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To: Prof. Charles Franklin, Chair
1998 NES Pilot Study Planning Committee
Center for Political Studies-University of Michigan
426 Thompson Street
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From: Robert Huckfeldt

Subject: Addendum to the Huckfeldt/Lake 1998 pilot study report on the social network battery

I am writing this memorandum as an addendum to our previous report, in response both to the February discussion at the NES Board Meeting and to your memorandum of February 17. Let me address each of the issues as I see them.

1. The form of the network name generator.

One of the issues that arose, both in your memo and in the discussion, was the pilot study's use of a name generator that asked only for names of discussants outside the immediate household. This name generator was based on several empirical regularities:

1. the tendency of name generators to be top-loaded in favor of intimate contacts within the household (Burt 1986);
2. the increased identification of "weak ties" as people are asked to provide longer lists of names (Huckfeldt et al. 1995);
3. and the greater political homogeneity among household members (Huckfeldt and Sprague 1995).

The pilot study name generator was designed to produce more weak ties at a cheaper cost in terms of interviewing time. Hence the 1998 pilot produced a short list of up to 3 discussants, but one that moved beyond the politically homogeneous confines of the household. After listening to the Board discussion and reading your memo, I became convinced that while the pilot study name generator has some real advantages, it is not well suited to members in the NES user community, many of whom are quite directly concerned with political relationships within nuclear families. Hence, if a network battery is to be included in the 2000 study, I would propose that the name generator not be restricted to discussants outside the household.

2. What are the network effects on political involvement?

Lake and Huckfeldt (1998) address network effects on political engagement, but let me consider them here in the context of the 1996 Indianapolis-St. Louis election study that is employed in the appendix to our earlier report. (All results reported in this memorandum are based on this study.) It is probably most useful to cumulate across a respondent's network in addressing political activation effects. In Table 1, political interest and participation in campaign activities are regressed on a series of explanatory variables, including the mean level of perceived political knowledge among the respondent's discussants as well as the number of discussants named by the respondent. In both instances we see pronounced effects that arise due mean political knowledge within the network as well as the size of the network. Holding network size constant, those individuals imbedded in politically expert networks are more likely to be interested in the campaign, and they are more likely to be engaged in campaign activity. Holding network expertise constant, those individuals who are imbedded in larger networks are more likely to be interested and engaged by the campaign. And both network effects persist in the face of controls for individual knowledge, partisan extremity, individual education, and organizational involvement. In short, political engagement within electoral politics depends quite directly on the political resources that are present within networks of social interaction and communication.

The 1996 study was based on interviews with registered voters in the Indianapolis and St. Louis metropolitan areas. In this empirical context, it is not terribly productive to consider turnout effects. Correspondingly, a central advantage of including a network battery within NES is that it would provide an opportunity for studying network effects on turnout.

3. How well do perceptions of discussant knowledge correspond to reality?

The best evidence we have in response to this question comes from Table 2, which is a reproduced from the paper attached as an appendix to the pilot report, based on data taken from the 1996 study (Huckfeldt 1999). Table 2 regresses the respondent's perception of discussant knowledge on a series of explanatory variables: actual knowledge of the discussant, discussant education, discussant partisan extremity, perceived and actual vote preference agreement between the discussant and the main respondent, the actual knowledge of the respondent, and a control for the form of the network name generator.

A more detailed discussion of these results can be found in the appendix to the pilot report. The important point for present purposes is shown in Figure 1, which is estimated on the basis of the Table 2 results. This figure provides a sequential comparison of the effects that arise due to perceived agreement and each of three discussant measures – objectively defined knowledge, discussant education, and the extremity of discussant partisanship. The maximum effects are 27 points for objectively defined discussant knowledge, 17 points for discussant education, and 15 points for the discussant's partisan extremity. In contrast, the maximum combined effect of actual and perceived agreement is 17 points, while the combined effect of discussant knowledge and education is 42 points.

In summary, the best predictors of perceived expertise are the measures of actual expertise. Discussants with higher levels of education and higher levels of political knowledge are perceived to be more knowledgeable by their associates, and the cumulative effect tends to swamp the combined effect of actual and perceived agreement. The effects of actual expertise become even more pronounced if we include partisan extremity. That is, if expertise is defined in terms of a discussant's ability to provide meaningful political advice and guidance, then it might be entirely appropriate to include partisanship as a measure of expertise, and the combined effect of objectively defined expertise on perceived expertise becomes even more dramatic.

4. What are the effects of discussant knowledge on persuasion?

In order to answer this question, the role of knowledge in the process of political persuasion must be put in substantive perspective. I am arguing that the clarity or effectiveness of communication enhances persuasion, and communication effectiveness is enhanced by the expertise of the individual who is sending a political message. In short hand terms, knowledge gives rise to effective communication, and effective communication gives rise to persuasion.

Thus, the first step is to demonstrate the consequence of effective communication for persuasion, and the current effort is based on an earlier analysis of Huckfeldt and Sprague (1999). Table 3 is taken from this analysis, and it estimates a series of models that illustrate the importance of communication effectiveness in the persuasion process. In each model, the respondent's evaluation of Bill Clinton is regressed on the respondent's own party identification, the party identification of the discussant, and a number of controls. In addition, a number of factors are considered as interaction measures which might enhance the effect of discussant partisanship. This is not the place for a full analysis of this table, but I draw your attention to the models in columns 2, 3 and 5.

In column 2, the effect of discussant partisanship is contingent on the accuracy with which the respondent perceives the discussant's vote choice. Hence, the indicator of effective communication is an accurate perception, and the contingent effect lies close to being statistically discernible. In column 3, the effect of discussant partisanship is contingent on the respondent's judgement regarding how difficult it was to assess the discussant's voting preference. In this instance the measure of effective communication is judgmental ease, and the contingent effect is strong and discernible. Finally, in column 5, the effect of discussant partisanship is contingent on both the respondent's judgment regarding the difficulty of assessing the discussant's vote, and the proportion of other discussants in the network who are perceived to hold this particular discussant's preference. Once again, we see a substantial and discernible effect on persuasion that arises due to communication effectiveness, measured as the ease with which the respondent is able to assess the voting preference of the discussant.

In short, these results demonstrate that persuasiveness is contingent on communication effectiveness. The next step is to demonstrate that communication effectiveness is contingent on the political knowledge of the discussant. Hence, in Table 4A, the previously considered

measures of effectiveness – accuracy and ease of judgment – are regressed on the perceived knowledge of the main respondent, as well as discussant partisan extremity, the respondent's perception regarding whether the discussant and the main respondent agree regarding their vote preference, the respondent's perception regarding whether other discussants hold the particular discussant's vote preference, main respondent knowledge, and the form of the network name generator. In both instances, perceived discussant knowledge produces statistically discernible effects on effectiveness that lie in the expected direction. In the logit model with all other factors held constant at mean values, the probability of accurate perception is .64 for discussants who are perceived to know "not much at all" compared to .75 for discussants who are perceived to know a "great deal".

5. What are the comparative effects of actual and perceived knowledge?

What are the comparative effects of actual and perceived knowledge? We have shown that measures of actual expertise are the best measures of predicted expertise. At the same time, there is a great deal of noise in perceived knowledge that is left unexplained. Hence the question arises, is it the explained or unexplained element of perceived knowledge that provides explanatory purchase? What are the implications for the use of perceived expertise measures?

There are a large number of comparisons that might be drawn between the explanatory power of actual and perceived knowledge, and the results are likely to vary across comparisons for important reasons. Indeed, consequences arising due to the disjunction between reality and perception provide an important theme in political analysis. Our strategy here is to reconsider the results of Table 4A by replacing perceived knowledge with actual knowledge in the list of explanatory variables. As Table 4B shows, actual knowledge fails to produce a discernible effect on the ease of making a judgement regarding the discussant's vote preference. At the same time, it does produce a discernible effect on accuracy of the respondent's judgment regarding the discussant's voting preference. With all other factors held constant at mean values, the logit model estimates that the probability of accurate perception is .64 for discussants who answer none of the questions correctly on the knowledge battery compared to .75 for discussants who answer all three correctly.

Hence, these results are mixed, and my expectation is that other results would generally be mixed in comparing the effects of perceived and actual expertise. In some instances, actual expertise matters more than perceived expertise, and in other instances perceived expertise is likely to be more important. Moreover, on theoretical and substantive grounds, we should sometimes be more concerned regarding the respondent's perception of expertise while at other times we should be more interested in actual expertise.

In these latter instances, the perception of discussant expertise would only provide a surrogate for the reality. And hence the question arises, how good a surrogate is it likely to be? The primary danger in using perceived expertise as a surrogate for actual expertise is that the measure is biased by perceived agreement, but it is a straightforward task to purge the measure of this bias so long as we include a measure of perceived vote choice in the network battery. Thus, based on previous work, *it is possible to construct a measure of perceived expertise that is not*

contaminated by perceived agreement, and such a measure is likely to be quite useful in political analysis.

6. Conclusion

What is the larger value of including a network battery within the National Election Study? In *Making Democracy Work*, Putnam (1993) argues that the success of democratic politics depends on horizontal networks of social relations among citizens (also see Coleman 1988 and Granovetter 1985). By incorporating a social network battery within the National Election Study, we would be making a significant contribution toward incorporating these horizontal networks within the analysis of American elections.

What would the battery look like? Let me suggest the following name generator, based on the one used in the 1996 Indianapolis-St. Louis study. This is the name generator that, with slight modification, was used in the 1998 NES pilot study.

Now let's shift our attention to another area.
From time to time, people discuss government,
elections and politics with other people. I'd like
to know the people you talk with about these matters.
These people might or might not be relatives.
Can you think of anyone?

<1> yes
<5> no
<9> RF

IF NECESSARY: What is this person's first name?
(All I need is a first name.)

Is there anyone else you talk with about these matters?

<1> yes
<5> no
<9> RF

Please note that this name generator allows the identification of discussants who reside inside or outside of the main respondent's household. I think it is important to identify up to four names.

Perhaps the two most crucial pieces of information to collect regarding each of the discussants is the respondent's perception of their presidential vote preference and their level of political expertise. The following two questions have been used in several studies, and slight variations were used in the 1998 NES Pilot Study.

Generally speaking, how much do you think [first name]
knows about politics? Would you say:

<1> a great deal
<3> an average amount, or
<5> not much at all

<8> DK - DON'T PROBE

<9> RF - DON'T PROBE

How do you think [first name] voted in the presidential election? Do you think [first name] voted for Al Gore, George Bush, some other candidate, or do you think [first name] didn't vote?

For your reference, Table 5 includes a list of all the measures that were included in the network battery for the 1996 Indianapolis-St. Louis study.

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Table 1. Campaign activity and interest in campaign as a function of mean perceived knowledge of discussants, number of discussants, and main respondent knowledge, partisan extremity, education, and organizational involvement.

	Campaign Activity		Interest	
	<u>coefficient</u>	<u>t-value</u>	<u>coefficient</u>	<u>t-value</u>
mean discussant knowledge	.287	4.344	.202	5.06
number of discussants	.100	5.455	.064	5.80
main respondent:				
knowledge	.122	4.242	.058	3.13
partisan extremity	.231	8.004	.142	8.09
education	-.015	1.159	-.002	.23
organizational involvement	.146	9.333	.035	3.72
constant	-1.087	5.357	.173	1.40
N =	1640		1639	
R ² =	.15		.11	
Standard Error =	1.06		.64	

campaign activity: number of activities reported - convince others how to vote; work for party or candidate; attend meetings or rallies; yard signs, bumper stickers, or campaign buttons; give money (range=0-5)
interest: interest in campaign - very much, somewhat, not much (range=1-3)
mean discussant knowledge: mean perceived discussant knowledge - a great deal, average amount, or not much at all (range= 1-3)
number of discussants: range=1-5
main respondent knowledge: number of correct answers (range=0-3)
main respondent partisan extremity: strong, weak, independent leaning toward party, independent (range=0-3)
education: years of schooling
organizational involvement: number of organizational memberships reported (range=0-9)

Source: 1996 Indianapolis-St. Louis Study.

Table 2. Perception of the discussant's political knowledge by the objectively defined knowledge of the discussant, the education of the discussant, the partisan extremity of the discussant, the main respondent's perception of agreement with the discussant, objectively defined agreement, objectively defined main respondent knowledge, and the content of the network name generator. (Ordered logit models. T-values for coefficients and standard errors for cutting point thresholds are shown in parentheses.)

	<u>coefficient</u>	<u>(t-value)</u>
objectively defined discussant knowledge	.41	(5.99)
discussant education	.12	(4.58)
discussant partisan extremity	.23	(3.66)
perceived agreement by main respondent	.28	(2.02)
objectively defined agreement	.44	(3.14)
main respondent knowledge	.01	(.17)
politics name generator	.04	(.32)
threshold (1)	.67	(s=.40)
threshold (2)	4.31	(s=.42)
N =		1336
chi ² /df/p:		154/7/.00
pseudo R ²		.07

objectively defined discussant knowledge: number of correct answers to political knowledge battery (range is 0-3)
discussant education: years of school based on discussant's self-report
perceived agreement: 1 if respondent reports the same presidential preference that he/she perceives to be held by the discussant; 0 otherwise
objectively defined agreement: 1 if respondent reports the same presidential preference reported by the discussant; 0 otherwise
politics name generator: 1 if the name generator asks for those with whom the respondent discusses "government, elections, and politics"; 0 if "important matters"

Source: 1996 Indianapolis-St. Louis Study.

Table 3. Discussant effects on Clinton evaluation, contingent on the accuracy and ease of judgments regarding discussants, as well as the correspondence between discussant and the remainder of network. (Coefficient t-values are shown in parentheses.)

	<u>Discussant Effects Contingent on:</u>				
	<u>1. baseline model</u>	<u>2. judgment accuracy</u>	<u>3. judgment ease</u>	<u>4. network corresp.</u>	<u>5. ease & corresp.</u>
constant	5.11 (24.31)	5.05 (22.49)	4.86 (22.15)	4.88 (21.61)	4.68 (20.23)
partisanship	-0.34 (20.82)	-.33 (20.02)	-.33 (20.27)	-.32 (18.74)	-.32 (18.47)
ideology	-0.16 (8.75)	.17 (8.87)	-.16 (8.67)	-.15 (8.02)	-.15 (7.98)
income	0.01 (.31)	.01 (.52)	.005 (.26)	.02 (.81)	.02 (.76)
education	-0.01 (.96)	-.01 (.93)	-.01 (.76)	-.02 (1.08)	-.01 (.88)
non-hispanic white	-0.47 (5.30)	-.55 (6.03)	-.47 (5.28)	-.53 (5.78)	-.53 (5.78)
discussant partisanship	-0.03 (2.45)	.01 (.26)	.02 (1.17)	.04 (2.06)	.08 (3.50)
judgmental accuracy		.15 (1.36)			
accuracy X disc. part.		-.05 (1.90)			
judgmental ease			.31 (3.20)		.30 (2.92)
judg. ease X disc. part.			-.09 (3.66)		-.08 (3.29)
network correspondence				.42 (3.21)	.33 (2.51)
network corr. X disc. part.				-.14 (4.28)	-.12 (3.65)
N=	1,144	1,096	1,142	1,054	1,052
R ² =	.61	.62	.62	.63	.63
S.E.=	.90	.89	.89	.88	.88

Table 3 (continued).

partisanship: seven-point party identification scale, where 0 is strong Democrat and 6 is strong Republican

ideology: seven-point ideological self-placement, where 0 is strongly liberal and 6 is strongly conservative
income: family income on a six point scale (1-6)
non-hispanic white: 1=non-hispanic white; 0=other
judgmental accuracy: 1=main respondent accurately judges the discussant's self-reported vote preference; 0=not accurate
judgmental ease: 1=very easy to judge discussant vote; 0=somewhat easy, somewhat difficult, or very difficult
network correspondence: proportion of other discussants perceived by the main respondent to hold the vote preference that is reported by the discussant in the dyad

Source: 1996 Indianapolis-St. Louis Study.

Table 4. Communication effectiveness as a function of discussant knowledge.

A. Ease and accuracy of judgement regarding discussant's vote as a function of perceived discussant knowledge with various controls.

	Ease of Judgment (OLS model)		Accuracy of Judgment (logit model)	
	<u>coefficient</u>	<u>t-value</u>	<u>coefficient</u>	<u>t-value</u>
perceived discussant knowledge	.175	3.19	.270	2.24
perceived agreement with disc.	.860	12.50	.776	5.50
network correspondence	.295	3.42	1.772	9.29
main respondent:				
partisan extremity	.132	3.86	.475	6.49
knowledge	.008	0.25	.041	0.56
politics name generator	.160	2.57	.285	2.08
constant	1.735	11.36	-2.306	-6.75
	N = 1251		N = 1253	
	R ² = .20		chi ² /df/p = 283/6/.00	
	Root MSE = 1.09		pseudo R ² = .18	

B. Ease and accuracy of judgement regarding discussant's vote as a function of actual discussant knowledge with various controls.

	Ease of Judgment (OLS model)		Accuracy of Judgment (logit model)	
	<u>coefficient</u>	<u>t-value</u>	<u>coefficient</u>	<u>t-value</u>
perceived discussant knowledge	.011	.31	.180	2.49
perceived agreement	.901	13.04	.831	5.90
network correspondence	.298	3.44	1.733	9.16
main respondent:				
partisan extremity	.149	4.35	.496	6.85
knowledge	.011	0.34	.011	0.15
politics name generator	.180	2.88	.310	2.26
constant	2.029	16.43	-2.100	-7.70
	N = 1256		N = 1258	
	R ² = .20		chi ² /df/p = 287/6/.00	
	Root MSE = 1.10		pseudo R ² = .18	

Ease of judgment: 0= respondent does not know for whom discussant voted; 1= respondent finds it very difficult to judge discussant vote; 2=somewhat difficult; 3=somewhat easy; 4=very easy

Source: 1996 Indianapolis-St. Louis Study.

Table 5. Questions in network battery for 1996 Indianapolis-St. Louis study.

Is [fill nam1] a:

- <1> spouse or partner
- <3> other relative, or
- <5> unrelated by blood or marriage

Is [fill nam1] a co-worker?

- <1> yes
- <5> no

Do you and [fill nam1] go to the same [fill chrh]?

- <1> yes
- <5> no

How long does it take to drive to where [fill nam1] lives?

- <1> 0 - 5 minutes
- <2> 6 - 15 minutes
- <3> 16 - 30 minutes
- <4> more than 30 minutes

Would you say [fill nam1] is a close friend, a friend, or just someone that you regularly come into contact with?

- <1> close friend
- <3> friend
- <5> someone that you regularly come into contact with

What is the highest level of education [fill nam1] has completed? Is it:

- <1> less than high school
- <2> a high school diploma
- <3> some college
- <4> a college degree, or
- <5> more than a college degree

INTERVIEWER: RECORD GENDER OF [fill nam1].

(ASK IF NECESSARY: Is [fill nam1]:)

- <1> male, or
- <5> female

During a normal week, how many days do you talk with [fill nam1]?

- <0> less than 1 day a week/never
- <1> 1 day
- <2-6> 2 to 6 days
- <7> 7 days/every day

When you talk with [fill nam1], do you discuss political matters:

- <1> often
- <2> sometimes
- <3> rarely, or
- <4> never

When you discuss politics with [fill nam1], do you disagree[n]:

- <1> often
- <2> sometimes
- <3> rarely, or
- <4> never

Generally speaking, how much do you think [fill nam1] knows about politics? Would you say:

- <1> a great deal
- <3> an average amount, or
- <5> not much at all

Do you think [fill nam1] normally supports political candidates who are:

- <1> Republicans
- <2> Democrats
- <3> both, or
- <4> neither

Does [fill nam1] talk with each of the other people you have mentioned at least once a month?

- <1> yes
- <5> no

IF NECESSARY: Which of the people you've mentioned does [fill nam1] not talk with at least once a month?

IF NECESSARY: Does [fill nam1] know each of the other people you have mentioned?

- <1> yes
- <5> no

I have another question about the [fill pers] you have named. How do you think [fill nam1] voted in the presidential election? Do you think [fill nam1] voted for Bill Clinton, Bob Dole, some other candidate, or do you think [fill ge1] didn't vote?

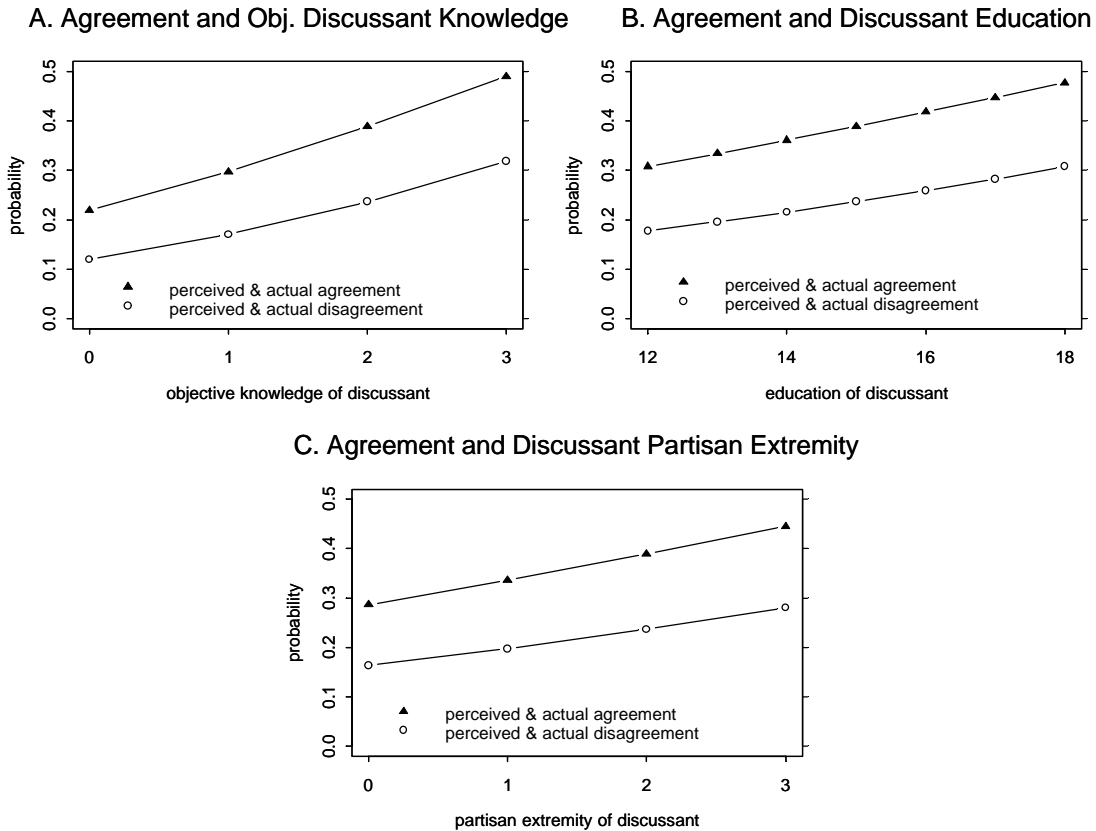
NOTE: INTERVIEWER TIMES RESPONSE

- <1> Bill Clinton
- <2> Bob Dole
- <3> some other candidate (specify) [specify]
- <4> didn't vote
- <7> ineligible to vote

How difficult or easy was it to say how [fill nam1] voted? Was it:

- <1> very difficult
- <2> somewhat difficult
- <3> somewhat easy, or
- <4> very easy

Figure 3. Predicted probability that the main respondent perceives the discussant to know a "great deal" about politics by perceived agreement, the objective knowledge of the discussant, the education of the discussant, and the partisan extremity of the discussant.



Source: Table 2 estimates. In Parts A and C, discussant education is held constant at 15 years; objectively defined discussant knowledge is held constant at 2 correct answers in Parts B and C; and partisan extremity of the discussant is held constant at 2 in Parts A and B. In all three parts of the figure, objectively defined main respondent knowledge is held constant at 2 correct answers, and the name generator is held constant at 1 ("government, election, and politics").