

Analysis of the Mediating Effect of Personal-Psychological Variables on the Relationship Between Socioeconomic Status and Political Participation: A Structural Equations Framework

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The goal of this research was to test whether the relationship between socioeconomic status and political participation is direct or mediated by personal variables such as self-esteem, locus of control, and political efficacy, and to detect how such a mediating process might operate if it exists. Two forms of participation, namely active political participation and the more passive psychological involvement of citizens in the democratic process, were treated as separate but related facets of participation. Four competing models were advanced and tested. The data were collected from 434 citizens in the north of Israel who were interviewed by questionnaire. The analysis was performed by structural equations modeling with LISREL VIII. The findings show that the relationship between socioeconomic status and political participation can be better understood as being mediated by personal variables rather than direct. This is demonstrated by the many nonsignificant paths in the direct model. The findings also reveal that active political participation and psychological involvement are distinct but related constructs, where involvement leads to active participation. In addition, all research variables were related more strongly to psychological involvement than to active political participation. The findings are discussed in terms of their implications for future research on political participation.

KEY WORDS: socioeconomic status, political participation, political efficacy, self-esteem, locus of control

Political participation has been one of the most studied concepts in political science. In *Voice and Equality: Civic Voluntarism in American Politics*, Verba, Schlozman, and Brady (1995) argued that “citizen participation is at the heart of

democracy” and that “democracy is unthinkable without the ability of citizens to participate freely in the governing process” (p. 1). As also suggested by Barner and Rosenwein (1985), “democratic values are in essence participatory values. At the heart of democratic theory is the notion that people should get involved in the process of governing themselves” (p. 59). Those who do not participate politically are likely to have a highly undemocratic view of the world (Guyton, 1988; Knutson, 1972). Not surprisingly, a large amount of research has been conducted in an attempt to understand forms and determinants of political participation.

Two approaches have dominated the literature on political participation. The first is the sociological, which has concentrated traditionally on structural-objective variables in its attempts to explain the determinants of political participation. In this framework, the role of socioeconomic status (SES) has been emphasized as the most important determinant of political participation. The findings yielded by this approach have shown that political participation is significantly higher among citizens with high SES than among those with low SES (e.g., Milbrath & Goel, 1977; Peterson, 1990; Verba & Nie, 1972; Verba et al., 1995). The second approach is psychological, and concentrates on personal attitudinal variables such as locus of control and political efficacy as determinants of political participation (e.g., Carmines, 1992; Krampen, 1991; Sabucedo & Cramer, 1991; Sears, 1987).

Within the framework of existing research on political participation, two main deficiencies can be identified. First, most prior research has examined independently the relationship between SES and political participation and the relationship between a variety of personal-psychological variables and political participation. Very little research has tried to integrate and test variables that represent both explanations. Several authors have discussed the limitations of applying only the sociological or only the psychological approach in predicting political participation (Greenstein, 1969; Kavanagh, 1983; Krampen, 1991; Wolk, 1996). Researchers such as Wolsfeld (1986) have begun to recognize that the relationship between SES and political participation might be better understood as mediated by personal-psychological variables. An idea raised by Verba et al. (1995) further suggests that the relationship between SES and political participation is more complex than what we used to think. According to this idea, different constructs of SES have different relationships with various patterns of political participation. This notion may also imply that some other variables, such as personal-psychological ones, may function as mediators in the perplexing relationship between SES and political participation. Yet very little research has empirically tested this possibility.

A second limitation of past research is that most of it has examined the relationship between a variety of antecedents and active political participation, even though psychological involvement in politics (elsewhere defined as passive political participation) has frequently been considered one of the antecedents. Consequently, it was not possible to compare the relative effects of potential antecedents on the two separate but related forms of political participation. Verba

et al. (1995) elaborated on the need to distinguish these two constructs in their effort to provide a solid definition for political participation. Their findings also revealed that psychological involvement in politics and active political participation are highly correlated but should be treated separately. However, as far as we could find, no past study has provided an integrative and comprehensive insight into the role of SES, personal-psychological characteristics, and political-psychological involvement in an explanatory model of active political participation. Questions such as how all these variables are mutually related and whether they are affected differently by potential antecedents have rarely been addressed empirically.

Accordingly, the goal of our study was twofold. First, we sought to better understand the relationship among SES, personal-psychological variables, and political participation by testing several models of this relationship. More specifically, we compared a direct model of the SES–political participation relationship with alternative models that included personal-psychological variables such as self-esteem, locus of control, and political efficacy as mediating variables. We tried to identify which of the proposed models tested here had the best fit with the data in predicting political participation. This was done by application of structural equations modeling with LISREL VIII, which has rarely been applied in testing the above research questions. This methodology seemed appropriate here because it could test and compare the fit of mediating and direct relationship models. Our second goal was to provide an extensive and thorough examination of the role of the two close but distinct forms of political participation in their relationship with SES and personal antecedents. To that end, we used comprehensive scales for these constructs and tested their discriminant validity. We also tested whether and how they were related to each other, and whether they were affected differently by the independent variables.

Literature Review and Research Models

Political Participation

One of the common definitions of political participation is that proposed by Verba, Nie, and Kim (1971): “Political participation is the means by which the interests, desires and demands of the ordinary citizen are communicated . . . all those activities by private citizens that are more or less directly aimed at influencing the selection of governmental personnel and/or the decisions that they make” (p. 9). A more recent definition by Verba et al. (1995) refers to “activity that has the intent or effect of influencing governmental action—either directly by affecting the making or implementation of public policy or indirectly by influencing the selection of people who make those policies” (p. 38).

These definitions were applied here because they are both narrow and broad in comparison with others. They are narrower because they do not include psychological orientations such as political efficacy. Nor do they treat as

political participation such aspects as showing interest in politics and holding political discussions and debates, because such activities are not aimed at influencing the government. Yet they are broader than definitions in other research on political participation, which restricted the activities of political participation mainly to voting and campaigning (e.g., Milbrath & Goel, 1977). Verba et al.'s (1971, 1995) definitions incorporate a wider spectrum of political participation activities, but only those that are aimed at influencing the political system. Such activities include voting, party and campaign work, community work, contacting officials, attending political meetings, protest activities, and communication activities. Hence, Verba et al. (1995) concluded that political participation must focus on *activity* instead of orientations, and that one should be "concerned with doing politics, rather than with being attentive to politics" (p. 39).

In line with this, the present research treated political participation as a multidimensional concept. We distinguished active participation and psychological involvement in politics. Our definition of active participation followed Verba et al. (1971, 1995), who defined political participation as all those *activities* by private citizens that are more or less directly aimed at influencing the selection of governmental personnel and/or the decisions that they make. Psychological involvement was considered a complementary concept representing knowledge and engagement in social and political issues. Milbrath and Goel (1977) defined such a psychological involvement as "the degree to which citizens are interested in and concerned about politics and public affairs" (p. 46). Psychological involvement thus refers to the level of citizens' understanding and knowledge regarding social and political issues, regardless of their influential activities in these issues. Hence, it is measured by questions to respondents about their knowledge of, exposure to, and involvement in political information as presented mainly through the media, or their interest in such information or in participating in political debates. This is the most salient approach recently suggested by Verba et al. (1995).

Logically and empirically, forms of psychological involvement have been found to be related to forms of active participation (Milbrath & Goel, 1977; Verba et al., 1995). Verba et al. (1971) and Verba, Nie, and Kim (1978) found positive and significant correlations between psychological involvement and campaigning, voting, and community activity in five countries. Orum (1989) mentioned several studies that found that psychological political involvement was positively related to active participation. Feldman and Kawakami (1991) found that those who were more exposed and interested in political information in the media were more politically active. Most of these relationships were also supported by the recent work by Verba et al. (1995), who conducted their study with more than 15,000 Americans. Hence, in our study, both dimensions of political participation were tested as distinct but related constructs. The proposed research models predicted that these two dependent variables are related to each other in a causal relationship, where psychological involvement affects active participation in politics.

Socioeconomic Status and Political Participation

The relationship between SES and political participation has been examined frequently, and for the most part, higher levels of political participation were found in citizens with higher SES (Dalton, 1988; Milbrath & Goel, 1977; Peterson, 1990; Verba & Nie, 1972; Verba et al., 1995). Citizens with higher education and higher income, and who were employed in higher status occupations, participated in politics more than did citizens with lower SES. The rationale is that citizens with high SES have more opportunities to participate, more personal contacts with officials, and more personal resources (mainly education) that are helpful in the political participation process. They also feel more obligation and normative pressure to participate. Of the three SES components—income, education, and occupation—education was found to be the strongest in its relationship to political participation (Verba et al., 1995).

However, the literature offers some indications that the relationship between SES and political participation may not be direct or simple but instead complex, in the sense that personal-psychological variables might mediate it. For example, Verba and Nie (1972) found that SES was positively related to civic orientations such as political efficacy, psychological involvement, knowledge of politics, and sense of contribution to the community. Their findings showed that the relationship between SES and political participation was stronger when this relationship was mediated by civic orientations than when it was direct.

These findings were reconfirmed by Verba et al. (1995), who suggested that SES comprises “components (that) are differently relevant for different kinds of participation” (p. 5) and that each component may work differently under changing conditions. These conditions may well include youth and pre-adult experiences (p. 417), which substantially affect the formation of young people’s personality and psychological state. Milbrath (1981) argued that “social position variables . . . do not cause any specific behavior in the sense that they are requisite for, or the immediate antecedents of, given acts. Social conditions, however, do form personalities, beliefs and attitudes which in turn do cause (are requisite to) specific acts such as participation in politics” (p. 221). According to this view, SES does not affect political participation directly but instead leads to personal beliefs and attitudes, which in turn affect participation. Wolsfeld (1986) argued that SES establishes the potential for political participation because it represents personal and social resources that are transformed into political activity. One of the theoretical explanations for the positive relationship between SES and political participation is based on cognitive and motivational characteristics typical of lower SES that are perceived as discouraging political participation, or characteristics typical of higher SES that are perceived as encouraging political participation (Krampen, 1991; Milbrath, 1981; Verba et al., 1995).

Regardless of the political setting, research in behavioral science has demonstrated the relationship between SES and personal variables. Ifeld (1978) found

that the lower the SES, the lower the self-esteem and the self-control of the individual. Lefcourt (1976) and Phares (1976) reviewed findings that showed that people with lower SES have low self-esteem and external locus of control. Other findings have shown that low SES leads to low self-esteem (Lal, 1987; McLeod & Kessler, 1990) or that higher SES leads to higher political efficacy (Paulsen, 1991). This basic framework argues that the environmental stimulations shape personal predispositions, which in turn can affect behavior. According to this framework, environmental and psychological variables are not mutually exclusive and are not competing concepts in terms of explaining human behavior, but instead offer complementary explanations.

Mediating Variables

We tested three personal variables that may mediate the relationship between SES and political participation: self-esteem, locus of control, and political efficacy. Each of these variables has been tested in its relationship to political participation (e.g., Carlson & Hyde, 1980; Krampen, 1991; Sears, 1987; Wolk, 1996), but only rarely have they been tested together (Sabucedo & Cramer, 1991), nor have they been tested as mediators in the relationship between SES and political participation.

Several studies provide reasoning for testing these variables as predictors of political participation. For example, Guyton (1988) found a positive relationship between each of the above variables and democratic attitudes. Verba et al. (1995) provided solid justification for the inclusion of the personal variables as tested here. Their study supports earlier empirical findings (e.g., Dalton, 1988; Knutson, 1972; Peterson, 1990) that citizens' personal and psychological resources generate political actions and that scarce resources, hampered motivation and expectations, or low belief in one's ability to become a "meaningful player" in the political game (i.e., low political efficacy) can yield lower levels of political knowledge, involvement, and participation. Verba et al. (1995) also suggested that motivation of individuals is one of the most salient causes of participation (pp. 3, 108–112). Motivation to be engaged in politics is more prevalent among people with greater concern for their environment and among those who are psychologically capable of such engagement. Krampen (1991) suggested that motivation to be involved in politics is a result of expectations one has of one's political environment, and that these facets may be related to personality traits best described by the action-theory model of personality. Hence, psychological constructs should be considered together with sociological ones in any attempt to explain political participation.

Self-esteem. Self-esteem can be defined as the way one perceives one's capabilities and qualifications (Ellison & London, 1992; Rosenberg, 1965). A person with high self-esteem will feel more secure and confident in dealing with problems in his or her personal life and in the environment. Carlson and Hyde (1980) and Carmines (1992) offered two competing explanations for the effect of self-esteem on political participation. According to the actualization hypothesis,

people with high self-esteem will strive for higher levels of political participation because they feel more secure and confident regarding their capabilities in participating in politics. The compensation hypothesis argues that people with low self-esteem will do likewise in an attempt to compensate for their low self-esteem. Most research has rejected the compensation hypothesis and supports actualization (Carlson & Hyde, 1980; Ellison & London, 1992; London & Giles, 1987). Our position was in accord with the latter, and we expected a positive relationship between self-esteem and political participation.

Locus of control. Recent studies (e.g., Ferguson, 1993) have reconfirmed the classic work by Rotter (1966), who suggested that locus of control derives from social learning theory. According to Rotter, people with internal locus of control believe their behavior to be relatively decisive in determining their fate. People with external locus of control believe their behavior to be less decisive in this respect; they believe that chance, luck, or powerful agencies exert strong influence on their fortunes. This idea has also received much scholarly attention in other works with different perspectives (e.g., Knoop, 1989; Trevino & Youngblood, 1990).

All these studies have put forth two competing theories for the relationship between locus of control and political participation (Carmines, 1980). According to the competence theory, people with internal locus of control will be highly motivated to take part in the political process because they believe that the political system, like other systems surrounding them, can be affected by their activities and effort. Such people do not feel helpless but think that they can control their lives, and because the political system can affect them they should do their best to influence it. An alternative rationality suggests that those with external locus of control will be motivated to participate in politics. The explanation is similar to the compensation hypothesis described for self-esteem. According to this explanation, people with external locus of control will participate in politics to increase mastery over their lives beyond the low control they believe they have. That is, political participation is one way whereby people with external locus of control seek to compensate themselves. Research has provided empirical support for the competence theory, showing that people with internal locus of control are more active in politics (Carlson & Hyde, 1980; Guyton, 1988; Milbrath & Goel, 1977). In keeping with these findings, we expected higher political participation by people with internal locus of control.

Political efficacy. Niemi, Craig, and Mattei (1991) argued that among different concepts framing individuals' attitudes toward politics, political efficacy is the most important and therefore has received much attention in the literature. In line with this, Verba et al. (1995) stated that "next to party identification, no political attitude has been studied more extensively than feeling of political efficacy" (p. 346). A similar view had been taken earlier by Abramson (1983, p. 135). Political efficacy refers to the individual's perception of his or her ability to influence the political system (or individual political officials) by the belief that personal effort

can have an effect (Barner & Rosenwein, 1985). Milbrath and Goel (1977) argued that political efficacy is part of the sense of mastery a child acquires during socialization. It includes two related dimensions: internal efficacy and external efficacy (McPherson, Welch, & Clark, 1977). Internal efficacy refers to one's belief in one's ability and competence to understand political processes and to take part in them. External efficacy refers to one's belief that the political system and political officials are responsive to one's attempts to influence it and that citizens' demands do affect governance. There is strong empirical support for a positive relationship between political efficacy and political participation (Burn & Konrad, 1987; Guyton, 1988; Nassi & Abramowitz, 1980; Paulsen, 1991; Verba et al., 1995). Hence, our study suggests that a person with high internal and external efficacy will be highly motivated to participate in the political system.

Research Models

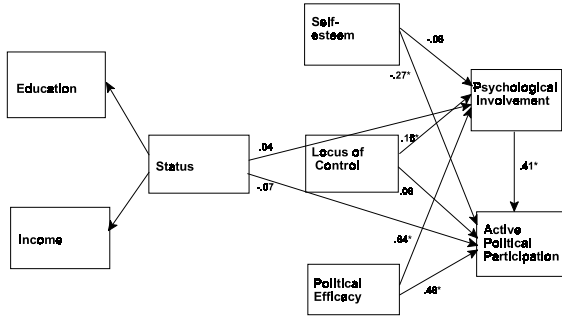
Our research models relied on the above studies and rationality to advance the understanding of political participation by arguing that personal-psychological variables mediate the relationship between SES and political participation. This argument was tested by our proposing a direct relationship model and comparing it with three mediating models. The following sections describe the proposed models. Some of the relationships presented in these models were based on the arguments presented above, and some were developed by us and are set out below. All the models tested here included six variables: SES (a combination of education and income), self-esteem, locus of control, political efficacy, psychological involvement, and active political participation. The four models are presented in Figure 1.

Model 1: Direct Relationship Model

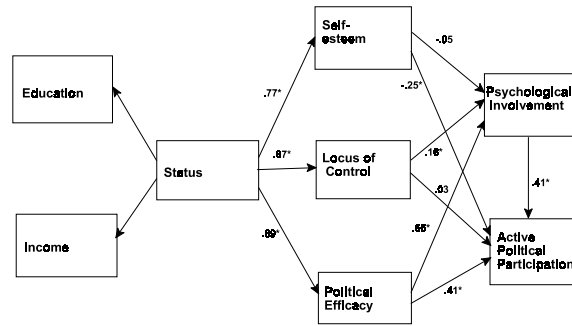
Conceptually, model 1 relies on the argument presented earlier regarding the sociological or the psychological approach. According to these approaches, each of the variables representing them has a direct effect on political participation. In this model, each of the four independent variables (SES, locus of control, self-esteem, political efficacy) has a direct relationship with each of the two dependent variables (psychological involvement and active participation in politics). This model does not assume any relationships among the independent variables but assumes that each of them will predict, independently of the other variables, the two dependent variables.

In addition, in line with the arguments presented above, this model predicts that psychological involvement will affect active political participation. (Because this last relationship is tested in each of the models, it will not be mentioned in the following.) It was also expected that the independent variables would be related more strongly to psychological involvement than to active political participation.

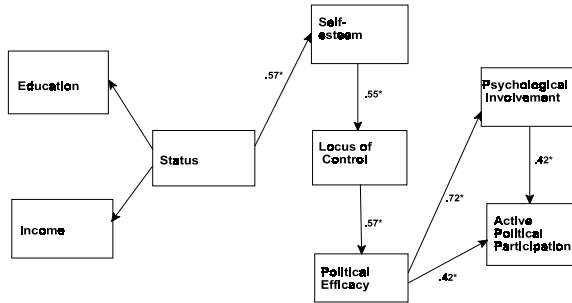
Model 1: A direct relationship model



Model 2: A fully mediated model



Model 3: A status and self-esteem relationship model



Model 4: A status, self-esteem and locus of control relationship model

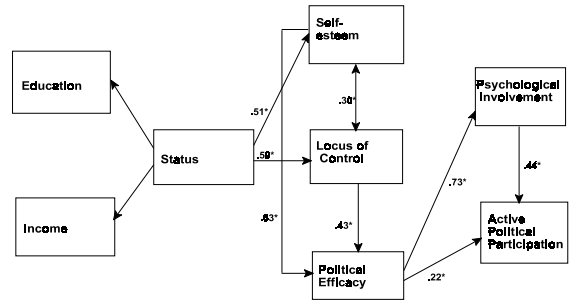


Figure 1. Research models and their path coefficients.

Mediating Models

The next three models assume that the effect of SES on political participation is mediated by the three personal-psychological variables. The three models differ in the process by which the three personal-psychological variables are expected to mediate the relationship between SES and political participation.

Model 2. This model can be described as fully mediated. SES affects each of the personal-psychological variables. However, unlike the case with model 1, SES does not affect either of the political participation forms. Instead, each of the psychological variables is related to each of the two participation forms. This model is based on Kavanagh's (1983) argument that personal variables might mediate the relationship between SES and political participation, and on some of the arguments presented by Verba and Nie (1972). The logic is that an individual with high SES tends to have high self-esteem, internal locus of control, and higher political efficacy. These psychological variables deriving from SES are those that affect each of the political participation forms independently. This model, like model 1, expects that the mediated variables will be related more strongly to psychological involvement in politics than to active political participation.

Model 3. Model 3 differs in several ways from the fully mediated model 2. First, according to model 3, SES is related only to self-esteem, not to all three mediating variables. The rationale is based on the idea that the lower the SES, the lower the self-esteem of the individual (Lal, 1987; Lefcourt, 1976; McLeod & Kessler, 1990; Phares, 1976). For example, Verba et al. (1995) found that education has a dominant role in shaping political activity because "it fosters psychological and cognitive engagement with politics" (p. 433). Individuals with high SES and especially with education may also possess higher self-esteem, which increases their self-confidence and enables them to take a more constructive part in politics. The next path in this model is between self-esteem and locus of control. The rationale here is that citizens with high SES tend to have high self-esteem; this leads to internal locus of control, meaning a perception that one can control one's life and future. Citizens with internal locus of control tend to apply it to the political setting also, and therefore will have higher political efficacy (Milbrath & Goel, 1977; Peterson, 1990). The two final paths in this model are from political efficacy to the two forms of political participation. This relationship has been suggested in the past in numerous studies, especially in Verba et al. (1995). Citizens with high political efficacy will have higher psychological involvement and more active political participation. The rationale for these relationships was discussed earlier. As can be seen, this model differs from the fully mediated one in that it proposes a specific process of effects among the independent variables, as against the global and general mediating relationships presented in model 2.

Model 4. Like model 3, model 4 is more precise in the kind of relationships it proposes among the variables, particularly among the mediating ones. Model 4, however, differs from model 3 in several relationships. In model 4, SES affects

both self-esteem and locus of control. Citizens with higher SES will have higher self-esteem and internal locus of control. This model does not predict a causal relationship between self-esteem and locus of control. It perceives them as two general attitudes of the individual toward himself/herself and his/her role in life. They may be related, but there is no causal relationship between them (Eberhart & Keith, 1989). In model 4, political efficacy is affected by both self-esteem and locus of control. Citizens with high self-esteem and internal locus of control will have higher perceptions of political efficacy. The rationale is that two general attitudes derived from one's SES, self-esteem and locus of control, effect a more specific attitude toward politics, namely political efficacy. As in model 3, political efficacy is the only variable that affects the two forms of political participation.

Method

Participants

Interviewers asked potential participants in two differently sized cities in the north of Israel whether they wished to participate in the study and interviewed those who did. In all, 434 citizens were interviewed by means of questionnaires, 209 people in the small city and 225 in the large one. The interviews were conducted at the participants' homes. The main sampling procedure was to interview citizens from a variety of neighborhoods to ensure that the sample included different levels of SES. Also, only one member from each family was interviewed. At every stage of the data collection, the distribution of the respondents in terms of SES and gender was checked, and each consecutive stage of data collection took into consideration the characteristics of the sample up to that stage to ensure heterogeneity of the sample. The response rate was 50% in the small city and 47% in the large one. Respondents' age ranged from 24 to 72 years, average age 38 (SD = 11.3); 52.3% of the respondents were males and 47.7% were females; 65.2% were married; 68.9% were native Israelis; and 54.9% had at least a high school education. The demographic characteristics of the participants from the two cities were similar, and therefore we decided to combine them into one sample for the purpose of data analysis.

Dependent Variables

Psychological involvement. This variable was defined as one's level of personal involvement in social and political issues and knowledge of these issues, as distinguished from active change-oriented behavior aimed to influence political officials (Verba & Nie, 1972; Verba et al., 1995). The measure contained 10 items (examples: "Do you watch the daily news on TV?", "Do you discuss social and political issues with your family and friends?", "Are you interested in politics and in the political developments in Israel?", "Do you read books or magazines which

deal with political and social issues?”). Each item was scored 0 (for responses of “never” or “sometimes”) or 1 (“often” or “always”). Thus, this variable could range from 0 to 10, where 0 indicates the lowest psychological involvement and 10 the highest.

Active political participation. This variable was defined as activities directly aimed at influencing political officials and the political decision-making processes (Verba & Nie, 1972; Verba et al., 1995). The measure contained 11 items (examples: “Did you vote in the last elections to the parliament?”, “Are you a member of a political party?”, “Have you donated money to a political party or a candidate of a party?”, “Have you signed on petitions on political issues?”, “Have you participated in a political rally?”). Each item was scored 0 (“never” or “sometimes”) or 1 (“often” or “regularly”). Thus, this variable could range from 0 to 11, where 0 indicates the lowest active participation and 11 the highest.

Independent Variables

Socioeconomic status. SES was measured by two items, one on level of education and one on income. Education was measured on a scale from 1 (no education) to 9 (master’s degree or higher). Income (net income) was measured on a scale from 1 [up to NIS (new Israel shekel) 1,500 (around \$400) per month] to 11 [more than NIS 15,000 (around \$4,000) per month]. As described below, SES was measured as a latent variable combining two observed variables (income and education). The latent variables’ indicators were formed by the LISREL model, as explained below.

Self-esteem. This variable was defined and measured following Robinson, Shaver, and Wrightsman (1990), who defined it as one’s positive and supportive (or negative and unsupportive) attitude toward oneself and one’s perception of personal worth. The scale is considered one of the most established in measuring self-esteem as a unidimensional concept. It consists of 10 items [examples: “I feel that I have a number of good qualities,” “I feel I do have much to be proud of,” “I take a positive attitude toward myself,” “At times I think I am no good at all” (reverse-scored), “On the whole I am satisfied with myself”]. Each of the items was measured on a scale ranging from 1 (“strongly disagree”) to 4 (“strongly agree”). Thus, this variable could range from 10 (lowest self-esteem) to 40 (highest self-esteem).

Locus of control. This variable was defined and measured on the basis of the common internal-external scale developed by Rotter (1966; see also Ferguson, 1993). The original scale contained 29 items that each presented two statements, one representing internal locus of control, the other external locus of control; the respondent was required to choose one. Six of the items in the scale were used as filter items, and five items concerning the political setting were omitted to avoid overlap with the political efficacy scale; hence, for this study the scale contained 18 items. For each item, a respondent who chose the internal locus of control

statement received 1 point; no points were given for choosing an external locus of control statement. Thus, a score of 18 represented the highest internal locus of control and a score of 0 represented the highest external locus of control.

Political efficacy. This variable was defined and measured following Guyton (1988), who defined it as one's perceptions of one's capability to understand and influence the decision-making process in the political system. The scale was measured by seven items; four of them measured internal efficacy, two measured external efficacy, and one measured both (Niemi et al., 1991) (examples: "I consider myself to be well qualified to participate in politics," "I feel that I could do as good a job in public office as most other people," "People like me don't have any say about what the government does," "I don't think public officials care much what people like me think"). Each of the items was measured on a scale ranging from 1 ("strongly disagree") to 4 ("strongly agree"). Thus, this variable could range from 7 (lowest political efficacy) to 28 (highest political efficacy).

Data Analysis

Confirmatory factor analysis. Confirmatory factor analysis was performed to establish the discriminant validity of the research variable, that is, to show that each of the scales in this study measured a different construct and that there was no overlap or concept redundancy among the scales. LISREL VIII (Jöreskog & Sörbom, 1993) analysis was performed to test the discriminant validity involving a comparison of the relative fit of five-, four-, three-, and single-factor measurement models. The five-factor model placed the indicators of psychological involvement (10 indicators), active political participation (11 indicators), self-esteem (10 indicators), locus of control (18 indicators), and political efficacy (7 indicators) on separate latent factors. The 10 four-factor models were established by forcing the indicators of two constructs into a single factor and placing the indicators of the remaining three constructs on three factors. The 10 three-factor models were established by forcing the indicators of three constructs into a single factor and placing the indicators of the remaining two constructs on two factors. The single-factor model forced all 56 indicators into a single latent factor. A correlation matrix of these indicators using listwise deletion of missing values formed the input for the LISREL analysis.

Path analysis. The research models were assessed by path analysis using LISREL VIII (Jöreskog & Sörbom, 1993). Estimating a path analysis model for directly observed variables with LISREL differs from the original path analysis technique developed in the 1930s. Rather than estimating each equation separately, LISREL considers the model as a system of equations and estimates all the structural coefficients directly (Jöreskog & Sörbom, 1989). An advantage of structural equation programs is their ability to estimate the parameters in a path model while correcting for the biasing effects of random measurement error. The

usual approach is to estimate structural relationships among latent variables free of measurement errors.

In this study, however, the multi-item scales, except for the two indicators of SES, were treated as single indicators of each construct because of the large number of parameters (56 observed variables) relative to the size of the sample. Mulaik et al. (1989) argued that with few latent variables and many manifest indicators for each, the number of parameters involving relations between manifest indicators and latent variables is much greater than where few manifest variables are involved. The parameters of the measurement model may then determine the greater portion of the covariance among the manifest variables, especially if the manifest indicator variables are highly reliable indicators of the latent variables. In this case it is possible to have a model in which the measurement model portion involving relations between the latent variables and the manifest indicator variables is correctly specified, but in which the causal model portion involving structural relations among the latent variables is wrongly specified, and to still have a goodness-of-fit index for the overall model in the high .80s and .90s. Because the measurement model was to be assessed in the confirmatory factor analysis, and at this stage we were interested in the fit of the structural models without any effects of the measurement, each multi-item scale was treated as a single indicator of its corresponding construct and corrected for random measurement error. The correction was performed by equating the random error variance associated with each construct to the product of its variance multiplied by the quantity 1 minus its estimated reliability (Bollen, 1989). Before the analysis, values of the latent-to-manifest parameters for each construct were fixed at the square root of their reliabilities. This procedure deals partially with a problem that arises when single indicator variables are used to define each construct, which leads to greater error than if multiple operations of the constructs are used (James, Mulaik, & Brett, 1982).

This approach has been used in recent studies (Frone, Russell, & Cooper, 1992; Judge, Boudreau, & Bretz, 1994; Meyer, Allen, & Gellatly, 1990). Moreover, the utility of the approach was supported in a study (Netemeyer, Johnston, & Burton, 1990) that revealed that latent variable analysis yielded virtually identical parameter estimates in terms of direction, magnitude, and significance. Results of both procedures, however, diverged substantially from the uncorrected single-indicator analysis. As mentioned above, the two indicators of SES, education and income, were both included in the models as observed variables to form the SES latent variable.

Model Evaluation

Four criteria were applied to evaluate the quality of the models: fit indices, the magnitude of the path coefficients, the percentage of explained variance of the

dependent variables, and a comparison of the research models with the saturated model.

Fit indices. The fit of the models was assessed by means of 10 indices. The first five indices—the χ^2 ratio, $\chi^2/\text{degree of freedom (df)}$ ratio, root mean square residual (RMSR), goodness of fit (GFI), and adjusted goodness of fit (AGFI)—are commonly applied in assessing LISREL models. Because the χ^2 test is sensitive to sample size, the ratio of the model χ^2 to df was also used. A ratio of less than 2.0 was considered a fairly good fit for the hypothesized model. Although there are no statistical distributions for the GFI, AGFI, or RMSR indices, common practice suggests that the first two should exceed .90 and that RMSR should be below .05 for the model not to be rejected. RMSR is difficult to interpret when covariances are used (Breckler, 1990) and when the variances of the variables vary considerably (Jöreskog & Sörbom, 1993). Therefore, we used the standardized RMSR, which is independent of the units of measurement of the variables (Jöreskog & Sörbom, 1993).

The remaining five indices are the normed fit index (NFI), non-normed fit index (NNFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), and expected cross-validation index (ECVI). NFI, proposed by Bentler and Bonett (1980), is an additive for nested model comparison; the closer its value to 1, the better the fit. A disadvantage of NFI is that it is affected by sample size; it may not reach 1.0 even when the model is correct, especially in smaller samples. This difficulty is resolved with the NNFI (Bentler & Bonett, 1980), which has the major advantage of reflecting model fit very well at all sample sizes; a value closer to 1 reflects better fit. The CFI, proposed by Bentler (1990), was developed to facilitate the choice of the best fit among competing models that may differ in degree of parameterization and specification of relations among latent variables. The closer its value to 1, the better the fit. The RMSEA and ECVI indices were proposed by Browne and Cudeck (1989). RMSEA is a measure used to test the null hypothesis of close fit, which is much more meaningful than the null hypothesis of perfect fit. Browne and Cudeck provided the following guidelines: An RMSEA lower than .05 indicates “very good” fit, a value from .05 to .08 indicates “fair to mediocre” fit, a value from .08 to .10 indicates “poor” fit, and an RMSEA greater than .10 indicates a “very bad” fit. They deemed RMSEA superior to any of the above goodness-of-fit indices as a measure of model error. ECVI, on the other hand, is a measure of overall model discrepancy across all possible calibration samples. In other words, it measures both model error and sampling error; the smaller the ECVI, the less the overall discrepancy.

Magnitude of the path coefficients. The fit of a given model to the data is an important criterion of the quality of the model, but it does not necessarily imply that this model is the correct causal model (Saris & Stronkhorst, 1984). The path coefficients, their significance, and their magnitude provide an important criterion for model evaluation, termed the plausibility criterion. The plausibility of a model refers to a judgment made about the theoretical argument underlying the specified

model (Saris & Stronkhorst, 1984). According to this criterion, the decision regarding the correct model should also be based on the theoretical correctness of the model demonstrated by its path coefficients. Hence, a model that fits the data well cannot be defined as a correct one if many of its theoretical paths do not support the theoretical arguments of the model. Some balance must exist between the fit indices and the theoretical predictions regarding the relationships among research variables. The accuracy of the theoretical predictions can be tested by the path coefficients in each of the models.

Percentage of explained variance of the dependent variables. When a low percentage of variance of the dependent variable(s) is explained by a given model, this indicates that the model is not correct (Saris & Stronkhorst, 1984). Low explained variance can be a result of measurement errors, omission of important variables from the model, or inaccurate definition of the interrelationships of the variables in the model. Thus, the percentage of the explained variance can serve as another criterion for the correctness of a model.

Chi-square difference test. As both the structural models and the models tested in the confirmatory factor analysis are nested models, a χ^2 difference test (Bollen, 1989) was applied to compare the models. The statistic for this test is calculated as the difference in the usual χ^2 estimators for the restricted and unrestricted models, with df equal to their difference in df. The specific hypothesis tested by this statistic is whether the restrictions added during the creation of the restricted model significantly reduce the fit compared with the fit attainable with all the model restrictions incorporated in the basic model. The basic model will be the saturated one in the structural models, and the hypothesized one in the confirmatory factor analysis. A saturated model includes all the possible paths, hence it is free from any theoretical constraints. The degree of freedom in this model is the lowest possible. A saturated model should have a very good or a perfect fit to the data, and it usually is used for comparison with the conceptual models, which are the four models proposed in this research. The logic behind this comparison is to see whether adding constraints to the saturated model (meaning less theoretical paths) reduces the fit to the data. A model that can be defined as good, considering the other criteria presented earlier, is one that does not differ significantly in its fit from the saturated model despite the additional constraints (demonstrated by omitting paths from the saturated model) imposed on this model as a result of the theoretical development. A significant χ^2 will indicate that the constraints imposed on the restricted models reduce their fit in comparison with the saturated or the hypothesized models. Finally, a correlation matrix among the research variables using listwise deletion of missing values formed the input for the path analysis.

Results

Correlations

Table I shows descriptive statistics, reliabilities, and intercorrelations among research variables. Results show good reliabilities of the measures of this study, which ranged from .76 (locus of control) to .86 (self-esteem). The correlations among research variables were all positive and significant. Some of the correlations among the independent variables were quite high, but none exceeded .70, which is the criterion for multicollinearity. The highest correlations were among the three personal variables: a correlation of .69 between self-esteem and political efficacy, of .53 between self-esteem and locus of control, and of .54 between locus of control and political efficacy. However, high correlations among these personal variables are expected conceptually. Moreover, in other studies, correlations similar in magnitude to these were found among the personal variables. Guyton (1988) found a correlation of .59 between self-esteem and locus of control, of .50 between self-esteem and political efficacy, and of .63 between locus of control and political efficacy. Also, Ilfeld (1978) found a correlation of .56 between self-esteem and locus of control. All this evidence supports the notion that the high correlations among the personal variables are a result of conceptual relationships and are not an indication of measurement problems. Nevertheless, in light of the somewhat high correlations among the research variables (in particular the independent variables), the results of confirmatory factor analysis are also important and can contribute to clarifying the nature of the relationships among the variables.

Confirmatory Factor Analysis

Table II shows the result of confirmatory factor analysis performed on the indicators of five scales: self-esteem, locus of control, political efficacy, psychological involvement, and active political participation. As described above, several alternative models were tested in terms of their fit to the data. The first alternative was the five-factor model, where the items of each of the five scales mentioned above were forced into separate factors. To support the discriminant validity of the research variables, this option should have a better fit to the data than all the alternative models. Results in Table II clearly show that the five-factor model fit the data better than did the one-factor model, any four-factor model, and any three-factor model. All the fit measures in the five-factor model were better than those in the other models. Also, a χ^2 difference test, which compared the five-factor model with the one-factor model, the 10 four-factor models, and the 10 three-factor models, revealed significant differences between the five-factor model and any of the others. This difference indicated that the five-factor model fit the data better than did any of the alternatives. Although the fit of the five-factor model could not be defined as perfect, it was better than all the four-, three-, or one-factor

Table I. Descriptive Statistics, Reliabilities, and Intercorrelations Among Research Variables

	Mean	SD	1	2	3	4	5	6	7
1. Income	4.24	2.38							
2. Education	6.01	1.94	.46						
3. Self-esteem	33.46	4.73	.33	.42	(.86)				
4. Locus of control	11.10	3.85	.37	.48	.53	(.76)			
5. Political efficacy	19.58	4.37	.40	.59	.69	.54	(.84)		
6. Psychological involvement	7.05	2.14	.27	.31	.26	.34	.52	(.77)	
7. Active political participation	3.81	2.53	.35	.46	.50	.51	.69	.59	(.79)

Note. Reliabilities are in parentheses. All correlations are significant at $p < .001$.

Table II. Confirmatory Factor Analysis Results

Model/description	df	χ^2	χ^2/df	RMSR	GFI	AGFI	NFI	NNFI	CFI	RMSEA	ECVI
Five factors	1,474	2,990.19	2.02	.020	.78	.76	.66	.78	.79	.050	7.72
One factor	1,484	4,280.52	2.88	.021	.65	.63	.51	.60	.61	.067	10.75
Four factors:											
1. Self-esteem and locus of control as one factor	1,478	3,316.10	2.24	.021	.75	.73	.62	.73	.74	.054	8.48
2. Self-esteem and political efficacy as one factor	1,478	3,246.14	2.20	.022	.76	.74	.63	.74	.75	.053	8.31
3. Self-esteem and psychological involvement as one factor	1,478	3,344.93	2.26	.021	.75	.73	.62	.73	.74	.055	8.55
4. Self-esteem and active political participation as one factor	1,478	3,786.71	2.56	.019	.69	.66	.57	.67	.68	.061	9.60
5. Locus of control and political efficacy as one factor	1,478	3,279.94	2.22	.021	.76	.74	.62	.74	.75	.054	8.39
6. Locus of control and psychological involvement as one factor	1,478	3,225.58	2.18	.020	.76	.74	.63	.75	.76	.053	8.26
7. Locus of control and active political participation as one factor	1,478	3,606.83	2.44	.019	.71	.68	.59	.69	.70	.059	9.17
8. Political efficacy and psychological involvement as one factor	1,478	3,097.24	2.10	.020	.77	.75	.64	.77	.77	.051	7.96
9. Political efficacy and active political participation as one factor	1,478	3,446.85	2.33	.020	.73	.71	.60	.71	.73	.056	8.79
10. Psychological involvement and active political participation as one factor	1,478	3,310.87	2.24	.069	.74	.72	.62	.73	.74	.054	8.47
Three factors:											
1. Self-esteem, locus of control, and political efficacy as one factor	1,481	3,541.80	2.40	.023	.73	.71	.59	.70	.71	.058	9.00

Table II. (cont.)

Model/description	df	χ^2	χ^2/df	RMSR	GFI	AGFI	NFI	NNFI	CFI	RMSEA	ECVI
2. Self-esteem, locus of control, and psychological involvement as one factor	1,481	3,595.70	2.42	.022	.73	.71	.59	.69	.71	.058	9.13
3. Self-esteem, locus of control, and active political participation as one factor	1,481	4,061.06	2.74	.020	.67	.65	.53	.63	.64	.064	10.24
4. Self-esteem, psychological involvement, and active political participation as one factor	1,481	3,947.58	2.66	.021	.67	.65	.55	.64	.66	.063	9.97
5. Self-esteem, political efficacy, and psychological involvement as one factor	1,481	3,445.40	2.33	.022	.74	.72	.61	.72	.73	.056	8.77
6. Self-esteem, political efficacy, and active political participation as one factor	1,481	3,866.26	2.61	.020	.68	.66	.56	.65	.67	.062	9.78
7. Locus of control, political efficacy, and psychological involvement as one factor	1,481	3,388.47	2.29	.021	.75	.73	.61	.72	.73	.055	8.64
8. Locus of control, political efficacy, and active political participation as one factor	1,481	3,796.54	2.56	.020	.70	.67	.56	.66	.68	.061	9.61
9. Locus of control, psychological involvement, and active political participation as one factor	1,481	3,699.59	2.50	.019	.70	.68	.58	.68	.69	.060	9.38
10. Political efficacy, psychological involvement, and active political participation as one factor	1,481	3,527.58	2.38	.021	.72	.70	.60	.70	.72	.057	8.97

Note. All values in the χ^2 column are significant at $p < .001$.

alternatives. Note that the five-factor model fit the data better than did a four-factor model where the indicators of psychological involvement and active political participation were forced into one factor (model 10). It also fit the data better than did a three-factor model where the indicators of the three personal variables (model 1) were forced into one factor. Thus, the findings of the confirmatory factor analysis show that the scales applied in this study differed and measured different constructs. This finding supports our argument presented earlier that the somewhat high correlations among the independent variables can be attributed to the conceptual relationships among these variables, and not to measurement problems.

Research Models

Table III presents the fit indices for the research models as well as the χ^2 test. Table IV presents the path coefficients and the variance of the dependent variables explained by each of the models. The path coefficients of the models are also presented in Figure 1. At first glance, one may conclude from the fit indices that model 1, the direct relationship model, was the correct one. However, for several reasons such a conclusion is rejected. First, the fit indices of model 1 were identical to those of the saturated model. This means that in terms of the theoretical constraints the two models operated similarly, as can be seen in the identical df value in both. That is, the main reason for the good fit of model 1 was the absence of constraints and the inclusion of almost all the possible paths. Therefore, we could not single out this model as the correct one despite its good fit indices. This conclusion is supported by the path coefficients of this model as shown in Table IV. Four of its paths were not significant. SES had no effect on the two political participation forms, whereas in the direct relationship model these were important relationships that should have been supported by the data. Also, the negative path between self-esteem and active political participation contradicted the conceptual argument presented in this research. Therefore, from the fact that most of the theoretical expectations were rejected by the data, it could be concluded that this model was not the correct one.

Another model rejected by the data was model 3. This one had a very poor fit to the data, as can be seen in Table III. The poor fit of the model was demonstrated in all the fit indices and forced us to reject it even though all the theoretical relationships predicted by the model were supported, as can be seen in the path coefficients presented in Table IV. Results of the χ^2 test also showed that the constraints set by the model significantly worsened its fit.

Thus, of the four proposed models, only two had the possibility of being accepted as correct: model 2 (the fully mediated one) and model 4. In terms of the fit measures presented in Table III, model 2 fit the data better than did model 4. Also, the explained variance for the two political participation variables was slightly higher in model 2 than in model 4. However, some problems beset this model in terms of its path coefficients. First, two paths were not significant: from self-esteem

Table III. Goodness-of-Fit Summary

Model/description	df	χ^2	Model comparison	$\Delta\chi^2$	df	χ^2/df	RMSR	GFI	AGFI	NFI	NNFI	CFI	RMSEA	ECVI
1. Saturated model	4	7.01				1.75	.013	.995	.967	.994	.987	.998	.042	.131
2. Model 1	4	7.01	Saturated vs. 1	0.00	4	1.75	.013	.995	.967	.994	.987	.998	.042	.131
3. Model 2	9	51.21*	Saturated vs. 2	44.20*	5	5.70	.036	.967	.897	.960	.921	.966	.106	.213
4. Model 3	13	318.36*	Saturated vs. 3	311.35*	9	24.49	.183	.862	.703	.750	.606	.756	.237	.831
5. Model 4	11	77.45*	Saturated vs. 4	70.44*	7	7.04	.065	.953	.882	.943	.906	.951	.115	.254
6. Model 2 modified	8	29.71*	Saturated vs. 2 modified	22.70*	4	3.71	.025	.980	.930	.977	.954	.983	.080	.166
7. Model 3 modified	11	95.15*	Saturated vs. 3 modified	88.14*	7	8.65	.076	.940	.848	.925	.872	.933	.135	.308
8. Model 4 modified	10	41.70*	Saturated vs. 4 modified	34.69*	6	4.17	.034	.973	.926	.967	.947	.975	.087	.185

* $p < .001$.

Table IV. Structural Coefficients and Squared Multiple Correlations for Research Models

Parameters	Model				Model (modified)		
	1	2	3	4	2	3	4
Path coefficients							
Status → Self-esteem		.77*	.57*	.51*	.33*	.55*	.54*
Status → Locus of control		.67*		.59*	.69*		.61*
Status → Political efficacy		.89*			.58*	.45*	.40*
Status → Active political participation	.04						
Status → Psychological involvement	-.07						
Self-esteem → Locus of control			.55*	.30*		.55*	.21*
Self-esteem → Political efficacy				.63*		.41*	.44*
Self-esteem → Psychological involvement	-.06	-.05			-.06		
Self-esteem → Active political participation	-.27*	-.25*			-.26*		
Locus of control → Political efficacy			.57*	.43*		.13*	.18*
Locus of control → Psychological involvement	.16*	.16*			.17*		
Locus of control → Active political participation	.06	.03			.04		
Political efficacy → Psychological involvement	.64*	.66*	.72*	.73*	.67*	.72*	.72*
Political efficacy → Active political participation	.46*	.41*	.42*	.22*	.41*	.22*	.22*
Psychological involvement → Active political participation	.41*	.41*	.42*	.44*	.43*	.44*	.44*
R^2							
Self-esteem		.59	.32	.26	.43	.30	.29
Locus of control		.44	.30	.35	.48	.30	.37
Political efficacy		.80	.33	.74	.71	.68	.72
Psychological involvement	.54	.54	.52	.53	.54	.51	.52
Active political efficacy	.41	.41	.38	.38	.41	.37	.37

* $p < .05$.

to psychological involvement, and from locus of control to active political participation. Second, the path from self-esteem to active political participation was negative, and this direction contradicted the expectation of a positive relationship. The path coefficients of this model clearly evinced problems in the prediction of outcome variables by the mediating variables, particularly self-esteem. Thus, theoretically it could be concluded that the relationships among the research variables were not well represented by model 2.

The path coefficients in model 4, however, were all significant and confirmed all the theoretical expectations of the relationships among the variables. SES was strongly and significantly related to self-esteem (.51) and locus of control (.59). These last two variables were significantly related to political efficacy, which significantly affected psychological involvement (.73) and active political participation (.22). Active political participation was also affected by psychological involvement (.44). So despite the better fit indices of model 2, model 4 seemed a more correct model because of the strong theoretical support provided by its path coefficients. As for the higher variance of the outcome variables explained by model 2, note that the reason for the slightly higher variance explained by model 2 was that in this model all three mediators were related to the outcome variables, versus only one (political efficacy) in model 4.

The fact that one variable predicted almost the same variance as three provided additional support to the conceptual accuracy of model 4. However, model 4 could not be defined as an entirely correct model; it merely fit the data better than did the other models. The reasons are its fit indices (which were not perfect), the significant χ^2 , and the relatively high χ^2/df ratio. Hence, there is still a need for improvement in the search for a better model.

Modified Models

The LISREL program calculates a "modification index" for every fixed parameter in a model. The modification index reflects the minimum reduction in the χ^2 statistics if the parameter is changed from fixed to free. The three mediating models tested here were revised on the basis of these modification indices. Both Breckler (1990) and Cudeck and Browne (1983) argued that cross-validation should be conducted whenever an initial model is modified on the basis of the data. That is, the modified model should be assessed by the use of different data. Otherwise, it should be cautiously interpreted. In our study, modification indices could serve as an additional indicator for the fit of the models tested. That is, higher modification indices in a model indicated a poorer fit.

Modification indices for model 2 showed that the fit indices of this model could be improved if a path from self-esteem to political efficacy was added to the model. Two paths were added in model 3 on the basis of modification indices: a path from SES to political efficacy, and a path from self-esteem to political efficacy. In model 4 a path from SES to political efficacy was added. The modified models 2, 3, and 4

are presented in Figure 2. The fit indices in Table III show that the fit of all the modified models was improved. The pattern of the fit remained unchanged in the non-modified models. That is, model 2 had the best fit indices, model 3 the worst, and model 4 was closer to model 2 in terms of its fit indices.

Table IV shows that the explained variance remained almost the same as before the modifications. In terms of the path coefficients of the modified models, as seen in Table IV, the problems in model 2—in particular the relationship between self-esteem and the outcome variables—remained as in the non-modified model; therefore, this model had to be rejected. In model 3 all the paths, including the two additional paths, were significant. Note the large change in the path from locus of control to political efficacy, which was .57 in the original model and was reduced to .13 in the modified one. This change can probably be attributed to the addition of a path from SES to political efficacy in the modified model. In the modified model 4, the additional path from SES to political efficacy was significant and high (.40) and resulted in a low (although significant) path from locus of control to political efficacy (.18), a path that was much higher in the non-modified model (.43). In short, the pattern of the fit of the modified and non-modified models appeared very similar.

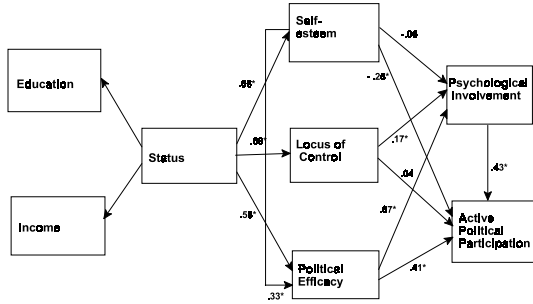
Discussion

The findings showed that the relationship between SES and political participation could be better understood as being mediated by personal variables than as being direct. This was demonstrated by the many nonsignificant paths in the direct model. In all the mediating models, the paths supported the notion that SES affected personal characteristics, which in turn affected the individual's participation in politics. Although none of the mediating models could be defined as a perfect model, one of them—model 4—was supported by the data more than the others.

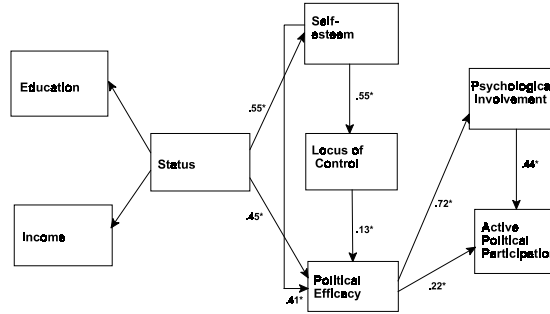
Model 4 suggested that the mediating process operates as follows: First, SES affects personal characteristics, namely self-esteem and locus of control. High SES of citizens leads to high self-esteem and internal locus of control. These two personal characteristics then produce a stronger perception of political efficacy among citizens. (In this respect, political efficacy can be perceived as a behavioral intention that is affected by two personal characteristics.) Finally, both psychological involvement and active participation in politics are affected by perceived political efficacy. Although this model could be improved in terms of its fit, future research should follow its rationale.

In many respects our findings are congruent with those of Verba et al. (1995), who suggested a variety of mediating effects between SES and political participation (p. 417). The civic voluntarism model led to one of the most important conclusions by Verba et al., namely that “the public's voice is often loud, sometimes clear, but rarely equal” (p. 509). This notion implies that personal resources (such as SES) and other personal factors may have a significant effect on political

Model 2: A fully mediated model (modified)



Model 3: A status and self-esteem relationship model (modified)



Model 4: A status, self-esteem and locus of control relationship model (modified)

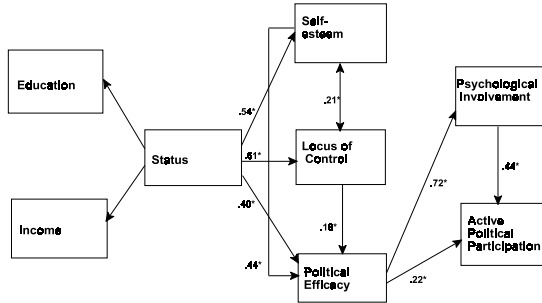


Figure 2. Modified models 2, 3, and 4.

participation. Because these resources are unequally distributed in society, capabilities of participation also differ among individuals. Verba et al. extensively examined the effect of SES (especially education) on political participation, but they did not directly elaborate on the meaningful role of psychological constructs, such as self-esteem and locus of control, as possible mediators between SES and political participation. More research is needed to further clarify the nature of this mediating effect (if it exists). Nonetheless, the findings here can be considered as an extension of Verba et al.'s work.

Our research supports the notion that political participation can be better explained by theories and ideas from both sociology and psychology. Some arguments for such an integrative approach were set out by Verba and Nie (1972), Verba, Schlozman, Brady, and Nie (1993), and Zipp, Landerman, and Luebke (1982). However, our study tested such an integrative approach as a whole through the use of structural equations modeling. Some of our results can assist in future conceptualizations of the process of political participation. Examples are the findings that SES was not related directly to political participation (model 1), that locus of control was related to psychological involvement but not to active political participation (models 1 and 2), and that self-esteem was negatively related to active political participation and had no relationship to psychological involvement (models 1 and 2). All this means that established theoretical relationships based on correlational analysis can be entirely rejected, or accepted for different reasons, when tested by an integrative approach and an analysis technique such as structural equations modeling.

Another contribution of this study is the testing of both psychological political involvement and active political participation as dependent variables. Psychological involvement (i.e., passive participation) and active participation in politics have been demonstrated as different concepts, but they are related in such a way that involvement can lead to active participation (Verba et al., 1995). Our findings showed that all research variables were related more strongly to psychological involvement than to active political participation. Also, across all the tested models, a positive relationship was found between political efficacy and psychological involvement, and between political efficacy and political participation. This relationship was stronger for psychological involvement than for active participation, which supports the notion that personal variables explain involvement or behavioral tendencies better than does actual behavior. The findings here strengthen the importance of political efficacy as a main determinant of political participation. They also show that psychological orientations can be better explained by personal variables than by active behavior aimed at influencing the political setting. In short, this study demonstrated the importance of viewing psychological involvement and active participation in politics as distinct but related concepts.

Our findings suggest several directions for future research. First, more research using comprehensive and integrative models capable of testing hypotheses on complex and non-direct relationships of determinants of political participation is

needed. Structural equations modeling is a strong tool for testing such models, and research of this kind may broaden knowledge of the determinants of political participation and the process whereby they operate. Second, more multidisciplinary research combining theories and concepts from different domains regarding political participation is also needed. Political participation is a result of both structural and personal considerations. Therefore, more integrative theories in line with the one tested here should be put forward. Other concepts from different disciplines may well expand understanding of political participation. For example, theories regarding the relationship between work and non-work can also be applied to political participation, which in this regard can be defined as a non-work activity. The concept of stress can also be integrated into models of political participation. There is evidence that different stressors are negatively related to political participation (Peterson, 1990; Rosenstone, 1982). Thus, the concept of political participation can only benefit from other theories that expand our understanding of it.

Finally, several limitations of this research should be noted. First, in criticizing the classical SES-participation relationship, Verba et al. (1995) suggested that SES may have different effects on political participation and that "what is true for voting cannot be generalized to other forms of activity" (p. 525). Hence, future studies may benefit by separating the SES constructs and examining them against separate constructs of political participation, involvement in politics, and other aspects of political behavior. This was not done in our study, simply because we decided to focus more on the mediating effect of personal-psychological constructs and not on the direct SES-participation relationship. Second, because the data were from a self-report survey, they were exposed to common method error, so some caution is warranted in the interpretation of the findings. Third, the data were collected from two cities in the north of Israel and cannot be generalized to the entire Israeli population. More research from other locations or based on a national sample is required before definite conclusions can be made regarding the findings of this study. Moreover, the Israeli data may not hold for cultures such as those of south Asia, eastern and western Europe, or North America. Therefore, the tests conducted here should be replicated in a political culture different from the Israeli one.

Despite their limitations, the findings allow us to draw several conclusions about the nature of political participation. First, political participation can be better understood through multidisciplinary theories. Second, the relationship of any antecedents to political participation may not be direct or simple but may be mediated by personal-psychological variables. Third, personal variables may be related more strongly to psychological involvement in politics than to change-oriented political conduct. Fourth, structural equations modeling is an important and useful method for testing a complex relationship like that demonstrated here.

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