Multifaceted Impact of Self-Efficacy Beliefs on Academic Functioning

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This research examined the network of psychological influences through which efficacy beliefs affect academic achievement. Parents' sense of academic efficacy and aspirations for their children were linked to their children's scholastic achievement through their perceptions of academic capabilities and aspirations. Children's beliefs in their own learning and academic attainments, in turn, contributed to scholastic achievement both independently and by promoting high academic aspirations and protocol behavior and reducing vulnerability to feelings of failure and depression. Children's perceived social efficacy and efficacy in managing peer pressure for detrimental conduct also contributed to academic attainments, but through partially different pathways of affective and self-regulatory influences. The impact of perceived social efficacy was mediated through academic aspirations and a low level of decisiveness. Social efficacy was related to academic achievement both directly and through adherence to moral self-regulations for detrimental conduct and protocol behavior that can subvert academic pursuits. Familial socioeconomic status was linked to children's academic performance only indirectly through its effects on parental aspirations and children's perceived social efficacy and self-regulatory factors accounted for a sizable share of the variance in academic achievement.

The recent years have witnessed a resurgence of interest in the self processes by which human agency is exercised. Among the mechanisms of personal agency, none is more central or pervasive than people's beliefs about their capabilities to exercise control over their level of functioning and environmental demands. Unless people believe that they can produce desired effects by their actions, they have little incentive to act. The findings of diverse lines of research reveal that efficacy beliefs exert considerable impact on human development and adaptation (Bandura, 1982, 1995; in press; Schwarzer, 1988). Such beliefs influence aspirations and strength of goal commitments, level of motivation and perseverence in the face of difficulties and setbacks, resilience to adversity, quality of analytic thinking, causal attributions for successes and failures, and vulnerability to stress and depression.

The various psychological processes through which self-efficacy beliefs exert their influence are intimately involved in the development of cognitive competencies. Children's beliefs in their efficacy to regulate their own learning activities and to master difficult subject matters affect their academic motivation, interest, and scholastic achievement (Bandura, 1982; Schunk, 1985; Zimmerman, 1985). These lines of theorizing and research integrate the cognitive, metacognitive, and motivational mechanisms of self-regulation (Bandura, in press; Schunk & Zimmerman, 1984). Moreover, efficacy beliefs influence aspirations and pursuits during early formative years. The stronger the students' beliefs in their efficacy, the more occupational options they consider possible, the greater the interest they show in them, and the better they prepare themselves educationally for different career pursuits, and the greater their persistence and success in their academic coursework (Betz & Hackett, 1988; Lent, Brown, & Hackett, 1994).

The preceding lines of research have added greatly to understanding of how efficacy beliefs affect intellectual development and functioning both directly and through their impact on mediating cognitive, affective, and motivational processes. However, children's intellectual development cannot be isolated from the social relations within which it is imbedded and from its interpersonal effects. It must be analyzed from a social perspective (Bandura, 1995; Vygotsky, 1982). In social cognitive theory, personal agency operates within a broad network of sociostructural and psychological influences in which efficacy beliefs play an influential regulative function (Bandura, in press; Elder, 1985).

The present program of research examines how diverse sources of influence, including socioeconomic, familial, peer, and self processes, operate in concert to shape the course of academic achievement. In the conceptual scheme guiding this research, the impact of the lower socioeconomic status of the families on children's academic achievement is mediated through its effects on parental academic efficacy and aspirations. Parents' sense of efficacy to promote their children's academic development and the educational aspirations they hold for them enhance their children's beliefs in their own academic efficacy and raise their aspirations. The children's beliefs and aspirations, in turn, contribute to their academic achievement both directly and by fostering peer acceptance and reducing depression and problem behavior that can undermine productive engagement in academic pursuits. The proposed structure of the causal model is summarized schematically in Figure 1. The rationale and evidence for the differential postulated paths of influence are presented in the sections that follow.

The first link in the conceptual model concerns the impact of socioeconomic status on familial beliefs systems. In social cognitive theory (Bandura, 1986, 1995), socioeconomic factors affect children's developmental courses principally through their impact on familial, peer, and self processes. Several lines of research lend support to this view. Elder (1985) has shown that economic hardship exerts its impact on children's developmental trajectories through familial processes rather than by undermining parents' sense of efficacy to cultivate their children's competencies and to safeguard them from environmental risks that can jeopardize successful development. Baldwin and his colleagues report that, when variations in parents' child management practices are controlled, socioeconomic status has no independent effects on child outcomes (Baldwin, Baldwin, Sameoff, & Seifer, 1985). In the conceptual model being tested, increases in socioeconomic status raise parents' academic aspirations for their children and parents' sense of efficacy that they can promote their children's academic development.

The second pattern of influences in the conceptual model specifies the impact of parental beliefs on their children's appraisal of their own academic capabilities and their educational vision. Parental aspirations and perceived efficacy build children's sense of efficacy and academic aspirations. There is a small but growing body of evidence that

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FIG. 1.—Proposed causal structure of the paths of influence through which parental and children's efficacy beliefs and academic aspirations affect academic achievement.
parents who believe that they can exercise some influence over their children's development are more proactive and successful in controlling their children's competencies than parents who doubt they can do much to affect their children's developmental course (Elder, 1965; Gross, Rigg, & Tucker, 1985; Schneuwly, 1985; Zitt & Geffen, 1989).

The evidence that parental self-regulatory efficacy has been verified across diverse socioeconomic statuses and family structures, under conditions of economic adversity that severely tax parental resilience, and in different cultural milieux.

Efficacy beliefs vary across domains of functioning, with parents having higher self-perceived competence in intellectual and interpersonal self-management skills than in professional and social skills. However, parents believe that they play a significant role in their children's intellectual development, as they recognize the importance of educational involvement in academic pursuits. It was predicted that parental academic efficacy would enhance children's sense of academic efficacy, and that parents' high academic perceptions would contribute to their children's self-regulatory efficacy and educational commitment.

So far, the presentation of the conceptual model has centered on parental influences mediated through their impact on children's sense of efficacy and aspirations. Parents who perceive high academic support, especially on the cognitive and social domains of functioning, have higher self-confidence and self-beliefs in their children's academic efficacy. In the present study, it is postulated that parental self-efficacy mediates through its effects on the children's sense of efficacy, which in turn affects their academic achievement. In this way, parental self-efficacy provides a framework for understanding the complex relationship between parental perceptions and children's academic performance.

The text phase in the proposed conceptual model specifies how children's aspirations and perceived academic efficacy affect their academic achievement and success in educational settings. It is postulated that the level of parental participation they encourage in their children's scholastic activities (Hawkins & Rose, 1995) and their intellectual efficacy in the educational process. Parents will have little effect on their children's schooling through influence on their teachers if they have low self-efficacy. The impact of parental self-efficacy on the school system by conveying high evaluation of education for their children than to try to alter teachers' instructional practices. Hence, it was hypothesized that parental academic efficacy would influence academic achievement, independently of its impact on their children, through its effects on parental academic aspirations.

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The final pattern of influences in the conceptual model concerns the emotional effects of perceived ineffectiveness. A low sense of efficacy to exercise control over one's stressors and control over one's resources leads to feelings of helplessness and depression. It does so in several different ways. One route to depression is through unfulfilled aspiration. People who impose on themselves high standards of self-worth because they cannot attain drive themselves to bouts of depression (Bandura, 1981a; Kanfer & Zeiss, 1983). A second efficacy route to depression is through a low sense of social efficacy. People who judge themselves as not being socially effective can work out and cultivate social relationships. Supportive relationships provide models on how to manage difficult situations and cushion the adverse effects of stress. Perceived social efficacy for developing supportive and affiliative relationships increases vulnerability to depression through social isolation (Holahan & Holahan, 1984; 1987b). Much human depression is cognitively generated by reflecting upon traumatic thought (Nolen-Hoeksema, 1991). A low sense of efficacy to exercise control over traumatic thought can lead to the occurrence, duration, and recurrence of depressive episodes (Kazak, 1989). Through these different processes, perceived academic and social ineffectiveness give rise to bouts of depression. Depression undermines academic performance (Nolen-Hoeksema, Gignac, & Seligman, 1989).

This project extends the line of research on academic development in several important directions. It is conducted within the direct and mediated paths of influence of sociostructural, familial, peer, and personal criteria of determinants. Many of the factors are assessed by different methods with different sources, thereby reducing common method and source biases. Although some of the segments of the proposed model have been tested in prior research, the inclusion of an expanded set of variables and the opportunity to provide new knowledge on the etiology of academic achievement is a new direction. Parental and children's efficacy beliefs are emerging as influential determinants of academic development (Tobias, 1986; Tobin & Tobin, 1988; Thomas, 1980). The present study evaluates their contribution to academic development more fully within a broad network of influences. As will be shown later, perceived academic efficacy is a better indicator of academic achievement than the traditional measures of self-concept of ability that are widely used in this field of research. The research addresses self-efficacy constructs that increase explanatory and predictive power and hold promise of advancing understanding of cognitive development.

Method

Subjects.—The participants in this study were 279 children ranging in age from 11 to 14 years, with a mean age of 12 years. There were 155 males and 124 females.

The students were drawn from the sixth and seventh grades in two middle schools in a residential community located near Boston. The students were not lateral or special education students as well as their mothers and teachers participated in the study. The study was conducted as a project conducted through the University of Rome to gain better understanding of how children develop. The mothers not only consented to the study, but 68% of them participated in the project themselves. This community represents a microcosm of the educational society, consisting of families of skilled workers, farmers, professionals, and local merchants and their service staffs. Socioeconomic status of the family was assessed by father's occupation. Eleven percent were in professional or managerial ranks, 24% were merchants or operators of other businesses, 33% were skilled workers, 24% were unskilled workers, and 1% were retired. Fifty-five percent of the mothers were homemakers, 25% were employed in unskilled work, 25% in skilled work, and 11% were in executive and managerial positions. The socioeconomic heterogeneity of the sample adds to the generalizability of the findings.

Children were administered the sets of scales measuring the variables of theoretical interest in their classrooms by two female experimenters. The various measures were administered over a period of several days. In addition, data for the variables of interest were collected from the children's parents, teachers, and peers. The scales were administered individually to the teachers and parents.

Children's perceived self-efficacy.—Children's self-efficacy in their classroom was measured by 37 items representing seven domains of functioning that form the three basic factors described earlier. For each of these items, using a 5-point response format, their beliefs in their level of capability to execute the designated activities. These particular domains are part of a larger set of multidimensional self-efficacy scales (Bandura, 1990).

Perceived efficacy for academic achievement measured the children's belief in their capabilities to master different areas of coursework. These included mathematics, science, biology, reading and writing languages, computer skills, and social studies. A second set of scales measured perceived efficacy for self-regulated learning (Zimmerman et al., 1992). Specifically, these scales measure perceived efficacy to structure environments conducive to learning, to plan and organize their academic activities, to use cognitive strategies to enhance understanding and performance, to seek help when necessary, to obtain information and to get teachers and peers to help when needed, to motivate themselves to do their schoolwork, to get themselves to complete scholastic assignments, and to pursue academic activities when there are other interesting things to do. The item, "How well can you get teachers to help you when you get stuck on schoolwork?" measured perceived efficacy for self-regulated learning. The item, "How well can you study when there are other interesting things to do?" measured children's perceived efficacy to regulate their motivation for academic pursuits.

A third set of scales assessed efficacy for leisure and extracurricular activities involving mainly group activities. A fourth set of scales assessed children's self-regulatory efficacy to resist peer pressure to engage in high-risk activities involving alcohol, drugs, unprotected sex, and aggressive behavior that teachers would consider dangerous. For example, the following item assessed perceived self-regulatory efficacy to resist peer pressure to use drugs: "How well can you resist peer pressure to drink beer, wine, or liquor?"

Perceived social self-efficacy measured children's beliefs in their capabilities to form and maintain social relationships that allow them to manage different types of interpersonal conflicts. Self-assertive efficacy measured children's perceived capabilities to voice their opinions, to stand up to mistreatment or inequity, to seek information and to make requests. "How well can you express your opinions when other classmates disagree with you?" is one of the items assessing perceived self-assertive efficacy. Perceived self-efficacy to meet others' expectations assessed children's beliefs in their capabilities to fulfill what their parents, teachers, and peers expect of them and to live up to what they expect of themselves. "How well can you live up to what your parents expect of you this year in school?" is one of the items assessing perceived self-efficacy to meet others' expectations.

A principal components factor analysis with varimax orthogonal rotation revealed a three-factor structure. The first factor, perceived academic self-efficacy, included high loading on items measuring perceived capability to manage one's own learning, to master academic subjects, and to fulfill personal, parental, and teachers' academic expectations. The predictive validity of this aspect of children's beliefs in their efficacy is supported by the work of Bandura and others (Bandura & Bandura, 1994; Zimmerman et al., 1992). Perceived social self-efficacy constituted the second factor. The items loading on this factor included perceived capability to resist peer pressure to engage in high-risk activities and for leisure-time activities. The third factor, perceived self-regulatory efficacy, was represented by items measuring perceived capability to resist peer pressure to engage in high-risk activities and to resist peer pressure to use drugs. The factor identified as self-efficacy was constituted 15.7%, 8.3%, and 7.1% of the variance, respectively.

The reliability of these three factors was assessed by the squared multiple correlations of factor scores. Coefficients of .70 or better indicated high reliability levels (Pedhazur & Schmelkin, 1989). The estimated reliabilities were .87 for academic self-efficacy, .75 for social self-efficacy, and .80 for self-regulatory efficacy.

Social and emotional behavior.—Data on children's social and emotional behavior were obtained through the use of different methods of assessment, two methods of assessment included the children themselves, their parents, teachers, and their peers. The method of measurement included personality questionnaires and peer sociometric rating.

Children rated their prosocial behavior on a 10-item scale developed by Bandura and his colleagues. It assessed degree of helpfulness, sharing, kindness, and cooperativeness. "I try to help others" is a sample item. To avoid a possible response bias, the instrument was given to parents as well as to the scale. The factor structure and concurrent validity of this measure have been corroborated in studies relating children's self-ratings to level of prosociality rated by parents, teachers, and peers (On
Moral disengagement.—Each of the eight mechanisms of moral disengagement was measured by four subsets of items (Bandura et al., 1996) that tapped the children's readiness to resort to moral justification, empathic labeling, advantageous comparison, displacement, and diffusion of responsibility, distraction of consequences, and denial of the self's responsibility with regard to different forms of transgressive conduct. To cite an example, "If people are careless where they leave things, it's their own fault if they get stepped on one of the items means they bear some of the blame to the victims. The item, "If they are not blamed meeting their friends pressure on them to do it", measures displacement of responsibility. The items encompass diverse forms of transgression that occur under a variety of contextual conditions and in different types of social relationships. The deviant activities involved physically injurious and destructive conduct, verbal abuse, deceptions, and thefts. The social contexts encompassed educational, familial, communal, and peer relations. For each of the 32 items, children rated on a 5-point scale their degree of acceptance of their parents for such conduct. Factor analysis of the items revealed a one-factor structure with all the items loading on the principal factor. Responses to the items were, therefore, considered a composite measure of moral disengagement. The alpha reliability coefficient for this measure was .83.

Problem behavior.—Problem behavior was measured by 85 items from the Child Behavior Checklist developed by Achenbach and Edelbrock (1977). Both the reliability (Almond, 1987) and the construct validity (Achenbach, 1987) of the measure of problem behavior were well established (Achenbach, Maccabee, & Howell, 1987). The subscale concerned with social unpopularity was deleted to eliminate any overlap with the sociometric measure of popularity and rejection in peer preferences. The items dealt with a wide range of problem behaviors, including hyperactivity, aggressiveness, motivation, transgression and disorganization, social anxiety, social complaints, and obsessionalism. A total of 15 teachers rated the children in their particular classroom, whether they exhibit those various problem behaviors and, if they do, whether they exhibit them in the variable or often. The reliability coefficient for the total score was .85.

Parental academic efficacy.—Parents' beliefs in their parenting efficacy were measured by an eight-item subscale selected from the multidimensional scales of perceived parenting efficacy (Bandura, 1996). The items encompassed a diverse set of activities parents have to manage to promote their children's academic development. Mothers' reported their sense of efficacy on 5-point scales ranging in terms of the amount of influence they believed they could exercise. The items measured parents' judgments of their personal efficacy to promote their children's interest and, valuation of, education, to motivate them for academic success, to get along with their schoolwork, and to help them to stay out of trouble at school. The following example item measured parents' perceived capability to influence their children's schoolwork: "How much can you do to help your child to work hard at their schoolwork?" Parents with more than one child in the sample rated their efficacy and perceived efficacy separately for each child. Factor analysis of the items yielded a single factor that accounted for 46% of the variance. The alpha reliability coefficient was .81.

Parental and children's academic aspirations.—Academic aspirations and values of academic pursuits were measured by a set of seven items. Children rated on 5-point scales their degree of importance placed on academic attainments by themselves, by their partners, and their friends, and the level of academic performance expectations their parents had for them and they had for themselves. In addition, children rated the educational level they expected to complete and the educational aspirations their parents had for them. The educational levels ranged from completing middle school, high school, or college, to attending college or work, to graduation from college. These items were combined into an index of academic value and aspiration. The mothers completed the four relevant items measuring the children's importance, values, and educational aspirations they had for their children. The alpha coefficients were .73 and .77 for the child and parental ratings, respectively.

Academic achievement.—The children were graded by their teachers for their level of achievement in the academic subjects they subject matters all at mid-year and at the end of the academic term. The assessment comprised five gradations of academic attainment. The two sets of academic grades were combined to provide a composite measure of academic achievement. The various psychosocial factors were measured prior to the assessments of academic achievement.

Results

Table 1 presents the means and variances for each of the seven variables. It also includes zero-order correlations among the various psychosocial factors and academic achievement. There were few correlates with sex or with age, which spanned a narrow range. Children get more depressed with age (r = .16). Wave 2 scores were more prosocial (r = .24). Less prone to moral disengagement (r = .20), and have higher academic aspirations do boys (r = .17).

Network of relationships.—The network of relationships is described briefly and then analyzed for how the various psychological and cognitive factors operate in concert in the perceived causal structure. Socioeconomic level is accompanied by a high sense of academic efficacy and educational aspiration in parents, and perceived academic aspirations, regulation of moral disengagement, low problem behavior, and academic achievement in children. Self-efficacious parents hold high academic aspirations for their children. Children's perceived academic efficacy and educational aspirations are both consistently related to their children's perceived academic efficacy and aspiration, social orientation, low depression, and problem behavior, high academic aspirations, and high scholastic achievement. In addition, academic aspirations are related to children's efficacy to withstand peer pressure for transgressive conduct and adherence to moral self-standards.

Children's beliefs in their academic efficacy and aspirations are similarly accompanied by higher academic aspirations, low despondency, regulation of moral disengagement, a low level of emotional and behavioral problems, and high scholastic achievement. Children's perceived efficacy to regulate their conduct for instrumental conduct is also related to the perceived social factors and scholastic achievement, although at a somewhat lower level. Children's social efficacy is primarily linked to their social functioning, emotional well-being. Those who are prone to moral disengagement are more socially discordant, dependent, heavily involved in troublesome behavior, and less academically successful.
Paths of influence.—The conceptual model was tested on the covariance matrix using the EQS program (Bentler, 1989). Academic achievement was the outcome variable in the model. The results of the structural equation modeling are presented in Figure 2. It includes the path coefficients that are significant beyond the .05 level. The goodness of fit of the model to the data was corroborated by all of the fit indices considered. These tests yielded a confirmatory chi-square of $\chi^2(266) = 61.19$, a Normed Fit Index (NFI) of .95, a Non-Normed Fit Index (NNFI) of .97, and a Comparative Fit Index (CFI) of .98.

The impact of the socioeconomic status of the families on children's academic achievement is entirely mediated through parental academic aspirations and children's prosocial behavior. The higher the families' socioeconomic status the higher the academic and occupational aspirations they have for their children and the greater is their children's prosocialness. The influence of parents' sense of academic efficacy on scholastic achievement is mediated through its impact on children's beliefs in their capability to manage their own learning and master coursework. Parents who believe they can enhance their children's educability also hold higher educational aspirations for them. Parental aspirations contribute to children's scholastic achievement both directly and by raising their academic self-efficacy and aspirations, bolstering their self-regulatory efficacy to ward off peer pressure for detrimental pursuits, and lessening their involvement in problem behaviors that can detract from academic activities.

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Children's belief in their academic efficacy is linked to scholastic achievement both directly and through its impact on academic aspirations, prosocial conduct, and lowering proneness to despondency. Perceived self-regulatory efficacy contributes to academic achievement both independently and through adherence to moral self-sanctions and a low level of problem behaviors. Children's belief in their social efficacy had no direct impact on academic achievement, but instead exerted its effect by promoting academic aspirations and reducing vulnerability to depression.

A prosocial orientation played an influential role in academic achievement, both directly and by fostering peer liking and curbing depression, moral disengagement, and problem behavior, each of which, in turn, accounted for variance in academic achievement. Prosocialness also mediated the influence of academic aspiration on scholastic achievement. Peer liking additionally contributed to scholastic achievement independently and by curbing troublesome behavior that can subvert academic pursuits and lowering vulnerability to depression.

An unexpected positive link was found between peer preferences and facility in moral disengagement. Previous research revealed no consistent relation between moral disengagement and peer popularity (Bandura et al., in press). The direction of the relation between peer popularity and moral disengagement will vary, of course, depending on the types of peers with whom one associates. One can be rejected by prosocial peers and gravitate toward, and gain acceptance from, those who promote unethical behavior.
The predicted link between passiveness to moral disengagement and problem behavior was not verified. In everyday life, academic functioning is likely to be affected by the different types of academic behaviors operating in concert for any given individual. For this reason, the full set of problem behaviors was used in the analysis. They included such things as inattentiveness, anxiety, withdrawal, somatic complaints, and obsessional behavior as well as conduct disorders. It is the injurious forms of problem behavior rather than the internalized ones that moral disengagement would support. Support for this phenomenon is provided by analyses performed with each of these main classes of problem behaviors separately. The analyses yielded a significant path from moral disengagement to aggression (36) and to externalized problems (39), but no significant path to internalized problems (-0.9).

In sum, the conceptual model provides a good fit to the empirical data. The full set of sociocognitive factors accounts for a sizable share of the variance (56%) in academic functioning. The analysis further reveals that the alternative model, in which low social skills, peer rejection, and depression are the products of the various types of problem behaviors, does not provide an acceptable fit to the data, which yields a highly significant chi-square, $\chi^2(25, 268) = 76.22$, $p < .001$, and the following values on the other fit indices: NFI = .96, CFI = .95, and NNFI = .93. Thus, the original model offers a better fit to the data than the alternate one. In addition, a series of comparative tests was conducted for goodness of fit with each of the key postulated paths deleted. In every instance, deleting a key path produced a less adequate fit to the empirical data, as indicated by statistically significant chi-square values. The significance of the differences between the chi-square values for the alternate model, in which a deleted path was also tested. The worsening of the model is significant in each comparative test.

Discussion

The findings of the present research verify the diverse paths of influence through which efficacy beliefs and aspirations contribute to children's academic achievement. Most of the links in the postulated causal model were empirically corroborated. The model not only fits the empirical data well, but provides a better fit than a plausible alternative model in which one of the key paths is deleted. Parents' beliefs in their efficacy to promote their children's intellectual development and the academic efforts they hold for themselves were both influential factors in the academic process. These findings adding to a growing body of evidence that parents' own academic efforts rest partly on their beliefs that they can produce desired effects through their actions. Parents who have a high sense of parenting efficacy select and construct situations that promote their children's development and serve as strong advocates on their behalf in transactions with educational and other social systems (Elder & Ardel, 1992). Elder, Eccles, Ardel, & Todd, 1989). In contrast, parents who are less sure about their parenting capabilities are reluctant to behave proactively, quickly abortive efforts when they encounter difficulties, and make up negative reasons to help manage problems with their children (Gross et al., 1989). Even among mothers suffering from depression, those who have a high belief in their child's ability will be more likely to be more resourceful in promoting their children's development (Tate & Gelfand, 1991).

The contribution of parental academic efficacy on scholastic achievement was mediated entirely through its impact on their academic aspirations and children's beliefs that they can regulate their learning activities and master coursework. Parental academic aspirations were linked to scholastic achievement in diverse ways. Parents who convey positive educational aspirations and the belief that children's academic attainment both directly and by enhancing their cognitive and self-regulatory efficacy to guide their children's learning as another key factor in the exercise of successful parental involvement in the educational process. Moreover, parental perceived academic efficacy determinates, in large part, the academic aspirations they hold for their children. By providing guidance through standards and supportive efficacious actions, parents who believe in their children's academic abilities can increase the likelihood of their children's academic success. Children who believe they can exercise some control over their own learning and mastery of coursework are more likely to succeed in their academic pursuits. Considerable research over the past several years has shown that academic efficacy is a key component of academic success. It is by heightening motivation and fostering good academic performance (Bandura, 1983; Schunk, 1989; Zimmerman, 1989). The present findings reveal that such beliefs enable children to develop effective academic strategies that enhance their academic performance.

Parents with a high sense of efficacy affected scholastic achievement apart from their impact on their children through the academic aspirations they hold for them. As specified in the hypothesized model, no direct effect of parents' efficacy on the children's academic activities on their academic achievement was found. As explained earlier, most parents are highly reluctant to encourage or praise the school's educational practices. However, we know from the research of Hooper-Dempsey and her associates that parents with a high sense of academic efficacy participate actively in classroom school activities (Hooper-Dempsey et al., 1987, 1992). Predictive relations depend on the types of parental efficacy beliefs that are measured. Thus, new beliefs about the efficacy beliefs that they can influence vary across different realms of functioning (Bandura, in press). The more relevant the assessed efficacy beliefs are to the activities on higher is their explanatory and predictive power (Hooper-Dempsey et al., 1987). The present findings suggest that parental academic efficacy can influence what teachers expect of their children, how much time they devote to them, and how much they help them academically is, therefore, more likely to yield a direct path of influence on parental efficacy to increase their children's interest and involvement in scholastic activities.

The present research not only corroborates the influential role of parental aspirations and academic efficacies in their educational development (Kao & Tienda, 1989; Zimmerman et al., 1993), but also identifies the diverse multi-level paths through which parental aspirations exert their effects. In addition, the present findings also document parental perceived academic efficacy to guide their children's learning as another key factor in the exercise of successful parental involvement in the educational process. Moreover, parental perceived academic efficacy determinates, in large part, the academic aspirations they hold for their children. By providing guidance through standards and supportive efficacious actions, parents who believe in their children's academic abilities can increase the likelihood of their children's academic success. Children who believe they can exercise some control over their own learning and mastery of coursework are more likely to succeed in their academic pursuits. Considerable research over the past several years has shown that academic efficacy is a key component of academic success. It is by heightening motivation and fostering good academic performance (Bandura, 1983; Schunk, 1989; Zimmerman, 1989). The present findings reveal that such beliefs enable children to develop effective academic strategies that enhance their academic performance.

Belief in one's capability to achieve goals over time affects one's life through its role in protective factors against feelings of futility and despondency. However, all the research linking perceived self-efficacy to vulnerability to depression has been conducted with adults (Kavanagh, 1989). Maddux...
The results of this study similarly show that children's beliefs that they can achieve academic success and the social efficacy they acquire from achieving success are highly correlated. The evidence indicates that some are and some are not. The absence of a significant path between perceived efficacy and peer preference also warrants some comment, especially given that a sense of social efficacy is known to promote social interactions. Peer preference, of course, measures whether one is a high or low preference student, but not how much one interacts with them. Peers do not form a homogeneous entity. They include social groupings that differ in their interests, values, standards of conduct, and the competencies they possess. To be with important others, requiring information about the values of the prevailing peer culture and the particular peers with whom given children identify. Popularity with peers may bring rejection from academically oriented peers. Thus, social efficacy may promote positive regard within one's reference group but low regard from peers who do not share the same values. This type of liking suggests the need to consider the structure of peer relations and the patterns of selective association in the analyses of peer preferences.

A prosocial orientation reduces vulnerability to depression, but peer acceptance is not the only route to gaining social efficacy. This is illustrated by Bandura et al. (in press). The findings of Ellett and Goodnow (1995) further demonstrate the generality of the mechanism. Prosocial behavior may enhance social efficacy by indicating to others that one possesses a significant level of peer acceptance.

The finding that familial processes mediate the effect of academic status on children's academic development in a school context with studies of other developmental outcomes (Baldwin et al., 1989; Ellett, 1995). However, parental "sense of efficacy" that they can have some influence over their children's educational success may be independent of their socioeconomic status. Parents had a higher sense of efficacy to promote their children's education by making their children attend academics. This is the case even for children from economically impoverished backgrounds who went on to college and professional careers if they were unique to do so (Ellis & Lane, 1993; Kroes, 1994). In these families, the parents' educational level was not necessarily a concern. The academic skills thus instilled were further developed by teachers. These evolving preferences led to selective association with college-oriented peers who, by their interest and social status, contribute to achievement standards, and cognitive skills conducive to intellectual pursuits.

There are several features of the present study that add to the reliability of the obtained relationships. For different classes of variables were obtained by different methods and from different sources, thus reducing common biases that can contaminate relationships. The self-efficacy and psychological predictors were measured prior to academic achievement. Moreover, a number of the key postulated paths of influence have been proposed and supported by other studies and systematic experimental variations of efficacy beliefs (Bandura, 1992, in press). These features remove some of the ambiguity concerning the nature and direction of causality and the validity of results. Given that the present is quite new, the impact of efficacy beliefs on educational performance and academic achievement and their reciprocal interplay will be further tested longitudinally in a multiple panel design.

The findings of this research have a number of educational applications. They document the importance of the educational views parents hold about their children's educational success. The parents' sense of efficacy can they can help their children realize those aspirations. Moreover, the study contributes new knowledge about the psychosocial paths through which these influences flow. Many of the models are restructured to show interrelations and the particular nature of efficacy that they can help their children realize those aspirations. Finally, the study contributes new knowledge about the psychosocial paths through which these influences flow. Many of the models are restructured to show interrelations and the particular nature of efficacy that they can help their children realize those aspirations.
References


Social Class Effects on Northeastern Brazilian Children’s Conceptions of Areas of Personal Choice and Social Regulation

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Nucci, Larry; Camino, Cleanice; and Sapiro, Cláry Milinsky. Social Class Effects on Northeastern Brazilian Children’s Conceptions of Areas of Personal Choice and Social Regulation. Child Development, 1990, 61:1231–1242. In this study, researchers examined the ways in which children from different socioeconomic backgrounds conceptualize their personal choices and social regulations. They found that children from lower socioeconomic backgrounds were more likely to view situations as uncontrollable and to rely on external factors for their actions. This leads to a more passive approach to decision-making and a reduced sense of control over their lives.

Devon Developmental psychologists of diverse perspectives have long held that the establishment of an autonomy is essential for processes of individuation and the child’s construction of a self and social identity. Moreover, it has been argued that children’s conceptions of personal autonomy and social regulation are crucial for the development of social competence, self-esteem, and mental health. This study provides empirical evidence for these claims, suggesting that children from lower socioeconomic backgrounds may have more difficulty developing a sense of autonomy and self-regulation, which can have long-term implications for their social and emotional well-being.