Polls and Elections

Socioemotional Selectivity Theory and Vote Choice

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Socioemotional selectivity theory posits that individuals invest more selectively in goals and activities that are emotionally meaningful as they age and time horizons gradually shrink. We extend socioemotional selectivity theory to the domain of voting in elections. We use data from the 2012 American National Election Study to test the hypothesis that older voters would place greater emphasis on emotional reactions to the candidates in their presidential voting, relative to younger voters. The empirical evidence suggests support for this contention, implying socioemotional selectivity extends to voting.

Keywords: voting behavior, political behavior, socioemotional selectivity theory

As individuals age, time horizons gradually shrink, causing people to invest more selectively in goals and activities that are emotionally meaningful (Carstensen 1992; Carstensen, Isaacowitz, and Charles 1999). According to this life-span theory of motivation, developed and termed socioemotional selectivity theory (SST) by Stanford psychologist Laura Carstensen, motivational shifts also affect cognitive processing; individuals focus more so on knowledge-related goals (knowledge acquisition, career planning, new social relationships) when their future is perceived to be open ended, but emphasis shifts to emotion-related goals when they feel time is running out (Santrock 2008; Carstensen 1992; Carstensen, Isaacowitz, and Charles 1999). Although this shift is associated with aging, it is not the passage of time per se that causes it, but rather an age-associated shift in time perspective (Santrock 2008).

We extend SST to voting in elections. Scholars have demonstrated that voting decisions are influenced by a wide range of factors. Chief among these are rationality-based assessments related to partisanship, ideology, candidate performance, and policy positions (Campbell et al. 1960; Lewis-Beck et al. 2008). This model of voter decision making remained the dominant view in studies of political behavior for decades, but growing evidence suggests voters are also responsive to emotional considerations. Affective Intelligence theory, for example, ascribes an important role to emotional decision making in elections (Marcus, Neuman, and MacKuen 2000), and some scholars believe emotional

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reactions to candidates and political figures actually precede—and perhaps more importantly, prescribe—rational assessments (Lodge and Taber 2013). Whether the effects differ significantly by life-span status remains an open question.

The prosocial nature of voting in elections makes it an especially promising context in which to examine whether SST operates. SST predicts that goals aimed at optimizing the future (e.g., career or vocational goals) are prioritized when perceptions of the future are open ended, but emotionally meaningful goals become relatively more important when time is perceived as limited (Lang and Carstensen 2002). Lang and Carstensen (2002) distinguish two subtypes of emotionally meaningful goals: *Emotion regulation* goals seek meaningful emotional experiences, while *generativity* goals include the desire to take responsibility for future generations (Ryff and Heincke 1983). Studies have shown generativity goals to be most prominent in later adulthood (McAdams, Hart, and Maruna 1998). This may result from stronger prosocial orientations in older adults compared to younger adults (Van Lange et al. 1997), potentially reflecting individuals' desire for "symbolic immortality" (McAdams, Hart, and Maruna 1998). Generativity goals may be closely linked to voting as a mechanism to secure bright futures and effective leadership for future generations. Accordingly, we expect that SST is applicable to voting and view it as an interesting domain in which to examine the theory's predictions.

If SST applies to voting in elections, we should be able to observe a shift in the relative influence of factors like partisanship and ideology toward emotional considerations as voters age and their time perspectives change. In this study, we examine survey data from the American National Election Studies (ANES) to evaluate the hypothesis that older voters place greater emphasis on emotional considerations in their vote decisions than do younger voters. Broadly speaking, evidence for this hypothesis would be consistent with SST.

Emotional Reactions to Candidates

We used data from the 2012 ANES to test the hypothesis that older voters put more emphasis on emotional reactions to the candidates in their presidential voting. The 2012 ANES survey asked respondents if Barack Obama and Mitt Romney made them feel proud, hopeful, afraid, or angry—four clearly emotional reactions to the candidates. In each case, the respondents could say that the candidate evoked that reaction always, most of the time, about half of the time, some of the time, or never, which we placed on a 5-point scale, with 1 indicating the most positive response.[1] We calculated the difference between the reaction to Obama and the reaction to Romney for each of the four emotional reactions, a difference that could run from $+4$ (Obama evoked the most positive reaction and Romney the most negative one) to -4 (Obama evoked the most negative reaction and Romney the most positive one), with 0 indicating that both

1. For the questions about feeling proud or hopeful about the candidate, a score of 1 indicates that the respondent always felt that way and a score of 5 that the respondent never felt that way. For the questions about feeling angry or afraid, a score of 1 indicates that the respondent never felt that way and a score of 5 that the respondent always felt that way.

TABLE 1
Emotional Reactions to Presidential Candidates, 2012

Emotional Reaction to Candidate	Obama	Romney	Obama Advantage
Proud	3.90	4.16	.26
	(3499)	(3490)	(3475)
Hopeful	3.86	3.88	.03
	(3507)	(3503)	(3475)
Angry	2.19	1.84	-.35
	(3510)	(3507)	(3488)
Afraid	1.91	1.84	-.07
	(3513)	(3507)	(3503)
Emotional reactions index	2.96	2.93	-.04
	(3518)	(3517)	(3514)

Notes: Blacks and minor party voters are excluded from the analysis. Entries are mean scores for the variables. *N*s are in parentheses. The first two variables (proud, hopeful) are scored on a 1 to 5 scale, where 1 indicates that the candidate always evoked the specified emotional reaction from the voter and 5 indicates that the candidate never made the voter feel that way. The scoring for the second two variables (angry, afraid) is reversed, so that a score of 1 represents the most positive score (never). The Obama advantage is calculated as the difference between the Obama score and the Romney score; a positive score indicates that voters had a more favorable reaction to Obama than to Romney. The emotional reactions index is the mean score for the above four variables.
Source: 2012 American National Election Study.

candidates evoked the same reaction. We also calculated an overall emotional reactions index for each respondent, which is simply the mean score for the four individual emotional reactions.[2]

Table 1 displays the mean scores for the above emotional reactions for voters in 2012. Blacks have been eliminated from the analysis because they voted almost entirely for Obama, so there is no variance in their voting to explain.[3] The relatively few minor party voters also have been eliminated from the analysis because there is no information on how they reacted to the candidate that they voted for. The mean scores for Obama and Romney for the two positive emotional reactions, proud and hopeful, are all around 4.0, which means that the average voter felt proud or hopeful about either candidate only some of the time, not a particularly favorable reaction. The mean scores for the two negative emotional reactions, angry and afraid, are all around 2.0, indicating that the average voter felt angry or afraid about either candidate only some of the time, so that while the candidates did not make most voters very proud or hopeful, they also did not make most

2. The emotional reactions index is calculated as the mean score for the difference between the reaction to Obama and the reaction to Romney for the four emotions (hopeful, proud, angry, afraid). Because the difference for each reaction ranges from +4 to −4, the mean score for the index runs from +4.0 to −4.0. We also calculated: (a) an overall reaction to Obama, which is the mean score for the four emotional reactions to Obama, and (b) an overall reaction to Romney, which is the mean score for the four emotional reactions to Romney. Each of these two measures range from 1 to 5, with 1 being the most positive score.

3. We also ran the analysis with black voters included, and the findings are very similar. However, it is preferable to exclude black voters because including them could artificially inflate the coefficients; blacks voted almost exclusively for Obama and they tended to have very positive reactions to Obama. To ensure that our results are not distorted or inflated by the confounding effects of race, we report the results of the analysis with black voters excluded.

TABLE 2
Distribution of Scores on the Emotional Reactions Index

Emotional Reactions Index Score		Percent
Most favorable to Obama	>3.5 to 4.0	1.4
	>3.0 to 3.5	3.7
	>2.5 to 3.0	6.0
	>2.0 to 2.5	7.6
	>1.5 to 2.0	6.9
	>1.0 to 1.5	7.8
	>0.5 to 1.0	6.8
	>0 to 0.5	7.1
Not favorable to either candidate	0	5.8
	<0 to -0.5	7.6
	<-0.5 to -1.0	8.1
	<1.0 to -1.5	8.0
	<-1.5 to -2.0	6.9
	<-2.0 to -2.5	5.8
	<2.5 to -3.0	5.6
	<3.0 to -3.5	3.6
Most favorable to Romney	<3.5 to -4.0	1.3

Notes: Blacks and minor party voters are excluded from the analysis. See the text for details on the emotional reactions index.
Source: 2012 American National Election Study.

voters very angry or afraid. Obama clearly had an advantage on the question of being proud about the candidate, but Romney had a significant advantage on the question of being angry about the candidate. For the other two variables, hopeful and afraid, there was little difference in the mean scores for Obama and Romney. The result is that the overall emotional reaction to both candidates was similar, with an average score close to 3.0, and neither candidate had any meaningful advantage when it came to emotional reactions from the voters, as the -.04 mean score for the emotional reactions index indicates (keep in mind that this analysis does not include black voters, who generally were very positive toward Obama).

While neither candidate had an overall advantage, as measured by the emotional reactions index, that does not mean that most voters reacted similarly to both candidates. In fact, there was considerable variation in this variable. Table 2 shows the distribution of scores on the index. Over one-third of voters had an index score of greater than 2.0 or less than −2.0. An index score of 2.0 would result from a voter saying that s/he felt proud and hopeful about Obama most of the time, but only some of the time for Romney, and afraid or angry toward Obama only some of the time, but most of the time for Romney. Of course, there are other ways to generate an index score of 2.0, but this example should illustrate how substantial of a difference a score of 2.0 represents. It is clear that a sizable number of voters had substantially more positive emotional reactions toward one of the two candidates than to the other, and these voters were split fairly evenly, with about as many feeling much more positively about Romney as feeling much more favorably about Obama. Relatively few voters displayed little difference in their overall emotional

reactions toward Obama and Romney; only about one-fifth of the voters had a mean score between 0.5 and −0.5.[4]

Emotional Reactions and Voting

The question that we are interested in is whether these emotional reactions affected how people voted and whether the effect is greater for older voters. To determine this, we ran a logistic regression analysis of the presidential vote for four different age groups: millennials, generation X, boomers, and seniors.[5] The 2012 ANES survey had an unusually large number of respondents, so there were a large number of respondents for each generational group. We conducted the analysis using a conditional model, meaning that we separated voters into different age groups and ran a separate regression analysis for each group, because this allowed the coefficients for all the variables to vary with age, not just the coefficient for the emotional reactions variable. An alternative analysis method would be to run one regression analysis for all voters and include an interaction term for age and the emotional reactions index to determine whether emotional reactions had a greater effect on the vote for older voters. However, this method would assume that the effect of the other variables does not vary with age, an assumption that is unnecessarily restrictive. Our analysis shows that there is substantial difference in the impact of other variables across the age groups. For example, party identification has a greater effect on the vote for older voters than it does for younger ones, and millennials are more strongly affected by their evaluations of Obama's handling of the economy than are older voters. These differences in the effects of other variables are not of interest in this study, but if we used a model that assumed that these other variables had the same effect for each group, the result would be that the coefficients for the effect of emotional reactions on the vote would be affected and thus could produce misleading estimates of these effects across age groups. Of course, it is possible to include interaction terms for all of the other variables in the analysis, but this makes the model quite complicated. A cleaner and more straightforward approach is to use a conditional model, as we have done.

In addition to the emotional reactions index discussed above, we included a number of other relevant variables. The literature on voting behavior indicates that the vote for president is affected by more fundamental attitudes, primarily party identification an ideological orientation, and by short-term attitudes toward the parties and the candidates. These short-term attitudes include orientations on specific issues of public policy, evaluations of presidential performance, and assessments of the character traits of the

4. A score of 0.5 on the emotional reactions index would result from a voter feeling: (a) hopeful and proud about Obama about one-half of the time but only some of the time for Romney and (b) having the same level of fear and anger about the two candidates. Of course, there are many other ways to generate a score of 0.5, but this example should illustrate the magnitude of a difference of 0.5 on the index.

5. Millennials are those 18 to 32 years of age in 2012, generation X members are those 33 to 49 years of age in 2012, boomers are those between 50 and 66 years of age in 2012, and seniors are those at least 67 years old in 2012. Each of these age groups could be defined slightly differently, but doing so does not alter the basic results of the analysis. For a discussion of how generations might be defined, see Howe and Strauss (2000), Miller (2011), and Pew Research Center (2010).

candidates. We include measures of all of these attitudes in our analysis in order to determine the independent effect of emotional reactions on the vote for president.

Party identification and ideological orientation were measured by the familiar 7-point scales (from *strong Democrat* to *strong Republican* for party identification, and from *very liberal* to *very conservative* for ideological orientation).[6] Evaluations of presidential performance were measured by two questions, one that asked about Obama's handling of the economy and one that asked about his handling of foreign affairs (responses to both questions were on a 4-point scale that ran from *strongly approve* to *strongly disapprove*).

Two measures of attitudes on public policy issues were constructed. An index of attitudes on social welfare issues was constructed from four questions, which asked respondents about: (a) increasing or decreasing government services and spending, (b) whether the government should guarantee individuals a job, (c) what role the government should play in providing health care, and (d) whether the government should attempt to reduce income inequality.[7] An index of attitudes on moral issues was formed from a question about abortion that asked respondents about how strongly they favored or opposed making abortion legal and from an index of attitudes toward gay rights, which was constructed from questions about whether gays should be allowed to marry, adopt children, serve in the military, and have protection against job discrimination.[8] Because other research has shown that among whites the vote for Obama was influenced by attitudes toward blacks, we also included a measure of what is often termed racial resentment (Knuckey 2011); this measure is formed from questions about whether blacks should be able to work their way up the way other ethnic groups did, whether blacks need to try harder to get ahead, whether a long history of discrimination has made it difficult for blacks to get ahead, and whether blacks have gotten less than they deserve.[9]

Voter assessments of candidate character traits were measured by an index of perceptions of Obama and Romney on four character traits that the survey asked about: strong leadership, caring about people, honesty, and knowledge.[10] This variable is particularly interesting in this study because perceptions of candidate traits might also indicate emotional reactions to the candidates, which would lead to the hypothesis that older voters place more emphasis on candidate character traits in deciding how to vote. However, it is not clear that perceptions of candidate character traits represent emotional reactions.

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6. There were a number of voters who did not place themselves on the 7-point ideology scale but who did classify themselves as liberal, moderate, or conservative with further prompting; these voters were classified as slightly liberal, moderate, and slightly conservative, respectively.

7. The four items have an average correlation of .49, and the index has a Cronbach's alpha of .85.

8. The four items in the index of gay rights have an average correlation of .50, and the index has a Cronbach's alpha of .86. The correlation between the question on abortion and the index of gay rights is .46.

9. The four items in the index of attitudes toward blacks have an average correlation of .51, and the index has a Cronbach's alpha of .86.

10. These four traits represent the four dimensions that have been identified as important to voters: leadership, empathy, integrity, and competence (see Holian and Prysby 2015, 22–51). Each character trait was measured on a scale from 1 to 5. The candidate trait index represents each voter's mean score on the underlying four items for both candidates. The measure ranges from 4 to −4, where a 4 represents a voter who gave Romney the highest and Obama the lowest rating on all four trait items; a −4 represents the opposite pattern. Zero means the respondent, on balance, viewed the candidates equally well in terms of their traits.

These assessments might represent, at least in the eyes of the voter, simply evaluations of relevant aspects of a candidate's character (Holian and Prysby 2015, 10–16). For example, a voter might have concluded that Obama in 2008 was inexperienced, that George W. Bush in 2000 was not very knowledgeable, or that Bill Clinton in 1996 lacked integrity and have felt that all of these judgments were based on the available evidence and information widely available in the media.

The results of the analysis are in Table 1. As we can see, emotional reactions toward the candidates have a significant effect on the vote for three of four age groups. The coefficient for the emotional reactions index is weak and statistically insignificant only for the youngest age group. The effect then becomes increasingly greater as voters get older, with the magnitude of the coefficient for seniors almost three times the size of the coefficient for the generation X group of voters and over four times the size of the coefficient for millennials. To put the results another way, the effect of a change of one point in the emotional reactions index on the presidential vote for seniors would be the same as the effect of a change of four points in the index for millennials, with other factors held constant. This result is what the socioemotional selectivity hypothesis predicts. The presidential vote choices of older voters are much more strongly driven by emotional reactions to the candidates than is the case for younger voters.[11]

This analysis also shows that there is no tendency for the emphasis on character traits to increase as the age of the voter increases. The coefficient for the trait variable is almost identical for the youngest and oldest groups, both of which seem to be more influenced by character traits than the middle two age groups. Thus, we find no support for the argument that, as voters age, they place more emphasis on character traits in their vote decisions. This finding, in combination with the results for the emotional reactions index, suggests that the perceptions of candidate character traits by voters are less emotional reactions to the candidates and more evaluations of relevant aspects of candidate character. These results also indicate that the effects of the other variables in the model do not systematically increase as voters age. In some cases, such as for social welfare issues, the coefficient for seniors is stronger than for the other age groups, but the coefficient does not systematically increase as we go from the youngest to the oldest group. The emotional reactions index is the only variable where the coefficient systematically and consistently increases as we move from the youngest to the oldest age group.

Discussion

The brief report we present provides evidence to support the claim that SST likely operates in voting domains. From a theoretical perspective, this finding reinforces the

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11. We also ran a logistic regression using all voters and including an interaction term for age and the emotional reactions index, along with interaction terms for other variables in the equations (party identification, etc.). The results of that analysis are consistent with the results that we report in Table 3. Specifically, the coefficient for the interaction term (age multiplied by the emotional reactions index score) is .025 ($p < .001$), which means that a change of one point in the index score for a 50-year-old voter would have the same effect on the vote as a change of two points for a 25-year-old voter, with other variables held constant.

TABLE 3
Logistic Regression of Presidential Vote, 2012

Independent Variable:	Millennials	Generation X	Baby Boomers	Seniors
Party identification	.55**	.36**	.64**	.75**
	(.21)	(.12)	(.14)	(.20)
Ideology	-.39	.05	-.38	-1.15
	(.32)	(.17)	(.20)	(.47)
Evaluation of Obama's	1.19**	.87**	.17	.61
handling of the economy	(.35)	(.21)	(.21)	(.53)
Evaluation of Obama's	.21	-.36	.15	-.26
handling of foreign affairs	(.31)	(.21)	(.18)	(.43)
Social welfare issues index	.66*	.53**	.49**	1.27**
	(.30)	(.16)	(.17)	(.31)
Moral issues index	1.20**	.83**	.70**	1.18**
	(.40)	(.23)	(.23)	(.49)
Index of attitudes toward blacks	.17	-.01	.28*	.63*
	(.23)	(.13)	(.14)	(.34)
Candidate trait index	1.33*	.43*	.41*	1.39**
	(.58)	(.22)	(.23)	(.41)
Emotional reactions index	.75	1.09**	1.95**	3.07**
	(.58)	(.28)	(.33)	(.84)
	Nagel. R^2 = .94	Nagel. R^2 = .88	Nagel. R^2 = .92	Nagel. R^2 = .96
	% cases corr. predict. = 97.7	% cases corr. predict. = 94.3	% cases corr. predict. = 96.3	% cases corr. predict. = 98.2
	N = 577	N = 877	N = 1062	N = 619

Notes: **$p < .01$, *$p < .05$ (one-tailed tests). Blacks and minor party voters are excluded from the analysis. Entries are logistic regression coefficients. Standard errors are in parentheses. The dependent variable is the presidential vote. See the text for details on the independent variables. Positive coefficients indicate that the likelihood of voting for Obama is increased by having a stronger Democratic identification, a more liberal ideological orientation, a stronger approval of Obama's handling of the economy and of foreign affairs, more conservative orientations on the two issue indices, a more positive view of blacks, a more positive views of Obama's traits relative to Romney's, and a more favorable emotional reaction to Obama than to Romney.
Source: 2012 American National Election Study.

notion that motivation is influenced by life-span and time-horizon perspectives and that individuals' judgments about political behaviors like voting are shaped by forces similar to those that affect choices in other domains. This has implications for the understanding of human motivation as well as political behavior.

From a practical vantage point, the results we present have implications for real-world political campaigns and electioneering. Our findings suggest older voters may base their political decisions on considerations that differ substantively from those employed by younger voters. In particular, older voters may be more responsive than younger voters to emotional appeals. Given older voters' general tendency to vote at rates higher than younger voters (Lewis-Beck et al. 2008), insights into the forces likely to be most influential in reaching voting decisions may be especially useful. Taking such heterogeneity into account can enable candidates and political operatives to design effective mobilization and persuasion strategies in elections. More generally, we hope this initial examination

inspires greater interest in studying whether (and how) the broader, psychological tendencies encompassed in socioemotional selectivity find expression in voting decisions.

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