SOCIAL ISOLATION AND STUDENT VOTING BEHAVIOR.

How voting frequency is affected by individual perceptions of loneliness

D. S. Pearl – R. K. Anderson

Washington State University Pullman

RESUMEN ABSTRACT Este artículo examina la relación entre el This paper examines the link between nivel de contacto social y la no participasocial connectivity and lack of participación en los sistemas políticos democrátition in democratic political systems. cos. Utilizando un conjunto nuevo de Using a set of novel scales that examine escalas que analizan las relaciones sociaboth objective and subjective social relales, la investigación trata de mostrar que tionships, the paper seeks to show that la participación del individuo en las elecindividual participation in elections (the ciones (el acto de votar) se relaciona act of voting) is directly connected with directamente con las percepciones de perceptions of loneliness. In addition to soledad. Además de estos conjuntos de these primary scale sets, many other escalas básicos, otros factores importanaggregate factors (such as gender, race and class as well as generational effects) tes (como el género, raza y clase así como el efecto generacional) se analizan are examined to better triangulate causapara lograr un mejor ajuste de la causalition. dad.

Key words: perceptions of loneliness, political participation, voter turnout

Background

Attempts to evaluate voter turnout have thus far taken one of three general forms: analysis of the individual characteristics of the voter, analysis of behavioral characteristics found across the voting population, and the systemic or structural analysis of laws and voting systems. In each of these general forms, psychological variables are used across the wide canon of work as an explanatory device for an individual's choice in voter participation. The primary focus of this exploratory study is identification of one such underused explanatory psychological variable (loneliness) and its correlation with voter turnout.

The use of traditional individual characteristic independent variables (such as race, class, and gender) across studies examining turnout have shown to be moderate indicators of potential voter participation (Verba and Nie, 1972; Wolfinger, Raymond and Rosenstone, 1980). Broadly, these variables can be defined for our purposes as stationary or semi-stationary groups to which individual's belong as a result of an ascribed status.

As a variable, race matters when examining voter turnout (Verba and Nie, 1972; Abramson and Claggett, 1984). African-Americans, for example, tend to have a substantially lower voter turnout than whites across regions and election types (Plutzer and Wiefek, 2006; Mangum, 2003). Reasons for race being so highly correlated with voter turnout might include general trust or distrust in government by various minority groups, political engagement, and/or political efficacy, or any number of other factors (Mangum, 2003).

Another primary individual characteristic often used to explain voter turnout is socio-economic level. This identifier has been used in a number of ways; including as a measure of class consciousness (a pseudopsychological variable in and of itself) manifest in times of inter-class conflict (Winders, 1999) and as a model of likelihood of voting across populations with fluctuating incomes (Filer, Kenny and Morton, 1993). Across the studies, the general consensus is that (for a variety of reasons) there is a positive relationship between income and voter participation (Sklar, 2000; Malchow, 1998; Wolfinger, Raymond and Rosenstone, 1980).

While having less direct correlation with voter turnout, gender is still used as a common variable explaining voter participation. As a percentage of the population, until (roughly) 1980, males tended to vote in greater number than females (CAWP 2005). After 1980, women have voted slightly more then men as a percentage of the U.S. population. This gap is exacerbated when looking at trends among 18-21 year olds (Levine and Lopez, 2002).

Explanatory behavioral characteristics responsible for voter turnout described in the literature are usually centered around custom and habit formation (Yalch, 1976; Erikson, 1981; Green 2000). This method of analysis usually yields the following result: an individual's casting a ballot in a previous election increases the likelihood that he or she will participate in the future (Green and Shachar, 2000). Assuming the habit of voting "takes root" (i.e. becomes more familiar and less daunting), an individual's future actions (trips to the ballot box) become much easier to predict (Yalch, 1976).

Structural analysis is an equally popular method of inquiry in determining the likelihood of voter participation. Many insist that states with tighter, more restrictive registration laws systematically depress voter turnout (King 1994, Filer, Kenny and Morton, 1991). Others claim that the structure of finance laws and actual candidate spending are one factor in determining whether or not an individual will go to the ballot box (Gillam, 1985).

While each of the above explanations for voter participation has been thoroughly examined, less well studied is the possibility of loneliness being a cause of, or even a contributor to, low turnout. Loneliness can be broadly defined as an individual's perception(s) of social isolation.

We know that a person's self perception of isolation can lead to very real problems with his or her physical health (Cacioppo, Hawkley, Craford, Ernst, Burleson, Kowalewski, Malarkey, Van Cauter and Berntson, 2002; Seeman, 2000). Previous studies have indicated that nearly 30% of Americans struggle with this phenomenon (Weiss, 1973). People who are active members of their community (members of a professional associations, clubs, political parties etc.) are more likely to vote (Hanks and Eckland, 1978). People self-reporting loneliness are likely to suffer from various degrees of agoraphobia and other correlated symptoms of depression (Park and Chang, 2004). People who are agoraphobic, lonely and depressed tend to be less active members of their community, therefore, we propose that they will also vote in fewer numbers than those identified as less lonely. This paper puts forward the idea that even in cases where minimal civic engagement would be required to participate in elections (for example mail-in ballots) persons self identifying as lonely would participate to a lesser degree than those who self identify as less lonely.

Attempts to measure loneliness vary tremendously from one method to another (Oshagan and Allen, 1992; Sarason, Levine, Basham and Sarason, 1983), but the method most commonly used is the UCLA Loneliness Scale (Russell, Peplau and Cutrona, 1980; Russell, 1996). This scale has been validated through numerous experiments (Hojat, 1982; Oshagan and Allen, 1992) and is generally thought to be a better fit in identification of loneliness then many of the short form scales developed since its inception (Hays and Dimatteo, 1987).

One criticism of utilizing the UCLA scale as a variable in a model testing voter participation is the potential for gender differences. There may exist more interaction between gender and loneliness than between either of these variables and voter participation. While our study did look for signs of interaction (see methods below), other studies have shown gender differences to be attributable to differences in overt acknowledgment of an individual's loneliness (Borys and Perlman, 1985) rather than flaws in the scale itself.

Methodology

Major Hypotheses

This work advances two major hypotheses. First and foremost we anticipated loneliness having a direct relationship with voter turnout. Even in a state like Washington, where a great amount of voting is completed with mail-in ballots (i.e. carrying a very minimal social cost of participation), individuals self identifying as lonely will vote less than those who self identify as less lonely. Second we anticipated loneliness being directly related to voter frequency of participation.

Research Design:

This project uses survey methodology in order to test the above hypotheses. As a point of course, the Washington State University Institutional Review Board approved the survey used, which is provided in the Appendix along with the informed consent form.

Variable	Min	Max	Mean	S.D.
Loneliness	22	62	37.1818	8.96975
Interest	0	2	1.3333	.63888
Sophistication	0	2	1.8283	.42953

Table 1Descriptive Statistics

The data used in this study was taken from a multi-question survey instrument administered by political science graduate students at Washington State University to a group of 107 undergraduate students whose class rank varies from freshman to senior status. Our analysis focused on the 99 students eligible to vote in Washington (8 students were registered in another state). The data can be obtained by emailing the primary investigator (David S. Pearl. By using a homogeneous population who vote in the state of Washington we can further isolate our primary investigative variable (loneliness). Students at Washington State University hail from all strata of society, and have a racial distribution reflecting the Washington population at large. Further, the respondents were drawn from four Political Science courses representing both general education curriculum (GEC) as well as required courses for graduation within the major. This population might be, in fact, ideal when one considers the habit formation literature (Yalch 1976, Erikson, 1981, Green 2000). If voting is habitual, than the study of first or second time voters (as most of our undergraduate participants were) would be critical.

In addition to the major hypotheses, we will pay careful attention to the possibility of interaction between variables. We did not expect social class and racial stratification to show signs of interaction (See Siassi, Crocetti and Spiro 1974), but we did look at possible interaction between gender and loneliness (See Borys and Perlman 1985).

It should be noted that some possible explanatory variables cannot be examined in this student population. For instance, since this sample is largely composed of college students between the ages of 20 and 22, few respondents were married. Additionally, small sample sizes in many categories in the race variable do not permit investigation of how effects might vary by race. Other indicators, such as union membership, were similar to the national average.

Measures

Voter Turnout:

The dependent variable in model one examined by the study is Voter Turnout. Did the individual cast a ballot in the most current election? Of the 99 participants, 48 (48.5%) voted and 51 (51.5%) did not.

Voter Frequency of Participation:

The dependent variable in model two examines the respondent's previous vote Frequency. Question n° 7 asks the respondent how often he/she votes (never, rarely, sometimes or always). Answering "always" is very different from any of the other answers that leave wiggle room for intention to vote. Accordingly, we also examined this dichotomous response: those who answered "Always" made up 44.4% of valid respondent's, "Never", "Rarely" and "Sometimes" together made up 55.6% of the responses.

Loneliness:

This independent variable measures loneliness, or self perception of social isolation. The phenomenon is quantified using the UCLA Loneliness Scale (a 20 to 80 point scale with higher scores indicating greater loneliness). Respondent scores ranged from 22 to 62. The mean score was 37.2. The mode for this variable was 31.

Race:

This independent variable measures the respondent's race. The question is worded so as to allow the respondent to identify him/herself as one race or as multiracial. 87.9% answered White, which is reflective of the general population in Washington (88.64% according to 2000 center for population data). Smaller categories were grouped and the data were examined as White, Asian, and Non-White/Asian. Filling in more than one category was scored as "multiracial" and thus part of the Non-White/Asian category.

	Frequency	Percent
White	87	88,0%
Black	1	1,0%
Hispanic	2	2,0%
Asian	6	6,0%
Native	1	1,0%
Multiracial	2	2,0%
Total	99	100,0%

Table 2 Respondent's Self-reported Race

Note. 58.6% of respondents were male and 41.4% were female

Table 3
Respondent's Gender

	Frequency	Percent
Male	58	58.6%
Female	41	41.4%
Total	99	100.0%

Generational Effects:

An important explanatory variable might be how often the respondent's parents voted. This *generational effect* independent variable was measured on a 4-point ordinal scale. The survey asks: "How often did/do your parents vote?" (Never, Rarely, Sometimes, or Always). 78.8% of respondent's

chose "Always", 19.2% chose "Sometimes", 2% chose "never" and surprisingly 0% chose "rarely".

Class:

As the population being examined is made up of university students with minimal income, asking a question like "what is your annual income" would not provide a good picture of the individual's social class. Here we asked "Do you consider yourself a...." in order to gauge the respondent's self reported social class. We also allow for an "opt out" option, i.e. Individuals can choose "other" instead of one of the specified class segments. Not surprisingly, a large majority (73.7%) of valid respondents self identified as Middle Class. 15.2% of respondents self identified as working class and 9.1% identified as members of the upper class.

	Frequency	Percent
WorkingClass	15	15.2%
MiddleClass	73	73.7%
UpperClass	9	9.1%
Other	2	2.0%
Total	99	100.0%

Table 4What class the respondent reported

Sophistication:

We used a two-question minimal political knowledge scale to measure base sophistication. Respondents were asked: which political party was in control of the house and senate before the last election and which political party the president of the United States belonged to. If respondents answered both questions correctly they were given a score of "2". One correct answer resulted in a score of "1". Zero correct answers resulted in a score of "0". Clearly, this scale allows only a crude measure as to the minimal political knowledge of the respondent.

Results and Conclusion

Multivariate Results Model One

In order to test the effects the various independent variables had on voting behavior we used a binary logistic regression model (Table 5). The dependent variable for this model is the odds of the respondent having voted in the November 2006 election cycle. This model explained approximately 50% of the variance between the variables (pseudo r^2 of .497). The model is significant (note the model chi-squared), and correctly predicts whether a respondent voted or not in the 2006 Election 76.8 percent of the time.

Variable	В	SE of B	Wald	Exp (B) (odds ratio)
Female***	1.693	.640	6.984	5.434
Loneliness***	103	.038	7.359	.902
Asian	.538	2.072	.067	1.713
Non-White/Asian	.768	1.007	.582	2.156
Middle Class	.653	.806	.656	1.921
Upper Class*	2.370	1.268	3.497	10.702
Class-Other	088	3.307	.001	.916
Political Interest***	2.730	.619	19.427	15.333
Party Member	344	.595	.333	.709
Sophistication	.038	.620	.004	1.039
Union Member	746	1.241	.362	.474
Constant	-1.415	2.018	.492	.243
Model Chi-squared***	46.204			
-2 Log likelihood***	90.948			
Nagelkerke R-squared	.497			
Classification Percentage Correct	76.8			

 Table 5

 Bivariate Logistic Regression Results for voted in the 2006 election

a. *p < .10 **p <.05 ***p<.01

b. The categories of race are compared with those that self-identified "white" as the reference group

c. The class categories are compared with those that self-identified "lower class" as the reference group

The significant variables in determining the odds of whether or not someone from this population would vote were the respondent's gender, a self-reported member of the upper class compared with self-reported members of the working class, a respondent's score on the political interest scale, as well as the respondent's score on the loneliness scale. Being female in this sample significantly increases the probability of voting significantly in this sample over the males, changing the odds of voting by 5.434 times (90% CI: 1.90 to 15.58). This suggests the appearance of a much more significant variable than would be found in representative sample of the entire nation.

Loneliness is significant for this sample at the .01 level. For every onepoint increase on a respondent's loneliness score, the odds of voting reduce by a factor of 0.902 (90% CI: .85 to 0.96).

Therefore, as a respondent feels lonelier he or she becomes less likely to vote. An interaction between the variables gender and loneliness was examined, and no statistically significant interaction was found at a .05 alpha level. Not surprising, a respondent's interest in politics was the greatest indicator of whether or not he or she voted or not according to this model.

Multivariate Results Model Two

In order to test the effects the independent variables would have on voter intention to participate we ran another binary logistic regression model (Table 6). Recall that the dependent variable for this model deals with voter intention of participation. The model as a whole is highly significant as per the model chi-squared, and it appears to be explain approximately 69% of the variation in the dependent variable. The model predicts the respondents intended voting frequency correctly 82.8 percent of the time.

Variable	В	SE of B	Wald	Exp(B) (odds ratio)
Female***	2.402	.910	6.959	11.041
Loneliness***	167	.060	7.685	.846
Asian	1.306	5.034	.067	3.691
Non-White/Asian	.748	1.137	.432	2.112

 Table 6

 Bivariate regression model results for voter frequency

Middle Class	1.260	1.124	1.256	3.526
Upper Class***	4.915	1.895	6.729	136.312
Class-Other	.535	8.072	.004	1.707
Political Interest***	4.553	1.080	17.773	94.952
Party Member	471	.731	.415	.624
Sophistication	.998	.845	1.397	2.714
Union Member**	-3.643	1.683	4.684	.026
Constant	-4.619	2.680	2.969	.010
Model Chi-squared***	71.342			
-2 Log likelihood	64.677			
Nagelkerke R-squared	.688			
Classification Percentage Correct	82.8			

a. *p < .10 **p < .05 ***p < .01

b. The categories of race are compared with those that self-identified "white" as the reference group

c. The class categories are compared with those that self-identified "lower class" as the reference group

As in model one, a respondent's gender, score on the loneliness scale, upper class compared to working class, and political interest score were significant. In addition, model two has union membership versus not belonging to a union as significant. That being said, the model's results are fairly similar to model one.

Conclusion

The findings seem to affirm not just the voting hypotheses but also our ideas regarding minimal costs and participation. In both models increases in the loneliness scale showed a significant decrease in the respective dependent variable. These findings indicate that even the minimal social costs associated with undergraduate student voting in a state like Washington (with its large percentage of mail-in ballots) are costs those who self report loneliness are more unlikely to bare. As an explanatory variable, loneliness might be useful in political research far beyond voter turnout. Issues of party identification, campaign participation and media effects are a few possible areas loneliness might improve the quality of our understanding.

This study provides a different dimension of investigation than the policy implications found in other studies, which seek to improve models of voter participation by examining new social capital variables. Unlike social capital (which measures social isolation in groups), loneliness measures selfperceived notions of social isolation. Furthermore, loneliness is distinct from (although probably correlated with) political efficacy. Thus, future versions of our research will incorporate both social capital indicators as well as efficacy measures in order to build our understanding of the phenomenon. It is also of interest to investigate how these results might be related to other populations beyond university students in the state of Washington.

The findings of this paper indicate that low levels of voter turnout might be partially explained by the high rate (approximately 30%) of Americans who suffer from loneliness and related psychological phenomenon. This finding then has implications for both political public policy as well as issues of public health.

Appendix: Social Lonliness Survey

SECTION 1. INSTRUCTIONS:

The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by writing a number in the space provided.

Here is an example: How often do you feel happy? ____

If you never felt happy, you would respond "never". You would place a "1" in the blank space provided. If you always feel happy, you would respond "always". You would place a "4" in the blank space provided.

NEVER	RARELY	SOMETIMES	ALWAYS
1	2	3	4

Appendix: Social Lonliness Survey

SECTION 2. QUESTIONS

1 How often do you feel that you are "in tune" with the people around you?	
2 How often do you feel that you lack Companionship?	
3 How often do you feel that there is no one you can turn to?	
4 How often do you feel alone?	
5 How often do you feel part of a group of friends?	
6 How often do you feel that you have a lot in common with the people.	
7 How often do you feel that you are no longer close to anyone?	
8 How often do you feel that your interests and ideas are not shared by those around you?	
9 How often do you feel outgoing and friendly?	
10 How often do you feel close to people?	
11 How often do you feel left out?	
11 How often do you feel left out?	
12 How often do you feel that your relationships with others are not meaningful?	
12 How often do you feel that your relationships with others are not meaningful?13 How often do you feel that no one really knows you well?	
12 How often do you feel that your relationships with others are not meaningful?13 How often do you feel that no one really knows you well?14 How often do you feel isolated from others?	
 12 How often do you feel that your relationships with others are not meaningful? 13 How often do you feel that no one really knows you well? 14 How often do you feel isolated from others? 15 How often do you feel you can find companionship when you want it? around you? 	
 12 How often do you feel that your relationships with others are not meaningful? 13 How often do you feel that no one really knows you well? 14 How often do you feel isolated from others? 15 How often do you feel you can find companionship when you want it? around you? 16 How often do you feel that there are people who really understand you? 	
 12 How often do you feel that your relationships with others are not meaningful? 13 How often do you feel that no one really knows you well? 14 How often do you feel isolated from others? 15 How often do you feel you can find companionship when you want it? around you? 16 How often do you feel that there are people who really understand you? 17 How often do you feel shy? 	
 12 How often do you feel that your relationships with others are not meaningful? 13 How often do you feel that no one really knows you well? 14 How often do you feel isolated from others? 15 How often do you feel you can find companionship when you want it? around you? 16 How often do you feel that there are people who really understand you? 17 How often do you feel shy? 18 How often do you feel that people are around you but not with you? 	
 12 How often do you feel that your relationships with others are not meaningful? 13 How often do you feel that no one really knows you well? 14 How often do you feel isolated from others? 15 How often do you feel you can find companionship when you want it? around you? 16 How often do you feel that there are people who really understand you? 17 How often do you feel shy? 18 How often do you feel that people are around you but not with you? 19 How often do you feel that there are people you can talk to? 	

References

- Abramson, P. R. and Claggett, W. (1984): Race-Related Differences in Self Reported and Validated Turnout, *The Journal of Politics*, Vol. 46, No. 3, pp. 719-738.
- Borys, S. and Perlman, D. (1985): Gender Differences in Loneliness, *Personality and Social Psychology Bulletin*, 1985, Vol. 11, No. 1, pp. 63-74.
- Cacioppo, J. T. Hawkley, L. C., Crawford, L. E., Ernst, J. M., Burleson, M. H., Kowalski, R. B., Malarkey, W. B., VanCauter, E., & Berntson, G. G. (2002): (2002): Loneliness and Health: Potential Mechanisms, *Psychosomatic Medicine*, Vol. 64, pp.407-417.
- Cacioppo, J.T., Hawkley, L. C., Berntson, G. G. (2003): The Anatomy of Loneliness, *Current Directions in Psychological Science*, Vol. 12, No.3, pp.71-74.
- Center for American Women and Politics (2005): Sex Differences In Voter Turnout, *Fact Sheet.* www.cawp.rutgers.edu.
- Erikson, R. S. (1981): Why do People Vote? Because they are Registered, *American Politics Quarterly*, Vol. 9, pp. 259-276.
- Filer, J.E., Kenny, L. W. and Morton, R.B. (1993): Redistribution, Income, and Voting, *American Journal of Political Science*, Vol.37, No.1, pp.63-87.
- Filer, J. E., Kenny, L.W. and Morton, R. B. (1991): Voting Laws, Educational Policies and Minority Turnout, *Journal of Law and Economics*, Vol. 34, No.2, pp. 371-393.
- Gillam Jr., Franklin D. (1985): Influences on Voter Turnout For U.S. House Elections In Non-Presidential Years, *Legislative Studies Quarterly*, Vol. 10, No. 3, pp. 339-351.
- Green, D. P., Shachar, R. (2000): Habit Formation and Political Behavior: Evidence of Consulted in Voter Turnout, *British Journal of Political Science*, Vol. 30, No.4, pp. 561-573.
- Hanks, M. and Eckland, B.K. (1978): Adult Voluntary Associations and Adolescent Socialization, *The Sociological Quarterly*, Vol. 19, Issue 3 pp. 481-490
- Hays, R. D. and DiMatteo, M. R. (1987): A Short-Form Measure of Loneliness, *Journal of Personality Assessment*, Vol. 51 (1), pp. 69-81.
- Hojat, M. (1982): Psychometric Characteristics of the UCLA Loneliness Scale: A Study with Iranian College Students, *Educational and Psychological Measurement*, Vol. 42, No. 3, pp. 917-925.
- King, J. D. (1994): Political Culture, Registration Laws, and Voter Turnout Among the American States, *Publius*, 1994, Vol.24, No. 4, pp. 115-127.
- Levine, P. and Lopez, M.H. (2002): Youth Voter Turnout has Decined, by Any Measure, Unpublished Research, *Center for Information and Research on Civic Learning and Engagement*, pp. 1-14.
- Malchow, H. (1998): Predicting Voter Turnout: A New Targeting Approach, *Campaigns & Elections*, July.
- Mangum, M. (2003): Psychological Involvement and Black Voter Turnout, *Political Research Quarterly*, Vol. 56, No. 1, pp. 41-48.
- Marangoni, C. and Ickes, W. (1989): Loneliness: A theoretical Review with Implications for Measurements, *Journal of Social and Personal Relationships*, Vol. 6, No.1, pp. 93-128.
- Oshagan, H. and Allen, R. L. (1992): Three Loneliness Scales: An Assessment of their Measurment Properties, *Journal of Personality Assessment*, Vol.59(2), 380-409.

- Park, Y. and Chang, E.G. (2004): Perfectionism and Lonliness as Predictos of Depressive Symptoms: A Test of an Integrative Model. *Journal of Young Investigatos*, Vol. 10 Issue 1
- Plutzer, E. and Wiefek, N. (2006): Family Transitions, Economic Status, and Voter Turnout Among African-American Inner-City Women, *Social Science Quarterly*, Vol. 87, No. 3, pp. 658-678.
- Russell, D. W. (1996): UCLA Loneliness Scale (Version 3): Reliability, Validity, and Factor Structure, *Journal of Personality Assessment*, Vol. 66 (1), pp. 20-40.
- Russell, D. W., Peplau, L.A. and Cutrona, C.E., (1980): The Revised UCLA Loneliness Scale: Concurrent and Discriminant Validity Evidence, *Journal of Personality and Social Psychology*, Vol. 39, pp. 472-480.
- Sarason, I. G., Levine, H. M., Basham, R. B. and Sarason, B. R. (1983): Assessing Social Support: The Social Support Questionnaire, *Journal of Personality and Social Psychology*, 1983, Vol. 44, No. 1, pp. 127-139.
- Seeman, T.E. (2000): Health Promoting Effects of Friends and Family on Health outcomes in older Adults, *American Journal of Health Promotion*, Vol. 14, pp. 362-370.
- Siassi, I., Crocetti, G. and Spiro, H.R. (1974): Loneliness and Dissatisfaction in a Blue Collar Population, *Archives of General Psychiatry*, 30, pp. 261-265.
- Sklar, H. (2000): Booming Economic Inequality, Falling Voter Turnout, Z Magazine.
- Verba, S. and Nie, N. H. (1972): *Participation in America: Political Democracy and Social Equality*. New York: Harper and Row.
- Weiss, R. (1973): Loneliness: The Experience of Emotional and Social Isolation. Cambridge, MA: MIT Press.
- Winders, B. (1999): The Roller Coaster of Class Conflict: Class Segments, Mass Mobilization, and Voter Turnout in the U.S., 1840-1996, *Social Forces*, Vol. 77, No. 3, pp. 33-862.
- Yalch, R. F. (1976): Pre-Election Interview Effects on Voter Turnout, *Public Opinion Quarterly*, Vol. 40, No. 3, pp. 331-336.

David S. Pearl, Teaching Assistant in Washington State University, received his M.A. from Governors State University and is currently a Doctoral candidate at Washington State University. His research interests include social isolation in politics, game theory and state level decision making. davidpearl@wsu.edu. Robert K. Anderson is an M.A. candidate at Washington State University. andersonrobertk@wsu.edu. *Address.* Washington State University, 717 Johnson Tower, Pullman, Wa. 99164,