

What Will Teachers Do to Involve Parents in Education?: Using a Theory of Reasoned Action

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Parents' involvement in their children's education is associated with a variety of benefits, including higher achievement, yet teachers are not uniformly supportive and encouraging. Teacher attitudes and beliefs about parental involvement are a predictive factor which schools, and preservice programs, could influence, yet little is known about how to influence those attitudes and beliefs. This study used the proximal variables of a theory of reasoned action to investigate both the intentions of teachers to perform eight parental involvement behaviors, and how those intentions were formed. Data were collected by questionnaire and analyzed primarily by multiple regression. The expected differences were found between elementary and secondary teachers. Teachers' intentions varied widely, depending on the behavior, and the theory's predictors accounted for large percentages of the variance in intention, suggesting the theory's utility for research in this domain. The objective of this study is to contribute to research on parental involvement in education by empirically determining the strength of teachers' motivations to promote parental participation in eight specific ways, and by using a well-tested theory of decision making to determine how those decisions were made, and therefore, how they can most effectively be influenced in the desired direction.

Problem

Parents' involvement in their children's education has been found to improve students' attendance (Epstein & Sheldon, 2002), and behavior in school (Sheldon & Epstein, 2002) as well as their completion of homework (Keith, Keith, Troutman, Bickley, Trivette, & Singh, 1993). There is general agreement that parents' involvement enhances academic achievement (Sheldon & Epstein, 2005; Thorkildson & Stein,

1998; Walberg, 1984; Zellman & Waterman, 1998). Students whose parents are involved in their education perform better in school regardless of parental education, or family structure (Bogenschneider, 1997), or income level (Shaver & Walls, 1998).

Unfortunately, despite these widely-known benefits, parental involvement is neither uniformly high, nor consistent across the grade levels: Epstein (1995, 2007) noted that parental involvement tends to decrease as children mature. Parent's socio-economic status also appears predictive: Marcon (1998) found that parents' income is moderately predictive of involvement. In studies of family characteristics, involvement tended to correlate highly with parents' own educational level, and researchers often concluded that less-educated parents could not, or would not, become involved in their children's education (Epstein, 1990). Of the factors within the control of schools, what are the most important barriers to effective parental involvement?

Epstein (1990) noted that during the 1980s, there were two main lines of research on parental involvement. The first line developed a number of models, often focused on family characteristics (primarily demographic) and behavior, to predict and explain parental involvement. The second line of research focused on the efficacy of school practices to change family behaviors and environments, so as to increase student achievement.

She and her colleagues combined these perspectives and included both teacher and family variables in studying parental involvement. A study by Dauber and Epstein (1993) found that teacher perceptions and practices more strongly influenced levels of parental involvement than did (a) child's grade level, (b) parental education, (c) family size, (d) parental work outside the home, and (e) parental rating of child's academic ability. Most studies of parent involvement, however, continued to emphasize family characteristics and behavior.

Dauber and Epstein's (1993) findings about the potency of school efforts to involve parents, suggested that future studies might profitably investigate teachers' and principals' decisions about promoting involvement. Gavidia-Payne and Stoneman (1997) noted that "researchers are consistently faced with the challenge to find theoretical referents to guide their work" (p. 714). Application of the theory described below can help schools increase parental involvement, whether efforts are focused on understanding and changing the behavioral decisions of parents, principals, or teachers. We began by investigating the behavioral decisions of teachers.

Dauber and Epstein's (1993) findings suggest that teachers' beliefs and attitudes can sometimes be a barrier to increased parental involvement. For example, they found that teachers in Chapter I schools believed parents did not want to be involved in their children's education, although those parents disagreed, and reported that they needed more help from teachers on how to help their children at home. Another study (Jones, White, Aeby, & Benson, 1997) found that teachers' attitudes toward family involvement were highly favorable, but that attitudes of African-American teachers were more favorable than European-American teachers. They also found that teachers of low ability students had less favorable views of family strengths than teachers of

high ability students. Grolnick, Benjet, Kurowski, and Apostoleris (1997) found the effects of the predictor variables depended on the *type* of involvement of concern.

These differences among teachers by ethnicity, differing perceptions of student ability, and type of parental involvement suggest that useful descriptions of teacher attitudes and beliefs about parental involvement will be highly variable, and perhaps even site-specific. Certainly the beliefs that underlie (a) attitude toward the behavior, and (b) perceived social pressure to perform the behavior, will differ according to site-specific circumstances, and teachers' own experience. These factors alone suggest the need for site-specific research, at least until research has reached the point that useful data-based generalizations can be made. Pryor (2000) reviewed research approaches in parental involvement and concluded that a parsimonious theory could make a significant contribution to this area of study. The theory of reasoned action, discussed below, offers a well-tested approach to investigations of beliefs, attitudes, and behavioral intentions, and can be easily applied by districts and preservice programs across the country.

A Theory of Reasoned Action

A theory of reasoned action was developed by Fishbein (1963, 1967) and Fishbein and Ajzen (1975) and can provide an understanding of how people make decisions in any volitional behavioral domain. Validation tests have shown the theory's utility for understanding and changing beliefs and attitudes (Lutz, 1973), and beliefs, attitudes, intentions, and actual behavior (McArdle, 1972). This theory has been used to study such diverse behaviors as: participating in leisure activities (Ajzen & Fishbein, 1969), smoking cigarettes (Fishbein, 1982), voting in an election (Shepard, 1987), and using public transportation (Bamberg & Schmidt, 2001, 2003).

The theory is not generally taught in educational research courses, however, and only in the last two decades has it begun to be applied to studies of educational decision making (Ballone & Czerniak, 2001; Kim, 2003; Pryor, 1990; Thornburg & Pryor, 1998). A "step-by-step" guide for use of the theory by school leaders was published recently (B. W. Pryor & C. R. Pryor, 2005).

The theory includes four primary variables: belief, attitude toward the behavior, subjective norm, and intention. A *belief* is a thought that links a behavior (e.g., "providing information on discussing homework") with a behavioral outcome (e.g., "increased student motivation"). *Attitude toward the behavior* is positive, negative, or neutral affect toward a behavior. *Subjective norm* is a perception that persons or groups important to one, want one to perform – or not perform – a behavior. (This norm is subjective, as the behavioral expectations are usually inferred.) *Intention* is a decision to perform – or not perform – a behavior.

Behavioral intention is formed by an *attitude toward the behavior* and a *subjective norm*. Attitude is often more important than subjective norm, but the relative influence

of these variables will differ across populations and behaviors. Attitude toward a behavior is formed by a set of beliefs about likely outcomes of performing the behavior, and a corresponding evaluation of each outcome. Subjective norm is formed by a set of normative beliefs that certain individuals (e.g., “my principal”) or groups (e.g., “my students’ parents”) would favor the person’s performing – or not performing – the behavior, and a corresponding motivation to comply with each referent.

A third predictor of intention, *perceived behavioral control*, was added by Ajzen (1985, 1987) to allow study of behaviors that were under less than total volitional control. This variable provides a measure of the participant’s perception of the degree of volitionality of the behavior.

An understanding of the exact contribution, whether positive or negative, each outcome belief (and its evaluation) makes to attitude provides invaluable information for influencing attitude. An understanding of the exact contribution, whether positive or negative, each normative belief (and its corresponding motivation to comply) makes to subjective norm, provides invaluable information for influencing norm. An understanding of the relative weights of attitude and norm (and possibly perceived behavioral control) in forming behavioral intention, suggests which predictor should be the focus of efforts to influence intention, and therefore, behavior.

Beliefs can be accurate, or not. Accurate beliefs that are a negative influence suggest policy, reward system, or other administrative changes that might be considered. Inaccurate beliefs can be targeted for refutation by accurate information.

Although the entire theory developed by Fishbein and Ajzen (1975) is uniquely valuable, the present authors believe the theory is useful even when its total application is not feasible. For example, they have developed a number of ideas about how K-12 teachers might use the theory in their classrooms to understand student preferences (B. W. Pryor & C. R. Pryor, 2004). The theory has also been used as a guide for evaluation (Pryor, 1999; Pryor, Crawford, Rice, & Pryor, 2006), and curricular research (C. R. Pryor & B. W. Pryor, 2005).

Method

Participants were a purposive sample of forty K-12 teachers from several districts in a large metropolitan area in the Southwest. The teachers ranged in total experience from 1 to 40 years, with a mean of 9.37. Twelve were secondary, 28 were elementary, teachers. One held the MBA, the remainder held only bachelors’ degrees. They ranged from 1 to 40 in years of experience at their current grade level.

Application of the entire theory to study a single behavior often requires an 80-item instrument. To avoid subject fatigue, only the most proximal variables of the theory were employed in this study of eight behaviors. Once the behavior of central interest in a district, school, or preservice program has been identified, the entire theory can be applied to decisions about that behavior.

Data Collection

Data were collected toward the beginning of the school year by two questionnaires. The first instrument elicited teachers' ideas about useful behaviors they could perform to involve parents in their children's education. These behaviors were content analyzed and used to develop a second instrument. Seven behaviors resulted, to which an eighth, drawn from the literature, was added: *recruit parents to volunteer in my class*.

This second instrument asked teachers to rate their beliefs, attitudes, and behavioral intentions on a variety of single-item, seven-point, bipolar scales. Similar scales have previously demonstrated reliability and validity (Pryor, 1987, 1999). On each scale, the number four was subtracted from the obtained value, transforming scales from 7 to 1 (though a neutral midpoint of four), to +3 to -3 (through a midpoint of zero).

Scales were organized into ten areas. The first area was labeled *Generally*, and consisted of three items that allowed teachers to respond positively, should they perceive that supporting parental involvement was socially desirable. The next seven areas concerned specific behaviors that teachers could perform ("in the coming semester") to encourage parental involvement. Some of these behaviors (e.g., provide vacation learning activities for students) could be seen as requiring more of parents' time and attention than others (e.g., provide information on homework). The seven elicited from teachers were: (a) provide information on skills needed by students; (b) provide information on homework; (c) provide information on improving student skills on assessments; (d) provide homework that requires student-family discussion of learning in class; (e) provide home-activity calendars for parents and students; (f) provide family math, science, reading, and reading activities; (g) provide vacation learning activities for students.

For each of these seven behaviors, teachers were asked to rate six scales: (a) intention to perform the behavior, (b) attitude toward performing the behavior, (c) subjective norm regarding the behavior, (d) perceived behavioral control, (e) a normative belief concerning students' expectations, and (f) a normative belief concerning parents' expectations concerning the behavior.

The ninth area of the instrument concerned an eighth behavior teachers might perform, *recruit parents to volunteer in my class*, and provided the same six scales as for the previous seven behaviors. The tenth and final area concerned teachers' behavior during the *current* semester. The very last scale, before demographics, was a probability item measuring the respondent's *current* level of activity in involving parents. This measure of their current behavior provided a baseline against which to compare their intentions for the future. An open-ended response item asked teachers to state either (a) *how* they actively involved parents, or (b) *why* they did not attempt to involve parents. There were four responses to these open-ended response items. Nine demographic items completed the instrument.

Scale data were analyzed by multiple regression. To test the utility of Ajzen's (1985) perceived behavioral control as a third predictor of intention in this domain, multiple regressions were run both with, and without, that third variable as a predictor.

The scales were seven-point probability and evaluative items with bipolar endpoints (e.g., *strongly disagree* and *strongly agree*), and a neutral midpoint (e.g., *neither disagree or agree*) but were scored from 1 to 7, with a midpoint of 4. Before data analysis, 4 was subtracted from each scale score, transforming the scores into bipolar scores ranging from -3 to +3 through a neutral midpoint of zero. This results, for example, with a probability score of +3 representing *strongly agree*, a score of +1 representing *slightly agree*, and a score of -2 representing *mostly disagree*.

Results and Discussion

The suggestion that prediction of parental involvement depended on the *type* of involvement (Grolnick et al., 1997) was supported in these results on teacher decisions. On the eight possible teacher behaviors, mean intentions to perform the behavior ranged from a high of 2.56 ($SD = 0.82$) for *provide information on homework*, to a low of -0.78 ($SD = 2.11$) for *provide vacation learning activities for students*, as reported in Table 1. As would be expected, teachers reported their *current* level of activity in involving parents as more moderate, a mean of 1.03 ($SD = 1.76$).

Formation of Behavioral Intention

To investigate the relative influence of the theory's predictor variables, the intention measure for each of the eight behaviors was regressed on attitude and subjective norm (and on perceived behavioral control). As reported in Table 2, every regression was significant ($p < .01$) and the theory's predictor variables of attitude and subjective norm accounted for large percentages of the variance in each intention, ranging from a low of 73.8% to a high of 91.2%.

In all instances, attitude was the stronger (or strongest) predictor of intention, and was most often the only significant one. Subjective norm achieved a significant beta weight on only one behavior: *provide information skills needed by students*. Ajzen's (1985, 1987) third predictor, perceived behavioral control, achieved significance on the same behavior, but no others.

This group of teachers based these particular behavioral decisions on attitude, rather than perceived normative pressure, and believed the behaviors to be largely under their volitional control. These results, however, are unlikely to be generalizable to other groups of teachers. Indeed, even for these teachers, the results might not be generalizable to other parental involvement behaviors.

Table 1
Selected Responses to Questionnaire Items

	<i>M</i>	<i>SD</i>
<u>Generally</u>		
Involving parents, <i>when they can be helpful</i> , is a good idea	2.58	0.84
My attitude toward involving parents in the coming semester	2.15	1.05
My attitude toward providing information on how to help students learn at home in the coming semester	2.53	0.67
<u>This Semester</u>		
I am <i>currently</i> very active involving my students' parents	1.03	1.76
<u>Intention to Perform Eight Behaviors Involving Parents</u>		
<i>Provide information on . . .</i>		
1. skills needed by students	2.48	0.93
2. my homework policies, monitoring, and discussion of homework	2.56	0.82
3. improving student skills on assessments	2.00	1.37
<i>Provide . . .</i>		
4. family math, science, and reading activities [†]	1.21	1.61
5. homework requiring student-family discussion of learning	0.95	1.91
6. home-activity calendars for parents and students	0.46	2.26
7. vacation learning activities for students	-0.78	2.11
<i>Recruit . . .</i>		
8. parents to volunteer in my class	1.21	2.18

Note. Scales were scored from -3 (i.e., *extremely likely*), to +3 (i.e., *extremely unlikely*) through a neutral midpoint of zero (i.e., *neither likely nor unlikely*).

[†]For elementary teachers only.

For example, if the school board, superintendent, and principal were enthusiastically promoting a ninth form of parental involvement, it is likely that subjective norm would become a significant predictor of teachers' intentions. Other parental involvement behaviors might be seen as outside the complete control of the teachers, and perceived behavioral control would become a more important predictor.

Formation of Subjective Norm

Previous studies of teachers' intentions applying this theory (C. R. Pryor & B. W. Pryor, 2005) have found parents, and students to be among the referents whose behavioral expectations teachers take into account. On the regressions of subjective

Table 2
Multiple Regression of Intention (I) on Attitude (A) and Subjective Norm (SN) [and Perceived Behavioral Control (PBC)]

Behavior	Predictors	Variance	Beta Weights	
Provide information on skills needed by students	A & SN	$R^2 = .77$	A = .778**	SN = .136
	A & SN & PBC	$R^2 = .79$	A = .649**	SN = .151 PBC = .198*
Provide information on homework	A & SN	$R^2 = .73$	A = .780**	SN = .104
	A & SN & PBC	$R^2 = .74$	A = .725**	SN = .053 PBC = .157
Provide information on improving student skills on assessments	A & SN	$R^2 = .88$	A = .708**	SN = .290**
	A & SN & PBC	$R^2 = .87$	A = .705**	SN = .279** PBC = .018
Provide family math, science, and reading activities †	A & SN	$R^2 = .84$	A = 1.021**	SN = -.105
	A & SN & PBC	$R^2 = .84$	A = 1.076**	SN = -.110 PBC = -.070
Provide homework requiring student-family discussion of learning	A & SN	$R^2 = .79$	A = 1.002**	SN = -.111
	A & SN & PBC	$R^2 = .80$	A = .939**	SN = -.152 PBC = .141
Provide home-activity calendars for parents and students	A & SN	$R^2 = .75$	A = .698**	SN = .191
	A & SN & PBC	$R^2 = .76$	A = .762**	SN = .234 PBC = -.166
Provide vacation learning activities for students	A & SN	$R^2 = .91$	A = 1.065**	SN = -.127
	A & SN & PBC	$R^2 = .91$	A = 1.056**	SN = -.065 PBC = -.072
Recruit parents to volunteer in my class	A & SN	$R^2 = .83$	A = .718**	SN = .212
	A & SN & PBC	$R^2 = .83$	A = .749**	SN = .280 PBC = -.122

Note. All R^2 values are adjusted. * $p < .05$, ** $p < .01$, †For elementary teachers only.

norm on beliefs about student and parent expectations, the latter were stronger predictors in every instance. On only two regressions (concerning the behaviors, *provide homework requiring student-family discussion*, and *recruiting parents to volunteer in my class*) were student expectations a significant predictor. Subjective norm achieved a significant beta weight on only one behavior, *provide information on improving student skills on assessments*.

Elementary-Secondary Differences

Although parental involvement is likely to aid student achievement at all grade levels (Epstein, 2007), research has shown that parental involvement tends to drop off beginning in middle school (Epstein, 1995). It was important, therefore, to separate the responses of elementary and secondary teachers. Analysis by T^2 test showed significant overall between-group differences, and analysis by t -test revealed significant differences on 42 of the 61 scales (68.8%) in the instrument. In every instance, the scores of elementary teachers were higher than those of secondary teachers. The most important of these differences are reported in Table 3.

As would be expected, given the research reported by Epstein (1995, 2007), the current level of parental involvement reported by elementary teachers was dramatically higher than that reported by secondary teachers. The intentions of elementary teachers to perform each of the eight behaviors ranged from a low of just over 1 (“slightly likely”) for *provide homework requiring student-family discussion* to a high of just under 3 (“extremely likely”) for *provide information on homework*.

Overall, elementary teachers’ intentions were noticeably stronger concerning the three behaviors which could be seen as less-demanding of parents’ time, such as information provision, and weaker concerning the four more-demanding behaviors of providing family activities. Secondary teachers’ intentions followed a similar pattern. Two of their three intentions in the first category were reasonably strong and positive, but all four in the second category were negative. On the eighth behavior, *recruit parents to volunteer in my class*, elementary teachers were quite positive (more than “quite likely”), while secondary teachers were slightly negative.

Hypothetical Use of these Results

The fact that these teachers were from a number of different districts, rather than a single school, makes it difficult to discuss any application of these results. By positing a hypothetical, combined elementary-middle (K-8) school, we may consider how the principal of such a school might use these results. Let us call this principal Mrs. Rossi. Certainly the unique strengths and needs of the school would influence the direction in which the principal would want to influence future parental involvement, but for sake of this example, let us assume Mrs. Rossi is not concerned about the *specific* direction increased parental involvement takes at her school.

Table 3

Important Significant Differences in the Responses of Elementary and Secondary Teachers

<u>This Semester</u>	<u>Elementary</u>	<u>Secondary</u>
I am <i>currently</i> very active involving my students' parents	1.68	-0.50 **
<u>Intention to Perform Eight Behaviors Involving Parents</u>		
<i>Provide information on . . .</i>		
1. skills needed by students	2.75	1.83 **
2. my homework policies, monitoring, and discussion of homework	2.81	2.00 **
3. improving student skills on assessments	2.46	0.82 *
<i>Provide . . .</i>		
4. family math, science, and reading activities †	1.89	-1.17 **
5. homework requiring student-family discussion of learning	1.04	-1.00 *
6. home-activity calendars for parents and students	1.50	-0.17 *
7. vacation learning activities for students	-0.25	-2.00 *
<i>Recruit . . .</i>		
8. parents to volunteer in my class	2.25	-1.00 **

Note. Scales were scored from -3 (i.e., *extremely likely*), to +3 (i.e., *extremely unlikely*) through a neutral midpoint of zero (i.e., *neither likely nor unlikely*).

* $p < .05$, ** $p < .01$, †For elementary teachers only.

The first step for Mrs. Rossi in applying the results would be to examine the results in Table 1. Of all eight behaviors that the teachers might perform to increase parental involvement, the one that had the highest agreement among teachers was “In the coming semester, I intend to provide parents with information on my homework policies, on how to monitor homework completion, and discuss schoolwork at home.” This behavior not only had the highest mean score, but the lowest standard deviation. This behavior, therefore, would be a good one with which Mrs. Rossi could begin her program of encouraging parental involvement activities by teachers. (The behavior “provide vacation learning activities” was the only one with a negative mean score, and Mrs. Rossi would eliminate that from her list of future reforms.) The behavior “provide information on skills” was the second most popular with teachers, with the second highest mean, and the second lowest standard deviation. It might be possible to combine the provision of information on skills, with the first choice, provisions of information about homework. This information, about the relative popularity of behaviors, is useful in itself, but is only the first of three steps in applying the theory in this behavioral domain.

The second step for Mrs. Rossi would be to examine the results reported in Table 2, to determine *how* the selected behavioral intentions were formed. For both behaviors, attitude is by far the stronger (or strongest) predictor of intention. If Mrs. Rossi wanted to increase the influence of subjective norm on intention, she could enlist the help of the district, the professional teachers' organization, and other groups with whom the teachers might be motivated to comply. Let us assume, however, that Mrs. Rossi does not believe there is sufficient time to attempt this.

She could try to determine what positive and negative outcomes the teachers believe would follow their performance of those two behaviors. By estimating the teacher's evaluations of those outcomes, she would have an estimate of the beliefs underlying the teachers' favorable attitudes, and how she might increase that favorability. This would only be an estimate, of course, but far better than sheer guesswork. Had Mrs. Rossi applied the full theory, however, she would then be able to take the third step.

The third step, not possible with the present study, would be to examine the *specific* outcome beliefs and evaluations that form attitude (see B. W. Pryor & C. R. Pryor, 2005 for an example of a table reporting these). She would look at the beliefs that make the most positive contributions to teachers' attitudes toward performing the behaviors, and try to *increase* the strength of teachers' beliefs. Conversely, Mrs. Rossi would also examine the outcome beliefs that make the most negative contributions to attitude, and try to *decrease* the strength of teachers' beliefs. Changes in both types of beliefs could be influenced by the provision of information or changes in school policy, such as in the reward system.

Now suppose, however, that Mrs. Rossi believed that the most pressing need in her school was for teachers to provide parents with information on improving student skills on assessments. Note in Table 2 that this is the only one of the eight behaviors in which subjective norm had a significant influence on intention. This means, that in addition to attending to the outcome beliefs that formed attitude, Mrs. Rossi would attend to the normative beliefs that formed subjective norm. Earlier studies of teachers have found such referents as the principal, fellow teachers, parents, and even students to be among those salient to teachers as they consider performing a behavior.

Mrs. Rossi knows from experience, and is aware that research has found, that parental involvement begins to drop off in middle school. She would, therefore, also look at these results by the two grade levels – elementary and secondary – in her school. Finding that middle school teachers' intentions to perform these behaviors were lower than elementary teachers, she understands that she must consider the two groups of teachers separately.

Conclusion

This study found evidence that the theory of reasoned action holds considerable promise for research on teachers' intentions to promote parental involvement in

education. The theory accounted for large percentages of the variance in teachers' behavioral intentions, and demonstrated that the intentions studied were almost solely under attitudinal control.

The importance of this study is that it tested a potentially useful theory for research on parental involvement, that it focused on the behavioral intentions of teachers, and that it found evidence that the theory could be highly useful for understanding the intentions of teachers. Further research is needed in at least three ways. First, the theory should be applied to the behavioral intentions of principals, parents, and others important to the behavioral domain of parental involvement. Second, the entire theory should be applied in studies of different behaviors and different potential actors (e.g., parents, teachers), so as to capture the beliefs that underlie attitude and norm.

Third, the entire theory should be applied in dynamic tests of the theory's utility. As the participants face an actual behavioral decision, the theory would be applied. Based on those results, an intervention would be constructed to influence intention in the desired direction.

A second application of the theory, just prior to the behavior's performance, would determine the extent to which the intervention produced the desired changes in beliefs, attitude, norm, and intention. Once the behavior had been performed, or not, the predictive power of intention could be determined in this instance.

This study offers a beginning on what could be a critically important line of research, a line that could be invaluable in increasing and enhancing parental involvement in education. Such involvement begins to drop off after the elementary grades, and tends to be lower among the economically disadvantaged. Use of the theory, with teachers, parents, and administrators, holds the possibility of reversing these trends, and bringing the benefits of involvement to all children.

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