# The Role of Political Agency in Political Participation Decisions\*

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## ABSTRACT

This paper proposes and explores a theory of political agency, a type of intentional explanation that differs in critical respects from existing rational choice intentional explanations. It is hypothesized that people possess differing degrees of political agency—the capacity or desire to choose actions consistent with a coherent sense of self. Data are presented bearing on the validity of a political agency scale. Experimental results are also reported indicating that political agency plays a mediating role on the effects of an attention manipulation on political behavior. People who have been made self-focused typically exhibit stronger relationships between feelings of responsibility and motivation to act on these feelings. Persons high in agency should not, however, be as susceptible to manipulations of self-focus because they are already utilizing the same processes of selfregulation that lend self-focus its effects. Rational choice explanations are among the most important in political science.

Green and Shapiro (1994, Chapter 1) point out that rational choice theory and research have come to constitute more than a third of articles in the most prestigious political science journal. Rational choice explanations dominate political scientists' understandings of the problem of collective action—why individuals engage in costly political participation, such as public interest group involvement. Prominent rational choice theories include Chong's (1992) reputation theory, Lohmann's (1993) signalling model, Opp's (1989) public goods model, and Finkel's (1989) collective rationality model.

Rational choice explanations represent a highly plausible type of explanation of participation choices—intentional explanation. Costly participation choices likely do involve intentions. In addition, intentional explanations are normatively attractive because they allow freedom of choice and reasoned cooperation. As Western Civilization's systematic inquiry into the nature of political life, political science inherits the aspirations of the democratic tradition. That tradition values human freedom and reason. Political science would be deeply disappointing were it to explain all of political life as the unreasoned outcome of deterministic psychological and social forces.

Nevertheless, the rational choice framework seems incomplete to many observers, who argue that existing rational choice approaches do not adequately account for matters of identity or ethics (Fireman & Gamson, 1979; Mansbridge, 1990; Monroe, 1996; Uhlaner, 1986). Even proponents have admitted that rational choice approaches have difficulty accounting for altruism (Lalman et al., 1993) and, in particular, collective action (Elster, 1986). By assuming people are purely self-interested or by assuming people are purely instrumentally rational, rational choice theory creates obstacles to understanding why anyone would engage meaningfully in political life. Persons exposed to economic and rational choice approaches are less likely to vote, to contribute to public goods, to invoke concepts of fairness, and to benefit themselves with cooperation (Abelson, *Critical Review*).

Social scientists appear to be faced with a dilemma. On the one hand they find theories that do not do justice to important human concerns, and on the other, they find approaches that address the complexity of human behavior, but appeal to deterministic psychological or social forces. This paper offers some speculations and findings regarding a third alternative to this dilemma—a theory of agency that both allows for intentions and choice, but has the potential to explain the roles of identity, altruism, and collective action in human behavior.

## **Agency in Rational Choice Theory**

Rational choice theory already implies a broader concept of human agency than is typically recognized. The key axioms of rational choice theory implicitly assume people have a continuity of identity over time. In later sections, I hope to show that the continuity of identity depends on processes of agency with implications that go beyond existing rational choice theories.

The continuity of the self is necessary for the very existence of the instrumental action upon which rational choice theory depends. Fulfilling a desire through instrumental action takes time. If a persona does not care about the self that will exist when the desire is satisfied in the future, that persona has no need to act on the desire. One of the key reasons why people care about future fulfillment of their desires is that *they* will be enjoying that fulfillment. In other words, they see themselves as continuous with their future selves.

Implicitly, rational choice accounts depend on a model of human agency in which persons have ever-present desires to modify the state of the world, and agents care about their ability to meet their inevitable future desires. Because they can use resources conserved in the present to meet salient future desires, rational agents will choose the most resource-conserving means to present ends and avoid intransitive preferences that can serve as a "money pump" to drain resources from the person. If we stipulate such agents, intransitive preferences and inefficient action become logical contradictions.

## The Continuity of the Self

Rational choice theory implicitly depends on the continuity of the self, but the experience of this continuity is an intricate process with requirements that go beyond rational choice theory. I would like to stress the difficulty and complexity of maintaining a coherent sense of self. The self is not a stationary object; it is a continuously evolving set of processes and mental structures charged with tasks of great difficulty.

According to developmental theory, the mental structures responsible for coherent understanding of the world and development of the self are elaborated and unified with experience (Chapman, 1988; Loevinger, 1987). Younger children appear to experience a chaotic, undifferentiated mass of perceptions comprised of partially interpreted sensory perceptions, mentally-constructed sensations, drive-related needs, and affects. A coherent self-concept is a central component of the cognitive structures needed to sort out the rush of psychic and sensory events that constitute human existence. It functions to prioritize the sensory stream and to categorize the stream into what is and is not the self.

Lending coherence to this mass of experience is no simple task. Markus and Wurf provide evidence of the motivational role of not merely present self-concepts but future possible selves. They stress the necessarily dynamic and flexible character of these constructs as they organize actions and experiences, motivate, provides standards, suggest behavioral scripts, and respond to the environment (Markus & Wurf, 1987). The development of adequate self-concepts is critical for autonomous and effective functioning (Cantor & Kihlstrom, 1987; Deci & Ryan, 1985).

Achieving a coherent sense of identity is in part difficult because people have largely indirect access to self-knowledge. Carver and Scheier (1981) observe that people have difficulty focusing attention on both the external world and themselves simultaneously. As a result, self-contemplation generally does not occur simultaneously with the behavioral choice process that most reveals who we are, making self-knowledge a difficult achievement. Not surprisingly, psychologists have found that people often do not know their reasons for action and incorrectly reconstruct their reasons after the fact (Nisbett & Wilson, 1977). Bem's self-perception theory even suggests that people usually reconstruct their reasons on the basis of the same external cues others use to infer a person's reasons for action. This perhaps goes too far (White, 1980), but it does underline the difficulty of acquiring self-knowledge.

People piece together theories of themselves in the form of self-schema, mental representations of who they are. Carver and Scheier (1981) observe that self-schema have the same psychological properties as the schema people have about others. Knowing oneself and knowing others are not fundamentally different, except in one salient respect—people are their mental structures.

## Toward a Theory of Political Agency

A theory of agency can be constructed on a model of the functional interaction of the self, attention processes, and action. The theory derives from developmental psychology and from control theory (Carver & Scheier, 1981), a theory of cognitive self-regulation.

First, some definitions. I will take the *self* or *identity* to be those aspects of people's selfconcept that they use to define what makes them the same person over time. Identity gives people a sense of continuity over time. A person has *agency* with respect to a certain action or class of actions to the extent that the action is consistent with their identity. When an action is thus consistent, it is experienced as self-determined. This sensation of selfdetermination is an aspect of agency, but not identical to it. By *action*, I mean not merely physical behavior but all products of persons, including thoughts, feelings, and desires. These terms have been used to denote a variety of concepts in the psychological and political science literature, but I am imposing definitions useful for the present theory.

Agency is a capability that must be actively constructed in two respects. People need to choose actions that are consistent with their identity, a difficult task. Just as importantly, however, they need to develop an adequate conception of identity. Too simple an identity will not lend coherence to the rich variety of actions of which persons may be capable and in which they may be actively engaged.

People can be low in agency with respect to a domain of action, such as political action, to the extent that they have not developed the capability of choosing actions in that domain that are consistent with their identity. Persons can also be low in agency with regard to a class of actions to the extent that they do not have an identity that can lend consistency and guidance to action in that domain.

People develop agency within a domain of action through a number of processes, of which I will discuss two in this paper. One process, internalization, develops the capability of choosing identity-consistent actions. The other process, reflexivity, enables the development of a coherent identity within an action domain. Cognitive evaluation theory (Deci & Ryan, 1985; Ryan, 1982) describes the process of internalization. People can be motivated to act for reasons that are more or less closely integrated with their sense of self. At one end of the continuum lie actions that are performed only to acquire rewards and punishments from the environment. Such actions are not internalized and they are experienced at a minimum as uninteresting and at the worst as coerced. The first step in internalizing a motive for acting in a domain is to develop internal rewards and punishments on behalf of the motive:

"*Introjected regulation* refers to behaviors that are motivated by internal prods and pressures such as self-esteem-relevant contingencies. It is this type of regulation that is present when one behaves because one thinks one *should* or because one would feel guilty if one did not. ...When a regulation has been introjected, ...it still remains separate from or external to the person's sense of self. ...Introjected regulation, then describes a form of internal motivation in which actions are *controlled* or coerced by internal contingencies rather than being self-determined." (Rigby et al., 1992)

At the other end of the continuum lies identity-based motivation, or what Ryan and his colleagues call "integrated regulation". Identity-based motivation involves goals that have been integrated into a coherent sense of self. If the person's sense of self is sufficiently coherent and unified so that internalized goals are not in conflict, the person has achieved identity-based motivation. Phenomenally, this type of motivation is experienced as emanating from a person's free choice, and not as imposed or forced.

Research suggests that attention and self-regulation processes are involved in the internalization of motives. Introjected regulation should undermine people's spontaneous

interest in and enjoyment of an activity. This is because people infer that they are engaged in the activity for self-rewards or avoidance of self-punishments, and not because the activity is inherently interesting or interesting given their sense of self. Ryan (Ryan, 1982). shows that experimentally–induced attention to internal rewards undermines subjects' spontaneous interest in a task. Spontaneous interest was measured by surreptitious observation. Subjects also report less interest in and enjoyment of the task. Plant and Ryan (Plant & Ryan, 1985) show that making subjects self-focused by placing them in front of a mirror also undermines spontaneous interest. The mirror manipulation induces a focus on the self rather than on the activity; and this promotes introjected regulation.

This theory of internalization underscores two key aspects of agency that help in operationalizing the concept. First, when people have low agency within an action domain, they should experience the requirement of action as internally coercive. For example, persons who have low agency with respect to politics should be more likely to report that they follow politics because otherwise they would feel bad or because others expect them to do so. Those with a higher sense of agency should be more likely to report they follow politics because doing so is important or because they want to learn about it. Second, as agency grows, people should be more likely to take spontaneous interest in an action domain. Thus, persons with high political agency may find following politics enjoyable.

Agency also grows with reflexivity, a capacity involved in constructing a coherent sense of self. Rosenberg (1990) defines reflexivity as the capacity to take oneself as an object and thereby to act on oneself. Reflexivity forms an important part of theories of development. Blasi (1990), for example, finds that at a young age, children are unable to describe themselves other than as a series of actions. As people mature, they come to see themselves as a set of unchanging traits. Such self-cognition becomes the basis eventually of conceptualizing the self and operating on it to accomplish self-modification. At high levels of maturity, levels not reached by many adults, the self becomes organized around a set of abstract principles that lend coherence to the self without imposing unworkably restrictive self-concepts. Loevinger's (1987) theory of ego development, Kohlberg's (1984) and Turiel's (1990) theories of moral development, and Rosenberg's (1996) structural theory of needs and values all describe similar developmental processes involving growth in reflexivity in varying domains.

As reflexivity grows, so does the capacity for taking responsibility for one's choices. Children are guided by impulses and needs in part because they have not learned to structure these impulses and needs. Reflexivity enables people to examine their desires, put them in perspective, and make choices among them. This process of structuration allows people to claim certain needs and desires as their own, in effect making them part of their sense of identity. By constructing their preferences, people assume responsibility for them.

Reflexivity suggests a third way in which agency might be operationalized. People with low agency in an action domain are apt not to take responsibility for their choices, beliefs, and other actions within that domain. They should be more susceptible to social norms and social influence within that domain, and their views may experience radical changes as arbitrary events focus their attention in varying ways within that domain. Perhaps, then, another measurable aspect of political agency is the degree to which a person reports feeling responsible for their political views or reports that events or other people are critically influential to their views.

## Hypotheses

My central goal in this paper is to begin the process of developing a scale of political agency and provide evidence for its validity. The paper is exploratory. My three areas of expectations concern the scaling properties of agency, its relationship with other variables and constructs, and, importantly, its role in mediating the effects of other cognitions and attention processes on motivation to participate in a public interest group.

The chief scaling "hypothesis" is a weak one—that a majority of the items I will propose for measuring agency have good scale properties and relationships with related constructs. The theory of agency presented here identifies three potentially measurable manifestations of political agency. These include the enjoyment of political action; the degree to which political motivation is experienced as internally or externally controlling versus arising from one's self; and the locus of responsibility for one's political views in oneself, other persons, or events. All these components are measures of the degree to which a person has developed agency with respect to political action. These three manifestations of agency may have some unique variance of their own, but they should also help identify a single underlying dimension of agency.

In exploring the relationship of the agency scale with other variables, I expect primarily to find significant correlations with variables measuring cognitive ability and expectations of individual influence on politics. Agency may also be correlated with postmaterialist values because materialist values imply a focus on external rewards and punishments, which are less consistent with internalization of political motivation.

The above concerns will be the chief focus of the paper. I will, however, briefly examine the role of agency in mediating the effects of other cognitions and attention processes on motivation to participate politically. Specifically, I expect that agency will enhance the relationship between motivation and sense of responsibility to contribute to a group's goals. Agency should also influence the degree to which people are susceptible to an attention manipulation that influences participation motivation. Self-focused attention induces people to live up to their less internalized standards of behavior because self-focus enhances self-regulation. Persons manipulated to self-focus show higher coefficients of various considerations, including sense of responsibility, on motivation to participate and likelihood of action (Muhlberger, 1996). However, persons with sufficiently high levels of political agency should already be utilizing the processes of self-regulation activated by self-focus. Consequently, self-focus may not have its usual effects in high-agency persons.

## Data

#### **Subjects**

Subjects were drawn from the undergraduate population at a mid-sized university noted for its technical curriculum. Students are highly career-oriented and not typically politically involved (96% of respondents were not active in any political organization). A list of randomly selected students, obtained from the registrar, was stratified by gender, ethnicity, year in school, and GPA. A stratified random sample was drawn with overrepresentation of female students so one-half of those contacted would be female, rather than one-third. Of the 269 persons contacted, 45% or 122 individuals were interviewed. Forty-five percent of the subjects were male. The sample was ethnically diverse, including 60% Caucasian, 18% Asian, 13% Afro-American and other, and 9% refusing. Median parental education was a college degree.

An examination of why college students choose to become politically involved can clarify how a politically important elite makes its consequential first decision to become politically active. Research indicates that high-cost participation during college, particularly in political groups, carries over to later adult life (Fendrich & Lovoy, 1988; Jennings, 1987; Merelman & King, 1986; Nassi, 1981).

#### Procedures

A caller offered prospective respondents \$7 to participate in an approximately 75 minute social-science study. Respondents took the self-administered interview in a laboratory. As part of the self-focus manipulation, the computer at which they took the interview either had a mirror mounted at the top of the monitor or not. Respondents could see there was nothing behind the mirror. A note on the mirror indicated that the mirror was for another experiment and should not be removed. Debriefed respondents indicated no suspicions. Respondents were informed that no steps were being taken to connect their identity with their responses. They were told to drop their completed interviews, recorded on unmarked computer disks, into a box with other diskettes.

## Questionnaire

Respondents could mouse click any point along a response scale on their computer screen. The program provided respondents with information on 12 diverse public interest groups, including Association for Life, The Rainforest Action Movement, and The American Civil Liberties Union. Information provided was from the groups' recruitment literature.

Respondents were interviewed about two groups. They were first asked to select the group in which they would be most likely to participate. This "favorite group" was included in the interview in order to obtain more variability on the behavioral measure. For the

second group, the computer randomly selected a group, henceforth referred to as the "random group." There were 122 respondents, so data analysis consists of 244 observations.

## **Manipulations**

As described above, self-focused attention was induced by the presence of a mirror, a standard manipulation that has been widely employed in psychological research and validated as effective in inducing self-focus (Carver & Scheier, 1981; Plant & Ryan, 1985). Fifty-four observations occur in each of the two no-mirror conditions (favorite and random groups) and 59 in each of the mirror conditions.

### Variables

The following will describe the measures employed. All of the terms in parentheses in the question text are scale anchors appearing on a continuous scale accompanying the question. The placeholder <group> indicates where the interviewing program substituted the name of a group.

## Measures of Agency

The following statements were used to measure the degree to which political engagement was experienced as internally or externally controlling versus arising from one's self. Respondents were instructed to indicate how true the statements were of them. Each statement was followed by a scale with the anchors: (not true / moderately true / very true). The positions of the anchors were randomly varied from side to side.

The statements were: I follow politics because that's what I'm expected to do. I follow politics so people won't be upset with me. I follow politics because I will feel bad about myself if I don't. I follow politics because it bothers me when I don't. I follow

politics because I want to learn new things. I follow politics because I think it's important. I follow politics because it's fun.

The following statements, also using the not true...very true scale, were used to measure the degree of spontaneous enjoyment of politics: I follow politics because it's fun. I follow politics because I enjoy it.

The following statements were used to measure respondents' locus of responsibility for political action. They were followed by a scale with the anchors (strongly agree / moderately agree / barely agree). The statements were: I usually ignore things I hear that contradict my political views. I usually depend on people I'm close with to fill me in on political issues. I usually depend on people I respect to fill me in on political issues. When I hear something that contradicts my political views, I make an effort to find out whether it is true.

The following two questions were also used to measure locus of responsibility, but with varying scale anchors: I feel (no / a moderate amount of / considerable) personal responsibility for my political views. It is ultimately up to me to make up my mind about political issues (strongly agree / moderately agree / barely agree).

#### Other Measures

SENSE OF RESPONSIBILITY TO PARTICIPATE—I feel (a strong responsibility to oppose / neither / a strong responsibility to contribute to) these goals. I feel (a strong obligation to contribute to / neither / a strong obligation to oppose) these goals. I ought to (energetically oppose / neither / energetically contribute to) these goals.

REPORTED MOTIVATION TO PARTICPATE—I am (strongly motivated to participate \*in\* / neither / strongly motivated to participate \*against\*) <group>.

## Results

I should caution that the following analyses are a first look at the data. A number of more sophisticated analysis options were not performed for lack of time. They should be fully explored before drawing more definitive conclusions.

## **Scaling Properties of the Agency Items**

Given the obvious social desirability of certain responses to the agency items, it was reassuring to learn that responses to most of these questions had an acceptable amount of variation. Basic statistics are reported in Table 1 below. The variables are listed in order of appearance in the variables section above. They are also keyed to terms in each question.

Variable	Obs	Mean	Std. Dev.	Min	Max
expect	122	12.33607	11.27977	0	47
upset	122	5.254098	7.600089	0	38
feelBad	122	11.4918	11.56601	0	48
bother	122	18.03279	15.40255	0	48
learn	122	27.78689	13.82729	0	48
import	122	31.81148	13.64141	0	48
fun	122	18,15574	14.20803	0	48
		21.46721	15.53625	0	40 48
enjoy	122	21.40721	15.53625	0	40
contrad	122	14.08197	12.98352	0	48
fillIn	122	17.59836	12.64039	0	48
fillIn2	122	20.41803	13.30683	0	48
crime	122	24.72131	13.03604	0	48
true	122	26.79508	11.81114	0	48
respVws	122	28.60656	12.91329	0	48
makeup	122	41.39344	10.16521	4	48

TABLE 1.

The underlying dimension of agency can be recovered from the measures using unidimensional unfolding scaling techniques. People should be more likely to agree with a statement if its position on the underlying continuum of agency lies closer to their own position on the continuum. For example, persons with moderately low levels of agency should be more likely to agree that they follow politics because they would feel bad if they did not. Persons with even lower political agency may agree with this statement less than they would agree that they follow politics because others expect them to do so. Persons with higher agency would also disagree with the statement, but for rather different reasons.

The first step in turning these variables into a scale involves identifying items that fit the assumption of a unidimensional unfolding scale. Items that fit should show a simplex pattern for component loadings in a principal components analysis (Roberts & Laughlin, 1996). Items that do not fit will show low communality for the first two components in such an analysis. After Roberts and Laughlin, I dropped four items that had a communality of less than 30%. These are: feelBad contrad crime makeup. The upset variable has a communality just better than 30% and very low variability. It was also excluded. In the future, however, all variables should be examined.

I implemented an unfolding scaling routine that seeks to minimize the sum of squared deviations of all scale items from their predicted value. The item score predictions for any one person are based on a single value on the unidimensional continuum and two parameters reflecting the position of each item on the continuum, both estimated by a maximum likelihood method.<sup>1</sup> Figure 1 illustrates the scaling model. The x-axis is the

<sup>&</sup>lt;sup>1</sup> The equation minimized was:

<sup>-</sup>Log-Likelihood=-ln( $\sum$ (I-(max\*exp(-(I'+ $\mu$ )/ $\sigma$ )))<sup>2</sup>). I is the item response of the individual. I' is the estimated scale position of the individual. Max reflects the highest observed score on the item.  $\mu$  and  $\sigma$  are two parameters controlling the shape and position of the mapping curve for a given item.

agency continuum, and the y-axis is the scale response of a person on an item. The two curves, which are essentially bell-curves, map agency scores onto predicted responses for particular response items. One curve for the statement that one follows politics because it is fun. Another curve shows the mapping of the statement that one follows politics because one is expected to do so. The figure contains the actual results of the scaling analysis for these two items.



FIGURE 1.

Unfolding is captured by the bell-shaped curves. As agency increases, responses to the expect item rise. But, the item has its highest responses only for persons with moderately low levels of agency. Persons with either high or very low levels of agency

should be unlikely to say they follow politics because they are expected to do so. (At the lowest levels of agency, a person may not even recognize social norms with regard to politics.) As agency goes past some point, responses to this expectancy statement begin to decline. In contrast, the statement about finding politics fun reflects a higher level of agency and consequently its curve is shifted to the right, resulting in higher item responses for persons with high agency.

The scaling does indicate that even responses to the fun question decline with increases in agency, an anomaly I will address at greater length later. Before moving on, however, note the two vertical lines in Figure 1. These represent the median values for each half of the agency scale. The figure indicates that the gap between fun and expect is much larger for high agency individuals than for low agency individuals. This suggests that agency might be reflected in the relative gap between low and high agency items, not merely their absolute size.

The scaling routine proved remarkably robust. In ten runs from random starting positions, the only difference between the analyses were in the underlying scale position of one observation. Parameters were essentially identical, at most reflecting differences due to the one observation. The scaling parameters also predict the observed item responses very well. Table 2 shows the correlation of each item with the value for that item predicted from the unfolding scale. The average correlation is .73. For comparison, the table also shows the correlation of items with a variable constructed by averaging the standardized variables and a variable representing the first component of a principle components analysis.

## TABLE 2. CORRELATIONS OF SCALE AND ALTERNATIVES WITH OBSERVED ITEM

Variable	Unidimen.	Sum of	Principle
	Scale	Std. Items	Comp. Score
Expect	.60	.33	.07
Bother	.68	.63	.64
Learn	.78	.75	.82
Import	.79	.74	.81
Fun	.82	.67	.81
Enjoy	.86	.73	.87
Fill In	.69	.31	01
Fill In2	.76	.48	.18
True	.63	.63	.64
Resp. Views	.69	.69	.71
Average:	.73	.60	.55
Std. Dev.:	.09	.16	.34

## Response

Although the scale predicts the items well, the placement of items on the underlying continuum might not be consistent with the theory of agency. I will therefore examine whether the shape and positions of the mapping curves are consistent with the degree of agency captured by each item. Figure 2 shows the scaling results of all of the variables. The figure is cluttered, but edifying.

The lateral positions of the mapping curves is generally consistent with expectations regarding the degree of agency implicit in each item. The peak points of the mapping curves occur in the following order, from lowest to highest: fillIn, fillIn2, expect, true, respVw, bother, learn, fun, enjoy, and import. The peak points are clustered into two sets, with the three lowest agency items occupying the leftmost positions. The only surprise is that bother, an indicator of introjected motivation (partial internalization), peaks farther to the right than true and respVws, indicators of responsibility for political views. Most likely, this occurs because of social desirability bias in the responsibility indicators. Figure 2

indicates that the responsibility indicators' mapping curves are exceptionally wide, allowing for high responses from people with both low and high agency.

A priori, I would lump the items fillIn, fillIn2, expect, and bother as low-agency items and the rest as high agency items. A test of whether the average peak position of the low-agency items differs from that of the high agency items proved highly significant (chi=31.54, d.f.=1, p=.00). Consistent with expectations, Figure 2 shows that fun and enjoy receive low ratings from persons with low agency, while the two fillIn items, indicating reliance on others for political beliefs receive high ratings. Expect also achieves its highest levels for those with low agency.





The two vertical lines in Figure 2 indicate a gap with no observations. Agency scores are bimodal, with a cluster of high and of low agency individuals. The x-axis shows

percentile markings for the density of observations in each cluster. Observations falling between the 10th and 90th percentiles of either cluster occupy a quite limited range of the observed agency continuum.

The odd distribution of responses on the scale could be explained in a number of ways. Perhaps agency is bimodal because of a discontinuous developmental process, such as those discussed by Piaget. Alternatively, the gap may indicate the need to introduce alternative functional forms. A third possibility is that the gap is an artifact of the scaling method, which is experimental at this stage. Given that the method uses a grid search, among other methods, for positioning individuals on the agency scale, this seems unlikely. However, the properties of the method need to be explored with Monte Carlo simulation.

A more plausible explanation for the bimodal distribution of the response scores is that the items are not unidimensional but measure two dimensions: agency and political interest. The degree of a person's agency is reflected by the relative strength of high to low agency items. That is, the spread between scores on high and low agency items, not the absolute strength of response, may be the best indicant of agency. Political interest, on the other hand, is reflected in the average strength of response across category. Responses may not occur in the middle of the scale for two reasons. First, middle of scale responses reflect levels of political interest that do not occur in the sample. Second, middle of scale responses provide little additional information regarding agency because the gaps between mapping curves are essentially the same as elsewhere.

The multidimensionality explanation also addresses another difficulty with the scaling results—the finding that persons with very high agency show declining responses to all scale items. This occurs because even persons with high agency can have low degrees of

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interest in politics. Agency and interest strongly covary, as I will discuss in a moment, but they are not identical.

Figure 3 supports this interpretation and also suggests that the current scaling exercise is not futile. The figure shows the relationship between political interest (the same question as Variable 701 on the 1994 National Election Study) and the agency measure. The relationship between political interest and agency for the low agency cluster is significantly positive (t=6.12, robust p=.00), while for the high agency cluster the relationship is significantly negative (t=6.12, robust p=.00). This is to be expected if the overall height of the mapping curves in Figure 2 are a consequence of political interest. The key point, however, is that the regression of political interest on the agency measure, including both clusters, is significantly positive (t=10.89, robust p=.00). This occurs because most of the observations in the high agency cluster are concentrated near the upper half of the political interest variable, while the reverse holds for the low agency cluster. In essence, political agency tends to lead to high political interest, but is not equivalent to such interest. The conclusion will discuss how this fissure is possible.



Figure 3 suggests, then, that the current measure of political agency does capture agency, though entirely by clustering people into high and low agency categories. A multidimensional unfolding scaling method will probably be necessary to develop a continuous and more precise scale of agency from these measures. While imperfect, the measure under consideration has a powerful effect in an expected direction on political interest. Reducing agency into a binary variable, agency accounts for 44% of the variance of political interest (t=13.94, p=.00), an impressive performance for a dichotomous variable.

## **Covariation With Other Variables and Constructs**

It would be interesting to see how the binary measure correlates with other constructs and demographic variables. Briefly, the demographic differences in the current sample are small. The students are of similar age and education. Their education and status as prospective professionals probably reduce differences of gender and ethnicity, though these might still play a role. Agency is a cognitive developmental construct and should not, therefore, be caused by demographic factors, once education and cognitive ability are taken into account. Agency has no significant relationship with any demographic variable.

Agency should, however, be related to cognitive ability. Agency shows a trend relationship with an indicator of cognitive ability (p=.07, one-sided, robust). The indicator combines GPA, SAT scores, and ACT scores, where available. Agency is no more significantly related with SAT verbal as with SAT math scores. But perhaps the evidence for a relationship with cognitive ability is the result of covariation with political interest. Political interest is also significantly correlated with the cognitive ability indicator (p=.09). In a joint regression, neither variable is significant, suggesting that they are too collinear to establish which is correlated with academic ability. Similarly, both show significant effects (p=.02 and .03, respectively) on a measure of how efficacious a person's contribution to a political action is, but neither are significant in a joint analysis. A more refined measure of agency may help to resolve some of these ambiguities. Agency does not correlate significantly with postmaterialism (Inglehart, 1990), though it shows a trend in a regression with political interest (p=.15). Interest is not significant (p=.49).

#### Moderating Effects of Agency on Cognition and Attention Processes

Persons with higher levels of agency should show more of an effect on motivation to participate in a public interest group for a given level of sense of responsibility to contribute to group goals. To sketch a rationale, the coherent identity and enhanced self-regulation associated with agency should promote cognitive consistency. Greater consistency should mean stronger relationships between cognitions involved in political participation decisions. (The relationship may actually be curvilinear, but this concern cannot be addressed with a binary measure.)

A similar argument holds with respect to manipulations of self-focused attention. Persons induced to self-focus engage in greater self-regulation, which proves to significantly increase the effects of considerations such as sense of responsibility on reports of motivation to act (Muhlberger, 1996). However, the degree to which people will be susceptible to selffocus manipulations should depend on whether they already engage in competent selfregulation. If so, inducements to self-focus should have little effect on their cognitive processes. Persons with high agency should therefore be less susceptible to self focus manipulations.

I used a mixture model (switching regression) to measure the impact of agency on the responsibility / motivation relationship. The model defines two endpoint regressions. The predicted coefficients for a given observation is a proportion of the two endpoint coefficients. In the estimated model, the proportion is a function of political interest and agency. Both variables significantly distinguish the two endpoint regressions (p=.00 for agency and .03 for interest).

Figure 4 shows the impact of high and low agency on coefficients in the four experimental conditions, which involved crossing a favorite and a randomly selected public interest group with a self-focus inducement or no self-focus inducement. Self focus was induced by having respondents answer the questions in front of a mirror. In the favorite group condition, subjects responded to questions about motivation and responsibility for their most preferred group out of a list of groups. In the random condition, subjects responded regarding a computer-selected group from the list.





Agency exhibits the expected effects, except that it exhibits only one expected effect per random / favorite conditions. In the random condition, respondents with high agency showed coefficients that averaged 27% higher than coefficients for persons with low agency. Agency did not, however, close the gap between the mirror and no mirror conditions, no doubt in part because there was no gap. In the favorite group condition, however, agency did not result in overall larger coefficients, but it did result in a 56% closing of the gap between the mirror and the no mirror conditions. These effects are complex and interesting and deserve a more thorough treatment than I can offer here.

## Discussion

This paper has sought to find a middle road between the alternatives of a rationalism that omits important aspects of human psychology and deterministic explanations of human behavior. The proposed alternative begins by agreeing with rational choice theory that people make choices and that intentions matter, but suggests that rational choice explanations do not pay sufficient attention to a critical implicit assumption they make—that identity is continuous over time. The psychological literature on self cognition and human development clarifies how intricate and fragile is the task of constructing a sense of continuity of self.

Integrating a number of psychological findings and theories, I propose a theory of human agency that can be applied to agency within particular domains, such as political action. Persons are agents to the extent that they choose actions consistent with a coherent sense of self. Agency in a domain of action depends on both people's capacity for choosing self-consistent actions in that domain and the degree to which their self-concept is adequate for lending coherence to actions in the domain. Cognitive evaluation theory clarifies some of the processes necessary for a capacity to choose self-consistent actions. Choice of selfconsistent action is made possible in part by internalization of motives within the action domain. As internalization grows, people move from being either externally or internally coerced to acting frictionlessly in accord with their sense of self. Research in developmental psychology suggests that growth in the adequacy of people's self-concept depends on processes of reflexivity that take the self as an object of cognition and action.

Theory and research on internalization and reflexivity processes suggests three potentially measurable manifestations of political agency. These include the enjoyment of political action; the degree to which political motivation is experienced as internally or externally controlling versus arising from one's self; and the locus of responsibility for one's political views either in oneself, other persons, or events. This paper proposes measurement items for these three indicants of agency and presents a preliminary analysis of the scaling properties of the items, the relationship of the items to other variables, and their value in testing non-obvious hypotheses about the role of agency in motivational cognition.

The results of these preliminary analyses are mixed but encouraging. The scaling properties of the items fit expectations in several respects. A unidimensional unfolding scaling algorithm reliably extracted a set of agency continuum scores that do well in reproducing the actual variables. The folding points of the items, the points at which they achieve their maximum responses, are arrayed in all but one case in accordance with expectations. Low agency items have peaks that average significantly lower than the higher agency items.

Anomalies in the unfolding results and subsequent analyses suggest, however, that the items are multidimensional, containing a component of political interest on the one hand and of agency on the other. But why is political interest not simply a result of agency? Further analysis of the unfolding results suggest that agency is highly predictive of interest, but the two are distinct, with some persons even having high agency but low interest. This combination may be possible to the extent that agency involves capabilities that can to a degree generalize across action domains. Certainly theories of ego and cognitive development imply the existence of general capabilities that can be invoked even in domains that do not usually receive attention or interest.

Agency is perhaps best revealed in the current, flawed unfolding results by the positions of different item responses relative to each other. These results divide people into two classes—those with high and those with low political agency. I conducted the

remaining analyses in this paper with a dichotomous variable reflecting that division. When time permits, these analyses need to be followed up with a less crude measure of agency derived from a multidimensional unfolding analysis.

Examination of agency reveals somewhat mixed results regarding its relationship with variables to which it should be related. The agency dichotomy does strongly and significantly predict political interest. But, it proves short of having a significant relationship with a measure of cognitive ability and with post-materialism, a value scale that may be related to one aspect of agency. Agency does significantly predict the extent to which people believe they could enhance the chances of a group achieving its goals, but this effect is collinear with political interest. Perhaps a more nuanced political agency measure will help clarify these ambiguities.

More encouraging, however, is the finding that the agency variable significantly moderates the relationship between participation-relevant cognitions and motivation to participate. Agency theory suggests that agency should enhance the impact of sense of responsibility to participate on motivation to participate. Also, persons with high agency should be less susceptible to the effects of an attention manipulation on the responsibility / motivation relationship. The agency dichotomy did significantly and substantially effect the coefficients of a regression of motivation on responsibility in expected directions.

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