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Determinants and Structural Relation of Personal Efficacy to Collective Efficacy

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Dans cette recherche, on éprouve un modèle structurel concernant l'impact du statut socioéconomique sur l'efficacité individuelle perçue et le rapport qu'elle entretient avec la perception de l'efficacité collective. Dans les travaux sociodémographiques, les jeunes, par comparaison aux plus âgés, s'estiment moins efficaces dans la gestion de leur vie professionnelle, de leurs relations intimes et de leur situation financière, mais plus aptes à promouvoir le changement social. Les hommes ont plus que les femmes le sentiment de pouvoir contribuer à la solution des problèmes sociaux. En accord avec le modèle structurel énoncé, le statut socioéconomique contribue à la fois à la perception de l'efficacité personnelle dans la gestion des événements de sa propre vie et dans la participation à l'amélioration de la société. Ces deux aspects de l'efficacité individuelle perçue contribuent à leur tour fortement à la conviction qu'une action collective peut effectivement induire le changement social. Un autre modèle où l'efficacité collective perçue devient la cause première de l'efficacité individuelle perçue se révéla moins proche des données recueillies.

This study tested a structural model regarding the impact of socioeconomic status on people's perceived individual efficacy and its link to their perceived

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collective efficacy. In sociodemographic analyses younger participants, compared to their older counterparts, judged themselves less efficacious to manage their worklife, intimate partnerships, and financial condition, but of higher efficacy in promoting social change. Men had a higher sense of efficacy than women to contribute to the solution of social problems. In accord with the posited structural model, socioeconomic status contributed to both perceived personal efficacy to manage one's life circumstances and individual efficacy to contribute to the betterment of societal conditions. Both forms of perceived individual efficacy, in turn, contributed substantially to a sense of collective efficacy to effect social change through unified action. An alternative model in which perceived collective efficacy is assigned causal primacy affecting perceived individual efficacy provided a poorer fit to the data.

INTRODUCTION

The beliefs people hold about their efficacy to exercise control over events that affect their lives influence the choices they make, their aspirations, level of effort and perseverance, resilience to adversity, vulnerability to stress and depression, and performance accomplishments (Bandura, 1997). In social cognitive theory, perceived self-efficacy is the foundation of human agency. Unless people believe they can produce desired outcomes and forestall undesired ones through their actions they have little incentive to act or to persevere in the face of difficulties. Diverse lines of research support the role of perceived self-efficacy in different spheres of functioning. A number of meta-analyses of findings in different domains of functioning confirm the influential role of perceived self-efficacy in human adaptation and change (Holden, 1991; Holden, Moncher, Schinke, & Barker, 1990; Multon, Brown, & Lent, 1991; Stajkovic & Luthans, 1998).

Research on the effects of perceived efficacy has been largely confined to the exercise of individual agency. Social cognitive theory extends the conception of agentic causality to collective agency exercised through a shared sense of efficacy (Bandura, 1997). People pool their knowledge, competencies and resources, provide mutual support, form alliances and work together to solve problems and improve the quality of their lives. Perceived collective efficacy is defined as a group's shared belief in its conjoint capabilities to organise and execute the courses of action required to produce given levels of attainments (Bandura, 1997). Unlike individual efficacy, collective efficacy involves interactive, coordinative, and synergetic social dynamics. Perceived collective efficacy is, therefore, construed as an emergent group-level attribute rather than simply an aggregation of perceived individual efficacies (Bandura, 2000, 2001).

Perceived collective efficacy has been measured in two ways. The first approach aggregates the perceived personal efficacies of group members. The second approach aggregates the members' judgments of the group's

capabilities as a whole. The latter holistic appraisal encompasses the coordinative and interactive dynamics operating within groups. The two indices of collective efficacy are at least moderately correlated for several reasons (Bandura, 2000). Because people are socially situated, and inter-dependently so, in judging their personal efficacy they necessarily consider the interactive contribution of the group members to their personal capabilities. Conversely, in judging group efficacy, members consider the potential contribution of key members to their collective attainments.

Some researchers advocate that perceived collective efficacy be measured by having a group arrive at a single judgment of the group's capability (Guzzo, Yost, Campbell, & Shea, 1993). The discussion approach is methodologically problematic, however. Constructing unanimity about a group's efficacy via group discussion is subject to the distorting vagaries of social persuasion by members who command power and other pressures for social conformity. Indeed, a group's collective judgment of its efficacy reflects mainly the personal judgments of higher status members rather than those of subordinate members (Earley, 1999). This mode of assessment may have reactive effects in that persuasory efforts to reach consensus can alter members' views. Assessments that operate through social influence should be avoided. Moreover, no social system is monolith with a unitary sense of efficacy (Bandura, 1997). A forced consensus to a single judgment masks the variability in efficacy beliefs among the various factions within a social system and misrepresents their beliefs.

The impact of perceived collective efficacy on group functioning is beginning to be verified empirically. Some of these studies assess the effects of perceived collective efficacy altered experimentally (Durham, Knight, & Locke, 1997; Earley, 1993, 1994; Greenlees, Graydon, & Maynard, 2000; Hodges & Carron, 1992; Prussia & Kinicki, 1996; Seijts & Latham, 2000). Other lines of research examine the unique effects of naturally occurring beliefs of collective efficacy in multivariate designs. The latter studies encompass diverse social systems, including the collective efficacy of educational systems (Bandura, 1997; Goddard, Hoy, & Hoy, 2000), athletic teams (Carron, 1984; Feltz & Lirgg, 1998; Mullen & Cooper, 1994; Spink, 1990), combat teams (Jex & Bliese, 1999; Lindsley, Mathieu, Heffner, & Brass, 1994), urban neighborhoods (Sampson, Raudenbush, & Earls, 1997), business organisations (Gibson, 1995; Earley, 1994; Hodges & Carron, 1992; Little & Madigan, 1994), and political systems (Pollock, 1983; Seligson, 1980).

The present research addressed a number of issues designed to clarify the structure of collective efficacy, its socioeconomic determinants, and the linkage of perceived personal efficacy to manage one's particular life circumstances to perceived collective efficacy to effect changes in common societal problems. With regard to the structure of efficacy beliefs, perceived personal efficacy has been shown to be multifacetedly dispositional, varying

across spheres of functioning, rather than globally dispositional (Bandura, 1997). But the structure of societally oriented collective efficacy has not been examined. In the personal domains examined in this study, participants judged their efficacy to exercise control over their worklife, health, finances, and relations with their spouse or other intimate partner. In the societal domains, participants judged their efficacy to improve social conditions of unemployment, economic crises, corruption, criminal and drug activities, and terrorism. Perceived collective efficacy was expected to be structured multifacetedly as is personal self-efficacy.

Social cognitive theory rejects a dualism between personal agency and social structure (Bandura, 1997). Sociostructural influences operate largely through psychological mechanisms to produce behavioral effects. In tests of this integrated causal structure, the impact of socioeconomic status on psychosocial functioning is mediated through the aspirations and beliefs of efficacy to exercise some measure of control over one's life circumstances (Bandura, 1999; Elder, 1995). Socioeconomic advantage provides the resources and access to opportunity structures for the development and exercise of personal efficacy. Socioeconomic status indeed fosters a sense of personal efficacy and aspirations (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). At the collective level, many people of low socioeconomic status feel politically inefficacious and remain disconnected from the major sources of social influence. In contrast, those of high educational and occupational status are better informed, have the social and financial means, and the connections to social systems that command influence to effect governmental policies and practices. They use their power to shape the structure and practices of societal systems in ways that favor their vested interests. The socioeconomically disadvantaged can, of course, view themselves to be personally inefficacious but the social system as collectively efficacious. But it is the socioeconomically advantaged with communal ties for mobilising collective political pressure who have a strong sense of efficacy to effect desired social changes by their collective actions (Steinberger, 1981).

Over the years women have faced innumerable barriers to equitable participation in social, educational, occupational, and political pursuits (Bussey & Bandura, 1999; Epstein, 1988; Jacobs, 1989). In many circumstances, given their heavy responsibility for homemaking, they have to manage the everyday homelife. The social impediments and constraining socialisation practices contribute to gender differences in perceived political efficacy (Bandura, 1997). There are no gender differences in childhood but, in adulthood, females feel less politically efficacious than males (Campbell, Gurin, & Miller, 1954; Easton & Dennis, 1967). In the present study, similar gender differences were expected in perceived collective efficacy to alter societal conditions, but not in personal and familial life, where women can exercise greater direct control.

The effect of age on perceived collective efficacy has not been systematically examined. Given that many of the societal problems are recurrent or chronic ones, older participants are more likely to view them as refractory to collective initiatives. On the other hand, experience can also bestow wisdom and forethoughtful perspectives that can help to sustain a sense of efficacy, especially under difficult circumstances. People's lives are shaped by the distinctive social, economic, and political experiences provided by the eras in which they live (Elder, 1994). Because of the many conditional factors governing the efficacy effects of age status, such as the type, magnitude, and outcomes of past coping experiences, and the sociopolitical context in which they occurred, no directional hypothesis was proposed.

The present study examined three different forms of perceived efficacy. The first, labeled *personal efficacy* is concerned with perceived self-efficacy to manage one's own life circumstances. The other two forms of perceived efficacy, which have received less attention despite their importance, focused on people's beliefs that they can achieve desired changes in societal conditions that affect their lives by their actions. Perceived *individual social efficacy* centered on beliefs that one can help to bring about social changes by one's individual actions. Both of these measures assessed an individual's sense of efficacy, but exercised differently. The former assessed self-efficacy to manage directly aspects of one's everyday life; the latter assessed self-efficacy to contribute to group effort to effect changes in the social conditions affecting one's life. Perceived *collective social efficacy* examined people's beliefs that through the exercise of their collective voice, their society can accomplish desired social changes.

Fig. 1 presents the posited structural model specifying the impact of socioeconomic status on perceived efficacy, and the paths of influence among the three forms of efficacy belief systems. In the first segment in the conceptual

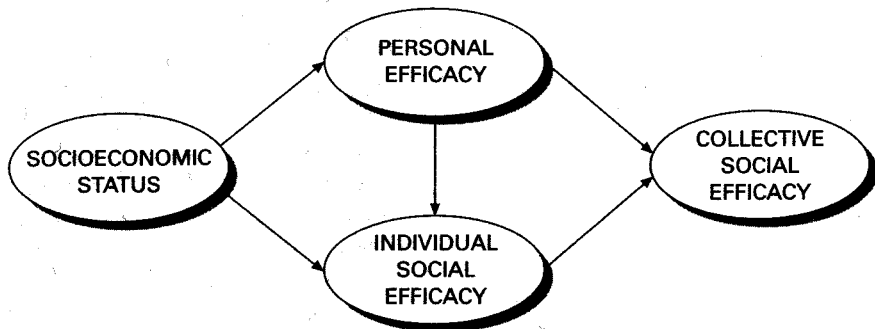


FIGURE 1. Posited causal structure of the paths of influence through which socioeconomic status and perceived personal efficacy contribute to perceived collective efficacy.

model, socioeconomic advantage enhances people's beliefs both in their personal efficacy to manage the various aspects of their personal life circumstances and to contribute to social efforts to effect desired changes in broader social conditions. For reasons given earlier, it was hypothesised that socioeconomic status affects perceived collective efficacy only indirectly through its influence on perceived personal and individual social efficacy. People's beliefs that they can effect social change by working together is, to a large extent, grounded in the perceived self-efficacy of its members. One cannot easily create a strong collective force from members who are plagued by a profound sense of self-doubt. People of low efficacy see little point in attempting to exercise control or, if they try, they easily convince themselves of the futility of further effort should they encounter difficult obstacles (Bandura, 1997). In the second segment in the structural model, both personal and individual social efficacy promote a sense of collective efficacy to improve societal life conditions.

METHOD

Participants

The participants were 1,214 individuals representative of the Spanish population. They ranged in age from 18 to 91 years of age. Fifty-two per cent were women, and 48 per cent were men. The socioeconomic status of the sample was distributed as follows: 19 per cent were in the high status category, 55 per cent in the middle class, 24 per cent were of lower socioeconomic status.

National Sampling Procedure

To ensure a representative national sample, the participants were selected proportionally across the 17 Spanish regions and, within each region, across the five population size categories into which municipalities are grouped. Once municipalities were randomly selected from the official statistical listing, census tracts were randomly selected, with eight participants chosen from each tract. Once a census section was selected, streets and numbers were randomly chosen. After the living unit was selected, the membership of the household above 18 years of age was identified. Participants were then selected according to the Kish (1995) tables, with only one person interviewed in each household.

Socioeconomic Status

Socioeconomic status comprised several facets in a comprehensive index. They included educational level of the participants; the family's socioeconomic

status measured in terms of income and occupational level; and the residential status based on Galtung's (1964) index combining not only educational and occupational status, but the standing of the residential milieu as gauged by net immigration and emigration from the residential locale.

Perceived Efficacy Assessment

Three sets of self-efficacy scales, each set including five items, were used to measure the degree of perceived efficacy across different domains of functioning (Fernández-Ballesteros, 1998). The selected domains represented the essential aspects of everyday life at the personal level, and important society-wide problems at the collective level.

To assess *Perceived Personal Efficacy* (PE), participants rated their perceived capability to manage common demands in their daily life. These included handling activities in the family, in their partnership, at work, and managing their personal finances and health.

To measure *Individual Social Efficacy* (ISE), participants rated their perceived capabilities to contribute individually to improvements in social problems and their judgments were aggregated. In the assessment of *Collective Social Efficacy* (CSE) the participants rated the capabilities of the society as a whole to effect desired improvements in major societal conditions. These included unemployment, corruption, criminal and drug activities, economic crises, and terrorism. The spheres of social problems were selected based on periodic surveys of representative national samples concerning people's major societal concerns (Díez-Nicolás, 1995).

The assessments of perceived efficacy were conducted in face-to-face interviews in the homes of the participants. The interviewers were selected from a professional national network, *Intercampo*, that conducts fieldwork interviews. There were 60 interviewers, half of whom were males, and the other half were females. For each item the participants rated the strength of their efficacy on a 5-point dimension ranging from no perceived capability to high capability to manage the various activity domains.

RESULTS

In the first step of the analysis we examined the factor structure of the different measures of perceived efficacy. We then analysed variations in the different forms of perceived efficacy as a function of socioeconomic status, gender, and age. We then tested the posited structural model in which socioeconomic status contributes to both forms of perceived individual efficacy which, in turn, enhances a sense of collective efficacy.

TABLE 1
Factor Pattern for the Different Forms of Perceived Personal and Collective Efficacy

Items	Factors		
	Factor 1	Factor 2	Factor 3
Personal efficacy			
Family	.07	.02	.72
Couple	-.03	-.06	.80
Work	.00	-.08	.81
Finances	-.03	.05	.76
Health	.01	.10	.76
Individual social efficacy			
Corruption	-.04	.89	.00
Unemployment	-.01	.87	.02
Crime/drugs	.02	.87	.01
Economic crises	.01	.89	-.02
Terrorism	.06	.79	.00
Collective social efficacy			
Corruption	.91	.02	-.02
Unemployment	.89	-.00	.00
Crime/drugs	.91	-.01	.02
Economic crises	.89	.02	.01
Terrorism	.89	-.01	-.01
Percentage of explained variance	27.03	25.18	19.92

Exploratory Factor Analysis

The factor structure underlying the various items measuring the different forms of perceived efficacy was evaluated using the principal component factor analysis. Table 1 presents the results of the factor analysis. The eigenvalues for the first seven factors were 6.53; 2.73; 1.56; .76; .57; .54; .43. Therefore, the three factors with eigenvalues above 1 were extracted and submitted to the Oblimin oblique rotational procedure. The factors identified correspond to the three forms of perceived efficacy designated conceptually (PE, ISE, CSE). These three factors accounted for 27.03, 25.18, and 19.92 per cent of the variance, respectively, with all factor loadings exceeding .70. The alpha reliability coefficients were .83, .94, and .92 for the PE, ISE, and CSE scales, respectively.

Impact of Sociodemographic Factors on Personal and Collective Efficacy

Table 2 presents the mean levels of perceived personal and collective efficacy as a function of age, gender, socioeconomic status, and activity domain.

TABLE 2
Level of Perceived Efficacy across Different Activity Domains as a Function of Sociodemographic Factors

	Personal efficacy					Perceived social efficacy												
	Family	Couple	Work	Finances	Health	Total	Corruption	Unemployment	Crime/drugs	Economic crises	Terrorism	Total						
	ISE	CSE	ISE	CSE	ISE	CSE	ISE	CSE	ISE	CSE	ISE	CSE	ISE	CSE				
Gender	3.56	3.71	3.10	2.84	3.17	3.27	1.59	2.02	1.58	2.01	1.64	2.11	1.52	1.87	1.51	1.82	1.57	1.97
Male	3.49	3.67	3.10	2.85	3.19	3.26	1.68	2.07	1.66	2.08	1.75	2.20	1.58	1.92	1.60	1.89	1.65	2.03
Female	3.62	3.74	3.10	2.84	3.15	3.29	1.51	1.98	1.50	1.94	1.53	2.01	1.47	1.82	1.42	1.75	1.49	1.90
Age	3.57	3.66	2.90	2.77	3.35	3.25	1.69	2.10	1.67	2.08	1.78	2.19	1.62	1.95	1.63	1.95	1.68	2.05
18-29	3.57	3.69	3.12	2.87	3.27	3.30	1.62	2.03	1.63	2.02	1.70	2.17	1.54	1.87	1.57	1.85	1.61	1.99
30-49	3.49	3.79	3.20	2.84	3.07	3.28	1.58	2.01	1.54	2.00	1.58	1.98	1.49	1.83	1.41	1.69	1.52	1.90
50-64	3.60	3.71	3.26	2.90	2.82	3.35	1.41	1.91	1.41	1.91	1.40	2.00	1.37	1.80	1.33	1.71	1.38	1.86
65-91																		
Socioeconomic status	3.41	3.54	2.99	2.70	2.85	3.10	1.49	1.89	1.45	1.96	1.48	1.92	1.41	1.77	1.41	1.75	1.45	1.86
Low	3.52	3.73	3.08	2.79	3.19	3.26	1.54	1.98	1.57	1.97	1.61	2.08	1.48	1.81	1.48	1.77	1.54	1.92
Middle	3.87	3.85	3.35	3.21	3.54	3.56	1.86	2.30	1.79	2.20	1.95	2.41	1.79	2.16	1.73	2.08	1.83	2.23
High																		

To evaluate the impact of the sociodemographic factors on perceived personal and collective efficacy, a mixed 4-way ANOVA was performed with gender, socioeconomic status, and age as between subjects factors, and form of perceived efficacy as a within subjects factor. To further evaluate the sociodemographic correlates of variation among the five facets within each form of perceived efficacy, mixed 4-way ANOVAs were performed with efficacy facets as the within subjects factor. Whenever the omnibus F test was significant, the source of the mean differences was analysed with the post hoc Tukey Honest Significance Difference Test.

The analyses of variance yielded significant main effects for the form of perceived efficacy, $F(2, 2062) = 917.46, P < .0001$, and socioeconomic status, $F(2, 1031) = 22.08; P < .0001$. Participants had a much stronger sense of efficacy to manage their personal life circumstances than to exert influence individually or collectively over societal problems. However, in the societal realm, they judge themselves much more efficacious to solve widespread social problems as a group than by acting individually. In further comparisons of pairs of means to identify the source of the socioeconomic differences, participants of high socioeconomic status had a stronger sense of efficacy than those of medium status and low status, which did not differ from each other. When variations in facets were considered, the latter pattern of differences was evident for individual social and collective social efficacy. But in the case of personal efficacy, all three SES groups differed significantly from each other.

A first-order interaction effect was obtained for different forms of efficacy as a function of age, $F(4, 2062) = 3.97, P < .01$. Compared to their older counterparts, younger participants had a lower sense of efficacy to manage their personal life circumstances, but higher efficacy that they can have a hand in effecting social changes.

Analysis of variations in perceived personal efficacy across the five facets revealed significant main effects for facets, $F(4, 4436) = 116.36, P < .0001$, and for age, $F(2, 1109) = 3.18, P < .05$, that is qualified by a significant age \times facet interaction, $F(8, 4436) = 4.23, P < .001$. People judged themselves to be more efficacious to manage their homelife than their worklife or health. Perceived efficacy to manage family and health matters did not differ by age, but the younger participants had a lower sense of efficacy to manage their worklife, intimate partnerships, and finances than did their older counterparts.

Analysis of variance for different forms of perceived efficacy aggregated across facets yielded a significant interaction effect between gender and efficacy form, $F(2, 2062) = 5.54, P < .01$. Compared to males, females judged themselves to be equally efficacious to manage their immediate life circumstances but of lower efficacy to have an impact on social changes either individually or collectively. However, the differences fell short of significance in paired contrasts. When facets within the efficacy forms are considered,

however, women have a lower sense of efficacy that their individual efforts can contribute to social change than do the males, $F(1,1116) = 4.77, P < .05$. As previously noted, socioeconomic status enhances individual social efficacy, as does age, $F(2, 1116) = 3.00, P < .05$, with younger participants having higher efficacy than older ones.

Variations in efficacy across facets differed significantly for both individual social efficacy, $F(4, 4464) = 10.50, P < .0001$, and collective social efficacy, $F(4, 4444) = 21.64, P < .0001$. In both forms requiring management of societal problems, people judge themselves to be more efficacious to reduce crime and drug activities than unemployment and corruption, and least efficacious to alter economic crises or to eradicate terrorism.

Structural Links

We tested the posited structural model on the covariance matrix using the EQS program (Bentler, 1995). In the model, socioeconomic status was treated as a latent variable comprising the different facets of status. Similarly, the three forms of perceived efficacy were latent variables each represented by five facets. Both individual and social collective efficacy were assessed on the same coping domains. This commonality can create a method effect that may enhance the correlations between the two forms of efficacy. To minimise this effect, we used the correlated uniquenesses procedure proposed by Marsh and Grayson (1995) in the structural equation modeling approach to the analysis of Multitrait Multimethod Matrices. This procedure estimates the effect of methods, which is inferred from the correlations between the uniqueness of variables sharing the same domains of assessment. In the present study, domain similarity is treated as the "method factor". In this way, the method variance due to domain similarity is controlled when estimating structural coefficients that link latent variables (Marsh & Grayson, 1995).

The results of the structural equation modeling for perceived collective efficacy are presented in Fig. 2. It includes all of the coefficients that are significant beyond the $P < .05$ level. In accord with prediction, socioeconomic status accounts for variance in both personal efficacy and individual social efficacy. The latter two forms of efficacy are, in turn, positively linked to collective social efficacy to improve societal life conditions. Socioeconomic status also has a weak direct effect on perceived collective social efficacy. However, its mediated effects through personal and individual social efficacy were much larger. The structural model accounted for 40 per cent of the variance in perceived collective social efficacy.

Because of the multidimensionality of fit indices, a variety of tests were performed. The model provided an excellent fit to the data as revealed by the various fit indices considered. The tests yielded a Comparative Fit Index (CFI) of .96, a Non-Normed Fit Index (NNFI) of .95, a Root Mean Square

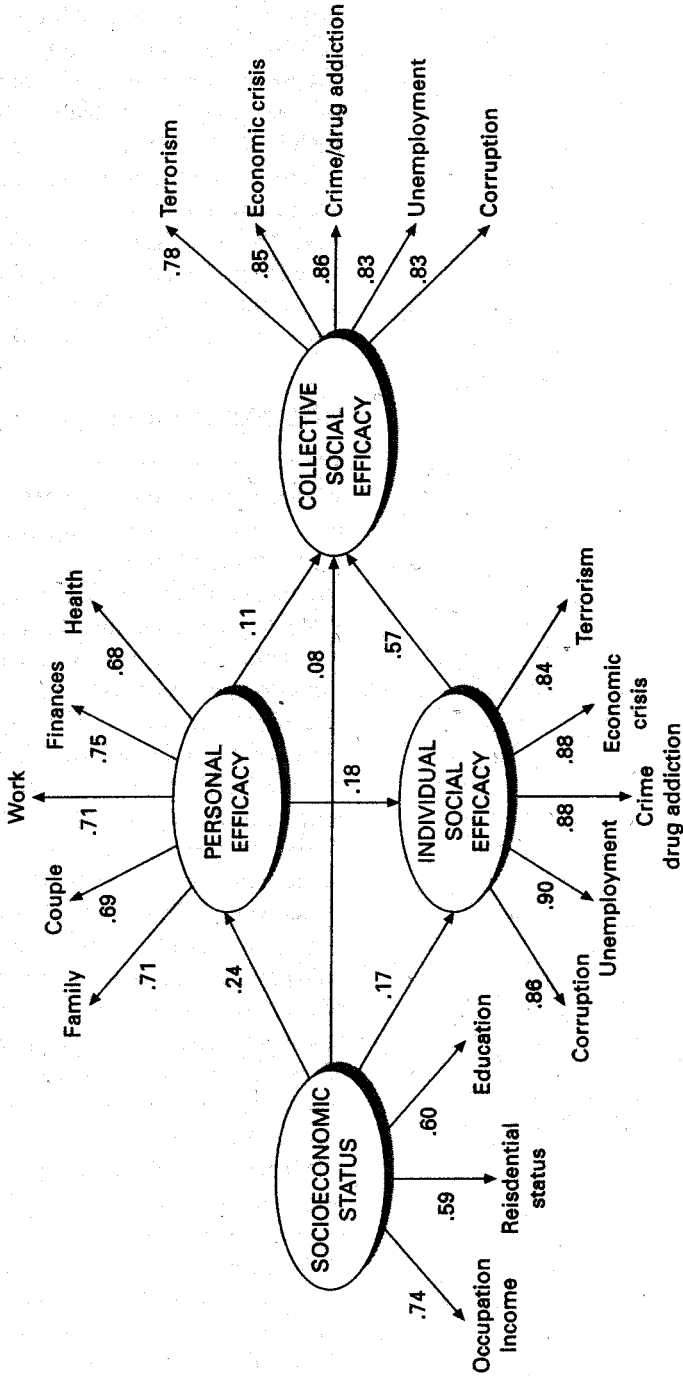


FIGURE 2. Path analysis of the paths linking socioeconomic status and perceived personal efficacy to a sense of collective efficacy to manage society-wide problems.

Error of Approximation (RMSEA) of .064, and a $\chi^2(124, N = 1065) = 659.66$, $P < .001$. However, the dependence of the χ^2 statistic on sample size makes it a less sensitive test with large samples.

In addition, we tested the structural model across gender using the multiple groups model approach which estimates simultaneously the same pattern of relationships among variables in the two samples of males and females. Equivalence across the gender samples is evaluated by constraints that impose identical estimates for the model's parameters (Byrne, 1994; Scott-Lennox & Scott-Lennox, 1995). In EQS the plausibility of these equality constraints is examined by the Lagrange Multipliers (LM) test (Bentler, 1995). All of the structural links in the posited model were verified for both males and females, with no significant gender differences in parameter estimates.

We also tested an alternative model in which socioeconomic advantage builds a sense of collective efficacy which, in turn, fosters perceived personal efficacy to manage one's immediate life circumstances and to contribute individually to social change. However, this model produced a poorer fit to the data than the one postulating that perceived personal efficacy provides a foundation for a sense of collective efficacy. The two forms of self-efficacy have little relation to each other in the alternative model, which goes counter to evidence that there is some generality to personal efficacy beliefs (Bandura, 1997).

DISCUSSION

The findings of the present study add to our understanding of the multifaceted structure of beliefs of personal and collective efficacy, their demographic correlates, socioeconomic determinants, and the linkage of perceived personal efficacy to manage one's life circumstances to perceived collective efficacy to effect desired social changes. Efficacy beliefs vary in strength depending on whether personal or social problems are the object of change. Immediate life circumstances are, of course, of lesser magnitude and more directly manageable than sociostructural conditions. Hence, people have a stronger sense of efficacy to manage various aspects of their lives in their immediate environment than to bring about changes in society-wide problems. However, as will be shown later, our findings reveal an interesting counterintuitive reversal of this pattern as a function of age.

People can bring their influence to bear more effectively working together than in isolation. Indeed, people's perceived collective efficacy acting individually is weaker than their perceived collective efficacy acting together. The efficacy benefits of collectivity indicate a mutual enablement by the power of numbers. The marginalised voiceless sectors of society lack the power of money and connections to those of power and influence to improve their life conditions. Even many individuals who are socioeconomically better off have become disaffected from the political system and no longer see themselves

as agents of social change. Some of the more creative efforts to build and restore a sense of collective efficacy rely heavily on enablement through the power of numbers exercised for common purposes (Alinsky, 1971; Bandura, 1997; Gardner, 1972).

Personal and collective efficacy represent different scopes of agency but, within each form, belief in the power to produce effects varies to some extent across different facets of functioning. At the personal level, for example, individuals judged themselves to be more efficacious to manage their homelife than their worklife over which they can exercise only partial control. At the collective level, they believe they can play a stronger part in reducing crime than altering economic crises or curbing terrorism, which may be operated stealthily by social forces outside one's society and thus be less amenable to direct control. The multidimensionality of perceived collective efficacy is in accord with a growing body of evidence in other spheres and levels of functioning that efficacy beliefs vary across domains rather than being globally structured. Domain-linked indices of perceived efficacy have greater explanatory and predictive value than do global ones (Bandura, 1997).

The different forms of perceived efficacy varied as a function of age and gender. Men and women did not differ in their perceived efficacy to manage their personal lives, but men expressed stronger efficacy that they can change their lives for the better through their actions to effect social change. The latter difference may partly reflect the fact that the major spheres of change involving economic, employment, and legal enforcement systems are ones in which males figure more prominently than females in many societies. In spheres of major import to women's lives, such as voting rights, property ownership, access to educational and organisational systems, and equitable pay for comparable work, women won social reforms after prolonged struggles through forcible collective action against those in positions of power who fought challenges to their advantaged positions (Bussey & Bandura, 1999; Jacobs, 1989; Reskin, 1991). Perseverance in the face of daunting obstacles requires a resilient sense of collective efficacy (Bandura, 1997).

As previously noted, adult females judged themselves to be less politically efficacious than males (Campbell et al., 1954; Easton & Dennis, 1967). However, recent years have witnessed substantial changes in the roles women perform. Their increased participation in organisational, political, and legislative activities is likely to reduce the gender gap in perceived efficacy to influence institutional practices that affect the social and economic life of a society. However, the opportunity structures for women to operate as policy makers varies widely cross-culturally.

The obtained age differences in perceived efficacy suggest one possible reason why the youth are often the spearhead of political activism (Bandura, 1973, 1997; Lipset, 1966). Younger participants judged themselves more efficacious than their older counterparts to bring about social change.

Interestingly, the differences are especially evident in their perceived individual contribution to perceived collective efficacy to bring their influence to bear on intractable societal problems. In the case of perceived collective efficacy, members may derive some of their sense of efficacy from the power of numbers, which include youth. This would reduce age differences. Youthfulness does not confer an indiscriminate sense of efficacy, however. The younger cohorts, who are typically in the process of establishing stable partnerships, finding a suitable occupational pursuit, and are insecure financially, expressed a lower sense of efficacy in these aspects of their lives than did their older counterparts.

Lives are historically situated and the sociopolitical and economic conditions ushered in by different eras alter the course of lives (Elder, 1994). This national representative sample is especially informative because of the radical sociopolitical transformations it spans. Indeed, the older participants would have undergone in their lifetime wrenching sociopolitical changes from monarchical to fascistic to democratic systems. These major sociopolitical changes in Spain from a dictatorial regime to a democratic one made life experiences, that can affect perceived efficacy, quite different depending on where people were in their lives at the time. Age-related differences in perceived efficacy undoubtedly reflect not only developmental changes over time but the impact of sociopolitical eras. Radical transitional experiences complicate the picture, however. While a dictatorial regime would dampen a sense of efficacy that one can personally do much to effect social change, emergence of a democratic system would rekindle a sense of collective efficacy to shape the social future. This might partly explain why the older cohorts rather than their younger counterparts had a lower sense of individual efficacy to promote social change, but did not differ from them in their perceived efficacy to do so collectively.

In accord with prediction, both socioeconomic status and social position were accompanied by high perceived personal and collective efficacy. Advantaged statuses provide the resources and access to opportunity structures to cultivate a robust sense of efficacy. The impact of socioeconomic status on perceived efficacy has been verified in the case of personal efficacy (Bandura et al., 1996, 2001; Elder, 1995). The present study extends this impact to perceived collective efficacy.

The findings of this study provide substantial empirical support for the posited causal structure. Socioeconomic status contributed to variance in both perceived personal efficacy and individual collective efficacy. However, it had greater impact on efficacy to manage personal problems than on individual efficacy beliefs to effect social change. As previously noted, accomplishing social change presents the more formidable challenge. Both forms of perceived efficacy, in turn, contributed substantially to a strong sense of efficacy to exercise control through concerted collective action. Contrary

to prediction, socioeconomic status had a weak, but nevertheless significant direct effect on perceived collective efficacy. People who are socioeconomically advantaged may view their social future as presenting fewer impediments and more favorable opportunity structures. This would enhance perceived collective efficacy. But, the path from socioeconomic status to collective efficacy is heavily mediated through its effects on the beliefs people hold about their personal efficacy. An alternative model that assumes that perceived collective efficacy spawns personal efficacy provided a poorer fit to the empirical data. The replication of the hypothesised paths across the gender samples adds to the generality of the proposed structural model.

Analysis at the cultural level often invokes a contentious dualism in which personal efficacy is equated with self-centered individualism and pitted against communal collectivism (Schooler, 1987). In fact, high perceived efficacy is vital for successful functioning regardless of whether it is achieved individually or by group members working together. A collective system with members plagued with self-doubts about their capabilities to perform their roles will achieve little. The findings of this study show that perceived collective efficacy is partly the product of a strong sense of personal efficacy, especially belief that one can have a hand in effecting societal changes.

The assessment of perceived efficacy in this study sought breadth across major spheres of personal and collective functioning. For example, people judged their capability to manage their financial circumstances rather than particular aspects of their financial life. Similarly, they judged their society's capability to deal with the terrorist activities that pose the relevant societal threat rather than the counterterrorist efficacy of overseeing institutional subsystems. Where the threat is concentrated in a single major source, there is no further disaggregation of societal system efficacy for dealing with different sources of threats. For purposes of the present study, the efficacy scales were cast at a suitable level of generality. They were multidimensional but not particularised for facets within domains. Microanalytic studies of personal and collective efficacy would shed light on how efficacy for the facets within activity domains contributes to the aggregate judgment.

This study was designed to clarify the relation of perceived personal efficacy in different activity domains to perceived collective efficacy. Although the scope of this research was limited to the determinants of perceived collective efficacy, as previously shown, such beliefs have notable impact on group accomplishments. The stronger the perceived collective efficacy, the higher the groups' motivational investment in their undertakings, the stronger their staying power in the face of impediments and setbacks, and the greater their performance accomplishments.

The present research has clarified some aspects about the structure, socio-demographic correlates, and relations among the different forms of perceived efficacy. However, it focused on only socioeconomic precursors and the pattern

of influences among perceived personal and collective efficacy at one point in time. An appropriate next stage for research is to expand the set of determinants and to test longitudinally the sociocognitive structural model.

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