exposed to campaign ads for other races as well, including House and Senate campaigns. We may find, with additional analyses, that public mood responds to variation in these races. Finally, the feelings measured in the public mood items have as their referent the country, and so the setting of a gubernatorial election may not be the most theoretically relevant context in which to test whether a connection between advertising and public mood exists. A more thorough examination of the connection between mood states and campaign advertising must await the release of the advertising data.

We also proposed to study the relationship between public mood and turnout. Initial explorations with the pilot data suggested that the lopsided distribution of the 4-point likelihood of turnout question limited the size of many coefficients, but the 101-point certainty scale, with its greater variation, was more promising for our purposes. Using OLS, we estimated a model in which the probability of turning out was regressed on the usual suspects that were available in the pilot plus the two public mood variables and the two candidate affect variables. Results are reported in Table 4.

Of the four affect measures in the model, only the arousal dimension of public mood exerts a significant influence, a substantive impact equivalent to the size of strength of partisanship.⁴ That it exerts any influence at all given the presence in the

⁴ Based on earlier evidence that the valence of public mood interacts with efficacy to produce either a mobilizing or demobilizing effect on turnout (see Rahn and Hirshorn 1999; Rahn forthcoming), we explored several interactions of net public mood with other variables, including efficacy, need to evaluate, need for cognition, and self confidence. While some of these interactions were suggestive (e.g., valence of public mood was a more consequential predictor of turnout for people high in need to evaluate), none of these interactions proved to be statistically reliable.

model of such other motivational variables as need to evaluate, political interest and strength of partisanship is notable.

This preliminary foray into the campaign relevance of public mood has produced one finding of consequence: higher levels of emotional arousal stimulate the intention to turnout to vote. Is this result sufficiently interesting to invest in these items for the 2000 study? Had we been able to establish a link between public mood and political campaigns, we might say yes. In the absence of this demonstration, however, we cannot recommend these items to the Board at this time. We may revise this recommendation if later analyses using the ad data find more support for the connection between political advertising and one or both dimensions of public mood.

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Measurement Appendix

Projected Turnout. *Question Wording, Half Sample:* Please rate the probability you will vote in the elections this coming November. We will use a zero to one hundred scale, with one hundred meaning you will DEFINITELY vote and zero meaning you will DEFINITELY NOT vote. You can use any number on the scale; the higher the number the greater the chance that you will vote in November. Responses were rescaled from 0 to 1. (v98P175).

Efficacy. *Question Wording:* Please tell me how much you agree or disagree with these statements. People like me don't have any say about what the government does. (If necessary: Do you agree strongly, agree somewhat, neither agree nor disagree, disagree somewhat, or disagree strongly?) Coding: 0 if agree strong, .25 if agree somewhat, .5 if neither agree nor disagree, .75 if disagree somewhat, 1 if disagree strongly. Public officials don't care much what people like me think. (Same coding). Over the years, how much attention does the government pay to what the people think when it decides what to do: a good deal, some, or not much? Coding: 0 if not much, .5 if some, 1 if a good deal. Responses to these three questions were summed and rescaled from 0 to 1. (v98P382, v98P384, v98P86).

Need to Evaluate. *Question Wording, Format A:* Would you say you have opinions about almost everything, about many things, some things, or about very few things? Coding: 0 if very few things, .33 if some things, .67 if many things, 1 if almost everything. Compared to the average person, do you have fewer opinions about whether things are good or bad, about the same number of opinions, or more opinions? Would you say that you have a lot (more, fewer) opinions or somewhat (more, fewer) opinions? Coding: 0 if a lot fewer, .25 if somewhat fewer, .5 if about the same, .75 if somewhat more, 1 if a lot more. Do you think it is better to have definite opinions about lots of things or to remain neutral on most issues? Coding: 0 if remain neutral, 1 if definite opinions. (v98P118, v98P119-121, v98P122). *Question Wording, Format B:* Would you say you have opinions about almost everything, about many things, about some things, or about very few things? Coding: 0 if very few things, .33 if some things, .67 if many things, 1 if almost everything. Compared to the average person, do you have fewer opinions about whether things are good or bad, about the same number of opinions, or more opinions? Would you say that you have a lot (more, fewer) opinions or somewhat (more, fewer) opinions? Coding: 0 if a lot fewer, .25 if somewhat fewer, .5 if about the same, .75 if somewhat more, 1 if a lot more. Do you think it is better to have definite opinions about lots of things or to remain neutral on most issues? Coding: 0 if remain neutral, 1 if definite opinions. (v98P387, v98P388-90, v98P391). Respondents' answers to the three different questions were summed and rescaled from 0 to 1.

Need for Cognition. *Question Wording:* Do you like having responsibility for handling situations that require a lot of thinking, do you dislike it, or do you neither like nor dislike it? If (like or dislike), Do you (like, dislike) it a lot or just somewhat? Coding: 0 if dislike it a lot, .25 if dislike it somewhat, .5 if neither like nor dislike, .75 if like it

somewhat, 1 of like it a lot. Some people prefer to solve simple problems instead of complex ones, whereas other people prefer to solve more complex problems. Which type of problem do you prefer to solve: simple or complex? Coding: 1 if complex, 0 if simple. Responses to these two questions were summed and rescaled from 0 to 1. (v98P392-94, v98P395).

Strength of Partisanship. *Question Wording:* Generally speaking, do you usually think of yourself as a Republican, a Democrat, and Independent, or what? If respondents answer Republican or Democrat, they were asked: Would you consider yourself a strong (Republican, Democrat) or not very strong (Republican, Democrat). Independents were asked: Do you think of yourself as closer to the Republican or Democratic party? Coding: 0 for those who are Independent or apolitical, .33 for Independent leaners, .67 for weak partisans, 1 for strong partisans. (v98P325-328).

Political Interest. *Question Wording:* Would you say you follow what's going on in government and public affairs most of the time, some of the time, only now and then, or hardly at all? Coding: Responses were coded 1, .67, .33, and 0 respectively. Would you say that you have been much interested, somewhat interested, or not much interested in the political campaigns so far this year? Coding: Responses were coded 1, .5, and 0 respectively. Responses to these two questions were summed and rescaled from 0 to 1. (v98P101, v98P376).

Political Knowledge. *Question Wording:* Who has the final responsibility to decide if a law is constitutional or not...its it the President, Congress, or the Supreme Court? And whose responsibility is it to nominate judges the Federal Courts...the President, Congress, or the Supreme Court? Do you happen to know which party has the most members in the House of Representatives in Washington? (IF NECESSARY: Which one?). Do you happen to know which party has the most members in the U.S. Senate? (IF NECESSARY: Which one?). Coding: 1 if respondents gave correct answer, 0 if wrong answer, don't know, or refused. Responses to these four questions were summed and rescaled from 0 to 1. (v98P344-47 in first half-sample, v98P348, v98P350, v98P352, v98P354 in second half-sample)

Care Who Wins Gubernatorial Election. *Question Wording:* Generally speaking, would you say that you personally care a good deal who wins the election for Governor this fall, or that you don't care very much who wins? Coding: 1 for care a good deal, 0 for don't care very much (v98P129).

Tone of Gubernatorial Race. *Question Wording:* In your state, would you say the tone of the campaign has been positive or negative? Would you say very (positive, negative) or somewhat (positive, negative)? Coding: 0 for very negative, .25 for somewhat negative, .5 for don't know, .75 for somewhat positive, and 1 for very positive. (v98P379-381).

Contacted by a Campaign. *Question Wording:* We would like to know how much contact people have had with candidates and campaigns during this election...Thus far in the campaign, have you received any mail from a candidate or political party about the election? Thus far in the campaign, have any candidates or party workers attempted to talk to you at your residence about the election? Thus far in the campaign, have any

candidates or party workers made any phone calls to you about the election? Coding: 1 if yes, 0 if no. Responses were summed across these three questions and rescaled from 0 to 1. (v98P278, v98P280, v98P282).

Total Affect toward Country. *Question Wording:* Thinking about the United States, at this moment do you feel (angry, enthusiastic, upset, hopeful)? Coding: 1 if yes, 0 if no. The total affect toward country measure was created by summing responses across emotions and across candidates and rescaling again from 0 to 1. (v98P286-289).

Net Affect toward Country. Sum of positive emotions (hopeful, enthusiastic) minus sum of negative emotions (angry, upset), scaled from -1 to +1.

Total Affect toward Candidates. *Question Wording, Format A:* Thinking about [Candidate 1, Candidate 2], do you feel [proud, afraid, hopeful, angry]? If an individual responded in the affirmative, a follow-up question asked: Would you say that you feel very (proud, afraid, hopeful, angry) or somewhat (proud...)? Coding: A 3-point scale for each emotion for each candidate was constructed where 0 means the respondent did not feel (proud...), .5 means the respondent felt somewhat (proud...), and 1 means the respondent felt very (proud...). *Question Wording, Format B:* Has (Candidate 1, Candidate 2) – because of the kind of person he is, or because of something he has done—ever may you feel (proud...)? If an individual respondent in the affirmative, a follow-up question asked: How often have you felt this way? Coding: A 5-point scale for each emotion for each candidate was constructed where a score of 0 means the respondent did not feel (proud...), .25 means they felt it rarely, .5 means they felt it occasionally, .75 means they felt it fairly often, and 1 means they felt it very often. *Question Wording, Format C:* Has [Candidate 1, Candidate 2] ever made you feel (proud...)? Coding: Responses in Format C were coded like those in Format B. In all formats, the total affect toward candidates measure was created by summing responses across emotions and across candidates and rescaling again from 0 to 1. (Format A: v98P208-223; Format B: v98P224-239; Format C: v98P240-255).

Net Affect toward Candidates. Sum of positive emotions (hopeful, proud) minus sum of negative emotions (angry, afraid), scaled from -1 to +1.

Average Thermometer Rating. Respondents were asked to rate various political leaders or groups on a feeling thermometer from 0 degrees to 100. These included Bill Clinton (v98P138), Newt Gingrich (v98P140), Gubernatorial Candidate #1 (v98P142), Gubernatorial Candidate #2 (v98P144), retiring Governor (v98P146), Democratic Senate Candidate (v98P148), Republican Senate Candidate (v98P150), labor unions (v98P157), pro-life groups (v98P159), environmental protection groups (v98P161), and conservative Christian groups (v98P163). An average score was created by summing across these questions and rescaling from 0 to 1.

Attention the Campaign on Local News. *Question Wording:* How much attention did you pay to news on local news shows about the campaign for governor—a great deal (1.0), quite a bit (.75), some (.50), very little (.25), or none (0). (v98p107)

Age. *Question Wording:* What is the month, day and year of your birth? (v98P422).

Education. *Question Wording:* What is the highest grade of school or year of college you have completed? Coding: Response options ranged from 0 to 17 or more. This item was rescaled from 0 to 1. (v98P424).

Income. *Question Wording:* What was your total annual household income in 1997 before taxes? Coding: 0 if less than \$20,000, .2 if \$20,000-\$29,999, .4 if \$30,000-\$39,000, .6 if \$40,000-\$49,999, .8 if \$50,000-\$59,999, and 1 if \$60,000 or more. (v98P429).

Blacks. *Question Wording:* In addition being American, what do you consider your main ethnic or nationality group? Coding: 1 if black, 0 if other. (v98P431)

Female. Observed by interviewer. Coding: 1 if respondent is female, 0 if male. (v98P031).

Illinois Race. Coding: 1 if state of interview is Illinois, 0 if Georgia or California. (v98P005).

Georgia Race. Coding: 1 if state of interview is Georgia, 0 if California or Illinois. (v98P005).

Table 1: Frequencies of Emotional Responses

	Angry	Enthusiastic	Upset	Hopeful
Yes	35.1%	52.7%	46.6%	80.5%
No	64.6	46.1	53.0	19.0
DK	.2	1.0	.2	.3
Refused	.1	.2	.1	.2

Table 2. Aggregate Means by State

	California	Georgia	Illinois	All 3 States
<u>Electoral Variables</u>				
Tone of Governor's Race	.505 g	.383 c,i	.475 g	.454
Care about Governor's Race	.712	.680	.670	.687
Contacted by a Party	.274 g	.217 c,i	.301 g	.264
Predicted Turnout (100 pt. scale)	.851 g	.793 c	.823	.813
Predicted Turnout (4 pt. scale)	.797	.816	.796	.802
<u>Political Attitudes</u>				
Strength of Partisanship	.650 g	.612 c	.634	.631
Political Interest	.559	.553	.545	.552
Efficacy	.551 g,i	.475 c	.508 c	.511
Need to Evaluate (opinion)	.532	.527	.515	.525
Need for Cognition (needcog)	.613	.581	.582	.592
<u>Affect Variables</u>				
Total Affect toward Country	.526 i	.531 l	.564c,g	.540
Net Affect toward Country	.291	.253	.242	.262
Total Affect toward Candidates	.146	.150 l	.135 g	.144
Net Affect toward Candidates	.147 i	.131	.114 c	.131

Note: With two exceptions, all variables are scaled on a common range of 0 to 1. Net affect toward country / candidates is scaled from -1 to 1.

c = statistically different from the California mean

g = statistically different from the Georgia mean

i = statistically different from the Illinois mean

**Table 3:
Correlations between Public Mood Dimensions and Other Variables**

	Net U.S. Affect	Total U.S. Affect
Net Candidate Affect	.12**	.05
Total Candidate Affect	.03	.14**
Tone of Race	.08**	.04
Efficacy	.19**	-.04
Need for Cognition	-.004	.015
Need to Evaluate	-.10**	.09**
Political Interest	.02	.13**
Strength of Partisanship	.03	.03
Average Thermometer	.18**	-.02
Attention to Campaign on Local News	.08**	.07*
Expected Turnout (100 pt. Scale)	-.02	.10**
Expected Turnout (4 pt. Scale)	.06	.04

* p < .05 ** p < .01

Table 4. Determinants of Projected Turnout

	Projected Turnout	Projected Turnout	Projected Turnout
<u>Demographics</u>			
Age	.0002 (.0008)	.0001 (.0008)	.0001 (.0008)
Education	.21*** (.08)	.21*** (.08)	.21*** (.08)
Income	.05* (.03)	.05 (.03)	.05 (.03)
Black	.03 (.03)	.03 (.03)	.03 (.03)
Female	-.01 (.02)	-.001 (.02)	-.001 (.02)
<u>Political Attitudes</u>			
Efficacy	.04 (.04)	.05 (.04)	.04 (.04)
Need to Evaluate	.03 (.03)	.03 (.03)	.03 (.03)
Need for Cognition	-.06** (.03)	-.06** (.03)	-.06** (.03)
Strength of Partisanship	.09** (.04)	.09** (.04)	.09** (.04)
Political Interest	.27*** (.05)	.26*** (.05)	.26*** (.05)
Political Knowledge	.04 (.04)	.04 (.04)	.04 (.04)
<u>Campaign Factors</u>			
Tone of Governor's Race	-.04 (.04)	-.04 (.04)	-.05 (.04)
Care Who Wins Race	.15*** (.03)	.14*** (.03)	.14*** (.03)
Contacted by a Campaign	.14*** (.04)	.14*** (.04)	.14*** (.04)
Illinois Race	-.03 (.03)	-.03 (.03)	-.03 (.03)
Georgia Race	-.01 (.03)	-.01 (.03)	-.01 (.03)
<u>Affect Measures</u>			
Total Affect for Country	.10** (.05)	.10* (.05)	.09* (.05)
Total Affect for Candidates	----	.02 (.09)	-.008 (.10)
Net Affect for Country	----	----	-.003 (.02)
Net Affect for Candidates	----	----	.04 (.06)
Constant	.25*** (.08)	.24*** (.08)	.24*** (.08)
Root MSE	.236	.236	.236
Adj. R ²	.353	.347	.345
Number of Cases	479	473	473

Note: With the exception of age and net affect, variables are scaled on a common range of 0 to 1. Age is in years, and the two net affect measures are scaled from -1 to 1. The dependent variable, projected turnout, is based on a 100 point scale in which respondents were asked to give the probability that they would vote in the November election.

* $p \leq .10$; ** $p \leq .05$; *** $p \leq .01$, two-tailed tests.