Home Schooling and Teaching Style: Comparing the Motivating Styles of Home School and Public School Teachers

Yi Cai
University of Wisconsin—Milwaukee

Johnmarshall Reeve and Dawn T. Robinson
University of Iowa

The rapidly growing number of home schooled children in America creates a need for educators to understand the instructional dynamics of home schooling. The authors focus on the motivating styles teachers adopt in home school and public school contexts. Results showed that religiously motivated home educators embraced a relatively more controlling style than did public school teachers. Gender (being male) and frequent church attendance further predicted a preference to motivate children in controlling ways, irrespective of school context. The results illuminate the ideological roots underlying teachers' motivating styles, show that an adherence to a preinstruction agenda explains why teachers adopt a controlling style, and highlight the need for home school researchers to assess children's motivational development.

Home schooling was the dominant form of education in colonial America (Cremin, 1961). The compulsory public school system that emerged during America's cultural transformation from a household-based society to a corporate-based one, however, pushed home education into the background (Coleman, 1988). Recently, home education has been pushing back. The number of home schooled students increased exponentially from 1970 to 1990 (Knowles, Marlow, & Muchmore, 1992; Lines, 1991) and continues to increase about 10% new students per year (Ray, 1999). Today, about 1.5 million students in the American educational system participate in home schooling (Ray, 1999), a number that represents about 2.8% of all publically and privately schooled K–12 students. Several factors account for the home school movement, including curriculum secularization, family–school value conflicts, school harassment and violence, exposure to peer pressure that advocates drugs and premarital sex, a desire to strengthen the family, and a conviction from parents that they can meet their children's needs better than the schools can (Knowles et al., 1992; Mayberry & Knowles, 1989; Mayberry, Knowles, Ray, & Marlow, 1995; Montgomery, 1989; Murray, 1996; Ray, 1999; Ryan & Powelson, 1991; Van Galen, 1987). One solution to these perceived problems is the choice to educate children at home.

The growing number of home-educated children in America creates a need for educators and scholars to understand the instruc-

tional dynamics of home schooling, both in its own right and in relation to more conventional school contexts. Understanding home education requires answering questions such as "What educational and developmental outcomes do home schooled children experience?" and "Who chooses to home school their children?" Speaking to the first question, home schooled children, on average, show academic outcomes that equal or surpass those of their conventionally schooled peers (Rakestraw, 1988; Rudner, 1999; Wartes, 1987, 1988), though part of the reason for these positive educational outcomes stems from the socioeconomically advantaged homes in which home educated children live (i.e., two parents, relatively high income, high parental education levels; Rudner, 1999). How home schooled children fare on social and developmental outcomes remains largely an open question (but see Shyers, 1992). Concerning the second question, 75% of home school educators nationwide are conservative (i.e., "born again") Christians who stress the Bible and its values, teachings, and doctrine (Cizek, 1994; Ray, 1997, 1999; Riemer, 1995; Van Galen, 1988; Van Galen & Pitman, 1991). By home schooling their children, these religiously motivated parents seek to teach specific philosophies and religious values, control their children's exposure to undesirable social interaction partners, develop close families, and attain high academic achievement for their children (Ray, 1999). The remaining 25% of home school educators are ideologically liberal to highly liberal and include atheists and libertarians. By home schooling their children, these nonreligiously motivated parents believe they can educate their children better than the schools can (Van Galen, 1988). In this article, we examine only the conservative, religiously motivated majority of the home schooled population.

A focus on religiously motivated home school educators represents an opportunity to examine the role that culture plays in educational practice. Cultural views on both education and child development influence a teacher's socialization agenda and motivating style. For example, the cultural codes within religiously motivated home school education create a child-rearing system

that prioritizes church attendance, heavily restricts children's access to television and movies (socialization agenda), and revolves around a parent-centered approach to solving problems (motivating style; Ray, 1999). For instance, the majority of religiously motivated home school educators have their children attend church worship and Sunday school classes (over 90%; Ray, 1997), limit their children to watching 1 hr or less of television per day (Rudner, 1999), and describe their instructional style as "clearly parent-controlled or parent-led" (Ray, 1999, p. 3). Recognizing this cultural basis, in the present article, we sought an understanding of, and a respect for, the beliefs and priorities of home school families to better understand their preferred motivating style. To do so, we began with the assumption that much of the origins, rationale, and utility of religiously motivated home school teachers' motivating style can be traced to what Coleman (1990) referred to as *social capital* (interpersonal relationships that are useful for the development of the child), because it is the vital means by which religiously based home schools can achieve the socialization outcomes for their children they seek.

Teachers' Motivating Styles

We conceptualize a teacher's motivating style along a continuum that ranges from highly controlling to highly autonomy supportive (following Deci, Schwartz, Sheinman, & Ryan, 1981). When students face motivationally relevant problems, controlling teachers take the initiative by diagnosing these problems, solving them by telling students what they should do, and ensuring students' compliance with extrinsic motivators or appeals to obligations. Such an orientation is controlling because the teacher pressures students to behave in particular, targeted ways. Other teachers motivate students by inviting and supporting their initiative in diagnosing the problems they face and by helping students generate workable solutions of their own. Such an orientation is autonomy supportive because the teacher supports students' capacity for autonomous decision making and problem solving.

We focused on motivating style as an important educational construct because students of autonomy-supportive teachers, compared with students of controlling teachers, experience more educational and developmental benefits (for reviews, see Deci & Ryan, 1987; Deci, Vallerand, Pelletier, & Ryan, 1991; Reeve, 1996). More specifically, students with autonomy-supportive teachers have relatively greater perceived competence (Deci et al., 1981), higher intrinsic motivation (Deci, Nezlek, & Sheinman, 1981), more positive emotionality (Patrick, Skinner, & Connell, 1993), enhanced creativity (Koestner, Ryan, Bernieri, & Holt, 1984), a preference for optimal challenge over easy success (Shapira, 1976), greater persistence in school (i.e., lower drop-out rates; Vallerand, Fortier, & Guay, 1997), greater conceptual understanding (Benware & Deci, 1984; Grolnick & Ryan, 1987), and better academic performance (Boggiano, Flink, Shields, Seelbach, & Barrett, 1993).

At present, determinants of teachers' motivating styles are poorly understood, though both personal characteristics and structural variables in the classroom seem important. As to personal characteristics, people who embrace traditional family values (Nachtscheim & Hoy, 1976), evangelical Protestant beliefs (Ellison & Sherkat, 1993), and a conservative political orientation (Reeve, Bolt, & Cai, 1999) also tend to embrace a relatively controlling ideology and a relatively controlling way of relating to others. Also, experienced teachers tend to adopt a more custodial or authoritarian orientation toward students than do less experienced teachers (Hoy & Rees, 1977; Packard, 1988; Weiss, 1991), and inexperienced preservice teachers become more controlling after they complete their student teaching experience in a school (Hoy & Woolfolk, 1990). As to structural variables, teachers become increasingly controlling in their interactions with students when they themselves are controlled and pressured by outside agents (e.g., administrators, experimenters; Deci, Spiegel, Ryan, Koestner, & Kauffman, 1982). Further, large class sizes generally lead teachers to adopt an increasingly restrictive manner with students (Stockard & Mayberry, 1992).

The Paradox of Religiously Motivated Home School

The classroom environment of religiously motivated home school education features two paradoxical elements in terms of understanding how teachers motivate students. On the one hand, religiously motivated home school teachers typically possess personal characteristics that orient them toward adopting a relatively controlling style toward students (as discussed above). On the other hand, home education offers a setting that is potentially tailor made for autonomy-supportive opportunities with its small teacher–student ratio, flexible curriculum, and spotlight-like focus on being aware of and meeting a wide range of student needs in a timely fashion. In home schooling, the teacher–parent not only knows the student's interests and needs intimately, he or she approaches each school day with a free-choice opportunity to fit instruction to the children. That is, home school teachers teach their children approximately 875 hr a year, but exactly what makes up those 875 hr is left not up to a school system but to the parents, and hence, potentially, up to the psychological, emotional, and academic needs of individual students. Although the curriculum is potentially very flexible, in practice, religiously motivated home school educators routinely opt for a relatively narrow, religiously affiliated curriculum.

This mixture between a conservative ideology and a student-centered setting creates opportunities for teachers to be either controlling or autonomy supportive, or both controlling and autonomy supportive. Religiously motivated home school teachers could perhaps be controlling in some circumstances yet autonomy supportive in others. In the motivation literature, however, control and autonomy are antithetical theoretical constructs (Deci & Ryan, 1985, 1991). Being antithetical, the controlling and autonomy-supportive styles exist at opposite ends of a single continuum in which control and autonomy support are inherently negatively correlated (rather than independent). One question we ask in the present study is whether home school teachers' religious conservatism leads them to a relatively controlling style, or whether home school's individually tailored climate leads teachers to a relatively autonomy-supportive style.

Hypotheses

Given the conservative ideologies embraced by religiously motivated home school teachers, we anticipated that they would be oriented toward the controlling end of the control–autonomy support continuum (Hypothesis 1). To make this prediction, we could

not find any existing studies of home school teachers' motivating styles, so we relied on research with conventional teachers showing how conservative ideologies (Reeve et al., 1999) and the salience of a preset agenda (Deci et al., 1982) lead teachers toward adopting relatively controlling styles. For purposes of comparison, we collected two samples of conventional school teachers: a sample of practicing public school teachers from the same school district and a sample of preservice teachers taking classes at a large university in the same city. We included these two samples because the public school teachers face structural restrictions (e.g., large class sizes), professional pressures (e.g., curriculum requirements, deadlines), and standards of accountability for their students' performances (from parents, administrators, public opinion) that, to varying degrees, collectively pressure them toward a controlling instructional orientation (Connell & Ryan, 1984; Hoy & Rees, 1977; Packard, 1988). We included the sample of university preservice teachers because they do not yet face these same structural restrictions and pressures (at least not to the same degree) and because preservice teachers' motivating style toward students becomes significantly more controlling after they complete their student teaching experience (Hoy & Woolfolk, 1990). Thus, Hypothesis 2 was that practicing public school teachers would report relatively more controlling motivating styles than would inexperienced teachers-in-training (i.e., preservice teachers).

We addressed not only how teachers prefer to motivate students but also why they adopt a preference toward a relatively controlling or autonomy-supportive style. Given the potential effects of personal characteristics and structural variables on motivating style, we anticipated that our primary hypotheses were oversimplified. That is, because personal characteristics lead people to choose to home school their children in the first place, our school context variable is confounded by differences between the personal characteristics of teachers who home school and teachers in public school and university settings. Further, because home school, public school, and university classrooms present different structural dynamics in which teachers instruct students, our school context variable is confounded by differences between the structural characteristics. With these potential confounds in mind, we introduced each of the following as a control variable to allow us to estimate whether differences in motivating styles emanate from the school context per se or from these personal and structural influences: political ideology (liberal–conservative), type of religious affiliation, frequency of church attendance, years of teaching experience, class size, and grade level taught. These six variables allowed us to test the extent to which motivating style emanates from a conservative ideology (as represented by political views, type of religious affiliation, and church attendance) and from structural aspects of instruction (as represented by class size and grade level taught). Thus, two secondary hypotheses were that teachers who embraced a conservative ideology (regardless of school context) would report a relatively controlling motivating style (Hypothesis 3), and teachers who faced structural restrictions (irrespective of school context) would report a relatively controlling style (Hypothesis 4). We found it difficult to anticipate the effects of characteristics such as age, race, gender, marital status, level of education, and teacher certification so we did not develop specific hypotheses about the direction and significance each might have on motivating style. We included them for purposes of data exploration and statistical control.

Method

Participants

The data were obtained from a survey mailed to a sample of 584 teachers in a large southern city: 176 home educators, 204 public school teachers, and 204 education students enrolled in a large university. We focused on religiously motivated home school teachers because researchers find most home education families are evangelical Protestants (Mayberry, 1989; Ray, 1999; Van Galen & Pitman, 1991). We selected our particular group of home school teachers because the members all resided in a state with both a large home schooling population and liberal regulations concerning its practice. (Some states virtually preclude home school by requiring that all instruction be provided by certified teachers.) Our participants also all belonged to the largest organized support group for home school educators in the state. Further, we selected this particular group of home school teachers because they constituted a critical mass that is surging both in numbers and in cultural acceptance in the local area (Gunning, 1993). As was the case for the home school teachers, all of the conventional teachers in our sample taught in the same local area, and all of our university students attended a large university in the same area.

Procedure

To reduce problems with response rate, which are inherent in mail surveys, we adopted the survey implementation procedures recommended in the Total Design Method (TDM; Dillman, 1978). The TDM survey implementation is a multiwave, follow-up procedure that features a first mailing and three follow-up mailings: a postcard reminder 1 week after the initial mailing, a replacement questionnaire with return envelope 3 weeks after the initial mailing, and a telephone call reminder 6 weeks after the initial mailing. Because the quality of the data researchers obtain declines with repeated follow-ups (Nachmias & Nachmias, 1996), we chose not to implement the third wave's telephone call reminder.

For home school teachers, we mailed the survey to each member of the support group's population. Among the home school population, 71 of the 176 teachers returned the survey for a response rate of 40.3%. For the public school teachers and university students, we mailed the survey to a random sample of each population. For the public school teachers, we randomly selected 204 teachers out of the 1,905 who taught in the local school district and had a mailing address on record with the school district office. Of these 204 public school teachers, 4 declined to participate (because they were no longer teachers) whereas 76 returned the survey for a response rate of 38.0%. For the university students, we randomly selected 204 currently enrolled students from the College of Education's records. Nine surveys were returned (because of an incorrect address) whereas 76 students returned the survey, for a response rate of 39.0%.

Our mailing provided us with a relatively equal number of participants across the three groups, and each group had a similar response rate: 71 home educators, 76 public school teachers, and 76 university students. Our overall response rate (223 out of 571; 39.1%) was comparable with the response rates in similarly designed investigations (Field & Bramwell, 1998; Fowler, 1988; Heberlein & Baumgartner, 1978; Price, Easton, Kandakai, & Oden, 1996), and our response rate for the home school teachers was noticeably higher than the response rate obtained in other surveys sampling home schoolers (e.g., 24.7% in Knowles, Mayberry, & Ray, 1991; 28.8% in Ray, 1997).

Materials

The survey included the Problems in School questionnaire (Deci, Schwartz, et al., 1981; to assess motivating style) and a battery of questions to determine participants' personal characteristics and the structural variables under which they taught. The Problems in School questionnaire features eight vignettes describing the motivation-related problems stu-

dents face in school. Each vignette lists four ways a teacher might respond to the child's motivational problem, and each way represents a point along a continuum that extends from highly controlling to highly autonomy supportive. For the highly controlling (HC) response, the teacher diagnoses the problem, makes a decision about what is right for the child, and uses a tangible extrinsic motivator to produce the targeted behavior. For the moderately controlling (MC) response, the teacher diagnoses the problem, makes a decision about what is right, and communicates that the child should implement the teacher-recommended action for his or her own good. For the moderately autonomy-supportive (MA) response, the teacher encourages the student to empathize with how his or her peers would understand, diagnose, and solve the same problem. For the highly autonomy-supportive (HA) response, the teacher encourages the child to diagnose the problem, generate a solution, and try out that solution for himself or herself. For each vignette, respondents rate the appropriateness of each of the four ways of responding on a separate 7-point Likert scale. Each scale's score is computed by averaging its eight responses, and the four scores are combined into an overall score as follows: Motivating style = 2 (HA) + MA − MC − 2 (HC). High scores represent a preference for an autonomy-supportive style, whereas low scores represent a preference for a controlling style.

The Problems in Schools questionnaire has been used in educational research to assess teachers' motivating styles (Deci, Nezlek, et al., 1981; Deci, Schwartz, et al., 1981; Flink, Boggiano, & Barrett, 1990; Guay, Boggiano, & Vallerand, 2001; Hoy & Woolfolk, 1990; Reeve, 1998; Reeve et al., 1999). It is both reliable (high alpha coefficients; stable test–retest scores) and valid (predicts actual teaching behavior; predicts theoretically consistent student outcomes, such as how intrinsically motivated the teacher's students are), although it has not been used previously with a sample of home school teachers. This raises the question whether its featured vignettes are relevant to and appropriate for the home school setting. To address this concern, we selected the four vignettes that most reflected the home school experience (e.g., a one-on-one interaction that asks the respondent for a parent's perspective), which were as follows: What should parents do when their daughter makes more progress than expected? (Vignette 2); What is the best thing for a teacher to do when a child loses his temper a lot? (Vignette 3); What should a mother do when her child has apparently begun to steal? (Vignette 7); and How can parents help their child who gets average grades improve? (Vignette 8). (The four vignettes involving the conventional classroom experience—a teacher interacting with a child in a context of a group of students—were as follows: What would be the most appropriate thing for a teacher to do when a student appears listless and does not participate in reading group?; What is the best thing to do with a boy who has been playing too much soccer with his friends?; How could Miss Wilson best help the Ranger's spelling group that has been having trouble all year?; and What would your wisdom guide you to do with a girl who has not been accepted by the other children?). Categorizing the vignettes this way allowed us to produce two different four-item versions of the Problems in Schools questionnaire, one that featured situations integral to the home school experience and the other that featured situations representing the conventional classroom experience (for a similar approach to partitioning the Problems in Schools questionnaire's vignettes in this way, see Guay et al., 2001). For Hypothesis 1, we tested the effect of school context on the full eight-item version of the Problems in Schools questionnaire, on the four-item version of the home school–focused vignettes, and on the four-item version of the conventional classroom-focused vignettes. Because the results from the pair of four-item versions of the Problems in Schools questionnaire were so similar to the results from the questionnaire's original eight-item version, we concluded that the eight-item Problems in Schools questionnaire is relevant to and appropriate for teachers in the home school context and therefore report only the data analyses involving the eight-item version in the Results section.

The survey included a battery of items to assess personal characteristics and structural aspects of teaching. For the personal characteristics, four items assessed demographic information—age, gender, race, and marital status. We scored age as a continuous variable in years, and we dummy coded respondents' gender, race, and marital status (for gender, 1 = *male*, 0 = *female*; for race, 1 = *white* [non-Hispanic], 0 = *otherwise* [Black, Asian, Hispanic, American Indian]; and for marital status, 1 = *married*, 0 = *single*). Three items assessed educational history—level of education, teacher certification status, and teaching experience. We measured level of education on a 7-point Likert scale that ranged from 1 (*some high school*) to 7 (*doctoral degree*); we dummy coded teacher certification status (1 = *certified*, 0 = *not certified*); and we measured teaching experience as a continuous variable in years of teaching with full-time responsibility. Three items assessed ideological values—political views, type of religious affiliation, and frequency of church attendance. We measured political view on a 7-point Likert scale that ranged from 1 (*extremely liberal*) to 7 (*extremely conservative*). After collecting data on the full range of religious affiliations, we organized type of religious affiliation into one of the following three categories: Evangelical Protestant (who were either Southern Baptist, evangelical Christian, or independent charismatic Christian); Catholic (who were either Catholic or Roman Catholic); or no religious affiliation. We then dummy coded each of the three types of religious affiliation as 1 (*a member of that religious affiliation*) or 0 (*not a member of that religious affiliation*). We scored frequency of church attendance on a 5-point Likert scale that ranged from 1 (*not at all*) to 5 (*several times a week*). Two items assessed structural variables in the respondents' teaching situation—grade level taught and class size. For grade level taught, we dummy coded each of four grade levels—preschool, elementary school, middle school, and high school—as 1 (*did teach at this grade level*) or as 0 (*did not teach at this grade level*); and we measured class size as a continuous variable (i.e., average number of students currently taught per class).

Results

Our central hypothesis was that home school teachers would, on average, report a relatively more controlling motivating style than would conventional teachers. We also expected that, among the conventional teachers, practicing teachers would report a relatively more controlling style than would preservice teachers. Before testing this second hypothesis, we found it necessary to divide the sample of preservice teachers into two separate groups, because 40 of the 76 university students in our sample turned out to be experienced teachers pursuing a master's degree while also teaching in the local school district. We categorized these 40 participants as "public school teachers taking classes," and we categorized the remaining 36 participants as "preservice teachers." The descriptive statistics for the four groups of teachers on each variable included in the study appear in Table 1.

School context significantly affected self-reported motivating style, $F(3, 219) = 10.46$, $p < .01$, as home school teachers reported a significantly more controlling motivating style than did the other three groups of teachers, whose style did not differ significantly from one another. Thus, home school teachers did report a relatively more controlling motivating style (supporting Hypothesis 1), but public school teachers did not report a more controlling style than did either group of university students (rejecting Hypothesis 2).

Numerous differences emerged among the four groups of teachers in terms of their personal characteristics and the structural variables in which they taught (see Table 1). For each variable assessed on a continuous scale, we performed a one-way analysis of variance with Scheffé post hoc tests (using $p < .05$); for each

Table 1
Descriptive Statistics for All Dependent Measures: Means and Standard Deviations for Continuous Variables and Group Percentages for Categorical Variables

	School context							
	Home school teachers ($n = 71$)		Public school teachers ($n = 76$)		Public school teachers taking classes ($n = 40$)		Preservice teachers ($n = 36$)	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Outcome measure								
Motivating style[a]	2.44$_a$	2.81	4.67$_b$	2.82	4.97$_b$	2.48	4.64$_b$	3.44
Personal characteristics								
Gender (% female)	88.70$_a$		86.80$_a$		85.00$_a$		91.70$_a$	
Age (years)	37.20$_a$	5.25	41.80$_b$	9.92	36.60$_a$	9.65	29.00$_c$	8.56
Race (% Caucasian/White)	97.20$_a$		73.30$_b$		89.70$_a$		91.70$_a$	
Marital status (% married)	98.60$_a$		65.80$_b$		70.30$_b$		50.00$_b$	
Level of education (high = Phd)	3.59$_a$	1.18	5.33$_b$	0.86	4.85$_b$	0.53	3.61$_a$	0.93
Teacher certification (% certified)	16.90$_a$		100.00$_b$		82.50$_c$		0.00$_d$	
Teaching experience (years)[b]	3.70$_a$	2.57	15.84$_b$	8.92	9.61$_c$	8.13		
Political views (high = conservative)	6.24$_a$	0.64	4.46$_b$	1.30	4.53$_b$	1.37	4.22$_b$	1.51
Religious affiliation (%)								
Evangelical Protestant	95.80$_a$		61.80$_b$		51.30$_b$		55.60$_b$	
Catholic	4.20$_a$		38.20$_b$		30.80$_b$		36.10$_b$	
No affiliation	0.00$_a$		0.00$_a$		17.90$_b$		8.30$_b$	
Frequency of church attendance	4.54$_a$	0.75	3.53$_b$	1.08	3.40$_b$	1.46	3.11$_b$	1.14
Structural variables[b]								
Grade level taught (%)[c]								
Preschool	4.20$_a$		1.30$_a$		5.40$_a$			
Elementary school	90.10$_a$		55.30$_b$		55.60$_b$			
Middle school	29.60$_a$		27.60$_a$		22.20$_a$			
High school	14.10$_a$		26.30$_a$		22.20$_a$			
Class size	2.00$_a$	0.87	19.93$_b$	7.75	22.76$_c$	4.95		

Note. Means and frequencies with different subscripts are significantly different from one another ($p < .05$), using Scheffé post hoc tests.
[a] High scores represent a highly autonomy-supportive motivating style. The possible range of scores is −18 (*extremely controlling*) to 18 (*extremely autonomy supportive*). [b] The university preservice teachers had not yet had formal responsibility for teaching a course and therefore reported null values for teaching experience, grade level taught, and class size. [c] Nineteen home school, 6 public school, and 2 public school teachers taking classes taught students at both elementary and secondary grade levels. The percentages in each column therefore do not sum to 100% because when a teacher taught at both the elementary and middle school levels, we counted that teacher as teaching at both levels.

variable assessed categorically, we performed appropriate chi-square tests.

Among the personal characteristics, school context did not predict gender, $\chi^2(3, N = 223) = 0.92$, *ns*. School context did predict age, $F(3, 219) = 18.94$, $p < .01$, as the public school teachers were older than were both the home school and public school teachers taking classes, who were older than the preservice teachers. For race, fewer public school teachers were Caucasian–White than were teachers in other three groups, who did not differ, $\chi^2(3, N = 223) = 19.69$, $p < .01$. For marital status, home school teachers were more likely to be married than were teachers in the other three groups, who did not differ, $\chi^2(3, N = 210) = 35.17$, $p < .01$. For level of education, school context predicted years of formal schooling, $F(3, 219) = 53.72$, $p < .01$, as public school teachers and teachers taking classes had more extensive educational histories than did either home school teachers or preservice teachers, who did not differ. For teacher certification, the school context effect was significant, $\chi^2(3, N = 223) = 159.55$, $p < .01$, as all four groups of teachers differed significantly in the following order from most likely to least likely to be certified: public school teachers, public school teachers taking classes, home school teachers, preservice teachers. For political views, home school teachers

were more conservative than were the other three groups of teachers, who did not differ, $F(3, 219) = 19.17$, $p < .01$. For religious affiliation, home school teachers were significantly more likely to be evangelical Protestant than were the other three groups of teachers who did not differ, $\chi^2(3, N = 221) = 34.83$, $p < .01$, and they were also significantly less likely to be Catholic than were the other three groups of teachers who did not differ, $\chi^2(3, N = 221) = 25.91$, $p < .01$. The public school teachers taking classes and the preservice teachers were both more likely to report a religious affiliation of "none" than were the home school and public school teachers, who did not differ, $\chi^2(3, N = 221) = 24.55$, $p < .01$. Finally, for frequency of church attendance, home school teachers attended church more frequently than did the other three groups of teachers, who did not differ, $F(3, 219) = 19.17$, $p < .01$. (We discuss the personal characteristic of "teaching experience" in the next paragraph.)

Among the structural variables, none of the preservice teachers had any classroom experience and, therefore, reported null values for grade level taught, class size, and teaching experience. Accordingly, we analyzed the data for teaching experience, grade level taught, and class size using only the first three groups of teachers, a comparison that allowed us to contrast home school teachers

with their more conventional practicing counterparts. For teaching experience, the school context effect was significant, $F(2, 184) = 54.85$, $p < .01$, as public school teachers had more years of experience than did public school teachers taking classes, who, in turn, had more years of experience than did home school teachers. For grade level taught, school context did not predict teaching at either the preschool, $\chi^2(2, N = 187) = 1.66$, ns; middle school, $\chi^2(2, N = 187) = 0.66$, ns; or high school, $\chi^2(2, N = 187) = 3.40$, ns, levels. School context did predict teaching at the elementary grade level, however, $\chi^2(2, N = 187) = 24.52$, $p < .01$, as home school teachers were more likely to teach elementary grade children than were the other two groups of teachers, who did not differ. For class size, school context predicted the number of students taught per class, $F(2, 184) = 255.56$, $p < .01$, as public school teachers taking classes had larger class sizes than did public school teachers, who, in turn, had larger class sizes than did home school teachers.

In summary, home school teachers reported a significantly more controlling motivating style than did the three groups of conventional teachers (who did not differ). In addition, however, home school teachers differed from their more conventional counterparts on a number of personal and structural variables. Specifically, home school teachers were generally younger, more likely to be Caucasian–White, and more likely to be married. They had completed fewer years of formal education and were less likely to be certified as teachers. They held more conservative political views and were more likely to be evangelical Protestant, less likely to be either Catholic or religiously unaffiliated, and more frequently attended church. They were more likely to teach elementary grade students, taught to smaller class sizes, and were less experienced as teachers. (Some personal and structural differences emerged among the three groups of conventional teachers as well, but these differences were theoretically less interesting because the three groups did not differ from one another on motivating style.)

Home school teachers differed from conventional teachers not only on motivating style but also on a host of potentially confounding personal and structural variables as well. As a first step to disentangling these otherwise confounded influences on motivating style, we explored which of the 11 personal characteristics and which of the 6 structural variables correlated with motivating style (irrespective of school context). Five personal characteristics and 1 structural variable correlated significantly with motivating style: gender, $r(223) = -.16$, $p < .05$; level of education, $r(223) =$

.23, $p < .01$; teacher certification, $r(223) = .19$, $p < .01$; political view, $r(223) = -.23$, $p < .01$; frequency of church attendance, $r(223) = -.29$, $p < .01$; and teaching at the elementary grade level, $r(183) = -.17$, $p < .05$. These correlations are important because they reveal the confounds that otherwise make it difficult to interpret the effect of school context on motivating style. That is, home school teachers might prefer a relatively controlling style because they are home school teachers or because they are less formally educated, not certified, politically conservative, frequent church attenders, or elementary-grade teachers.

We first computed the correlation matrix for all seven variables related to motivating style and then ran a stepwise multiple regression to identify which variables could uniquely predict motivating style. The correlations among school context (scored as 1 for home school teachers, and as 0 for the three groups of conventional teachers), five personal characteristics (gender, level of education, teacher certification, political views, frequency of church attendance), and one structural variable (elementary grade level) appear in Table 2. Data for all 223 teachers are included in Table 2 for all variables, except for elementary grade level because 40 preservice teachers reported null values on this variable. In looking at this structural variable, motivating style correlated more strongly with school context than it did with elementary grade level ($r = -.35$, $p < .01$, for school context; $r = -.17$, $p < .05$, for elementary grade level). In a preliminary two-predictor multiple regression analysis on the subsample of 183 nonpreservice teachers, elementary grade level did not explain unique variance in motivating style after controlling for the school context effect ($pr = -.35$, $p < .01$ for school context; $pr = -.03$, ns, for elementary grade level). We therefore removed elementary grade level as a variable for further consideration, an analytic strategy that allowed us to include the full sample of 223 teachers in a stepwise multiple regression in which motivating style was the outcome variable whereas the six predictor variables were school context and the five remaining personal characteristics.

On the first step of the multiple regression, school context predicted motivating style, $F(1, 221) = 31.27$, $p < .01$ ($R^2 = .12$; $\beta = -.35$, $p < .01$). On the second step, gender entered as a second individual predictor of motivating style, $F(2, 220) = 19.37$, $p < 01$ ($R^2 = .15$; school context, $\beta = -.35$, $p < .01$; gender, $\beta = -.16$, $p < .05$). On the third step, frequency of church attendance entered as an individual predictor of motivating style, $F(3, 219) = 14.95$, $p < .01$ ($R^2 = .17$; school context, $\beta = -.29$, $p <$

Table 2
Descriptive Statistics and Correlation Coefficients for All Variables Included in the Regression Analyses to Predict Motivating Style

Variable	M	SD	1	2	3	4	5	6	7	8
1. Motivating style	4.01	3.05	—	−.35**	−.16*	.23**	.19**	−.23**	−.29**	−.17*
2. School context[a]	0.32	0.47		—	−.02	−.46**	−.51**	.58**	.44**	.37**
3. Gender	0.13	0.38			—	.08	−.02	−.14*	.04	−.17*
4. Level of education	4.41	1.23				—	.64**	−.27**	−.11	−.24**
5. Teacher certification	0.54	0.50					—	−.24**	−.19**	−.30*
6. Political views	5.00	1.46						—	.47**	.30**
7. Frequency of church attendance	3.76	1.21							—	.11
8. Grade level taught: Elementary	0.69	0.46								—

Note. $N = 223$, except for grade level taught: elementary, in which $N = 183$.
[a] School context contrast scored as 1 for home school teachers and as 0 for the three groups of conventional teachers.
*$p < .05$. **$p < .01$.

.01; gender, $\beta = -.15$, $p < .05$; and frequency of church attendance, $\beta = -.16$, $p < .05$). Level of education almost entered as a fourth individual predictor of motivating style ($\beta = .15$, $p < .07$), whereas teacher certification and political views were largely uncorrelated with motivating style after partialing out the variance in motivating style attributable to school context, gender, and frequent church attendance. (A follow-up simultaneous regression in which we entered all six predictors of motivating style on a single step yielded very similar results, $F[6, 216] = 8.10$, $p < .01$ [$R^2 = .18$], with the individual standardized beta weights as follows: school context, $\beta = -.24$, $p < .01$; gender, $\beta = -.17$, $p < .05$; frequency of church attendance, $\beta = -.17$, $p < .05$; level of education, $\beta = .15$, $p < .07$; teacher certification, $\beta = -.07$, ns; and political views, $\beta = -.01$, ns.)

Discussion

The surging home school movement in American education presses the question of who will be the principle agents to educate children—parents and families or professionally trained school personnel. In increasing numbers, parents' disenchantment with public schooling is leading them to entertain the possibility that families and religious communities make better educators and transmitters of culture. Recognizing this trend, we explored the implications for a teacher's motivating style when parent becomes teacher. Our principle finding was that religiously motivated home school teachers reported a motivating style that was significantly more controlling than that reported by conventional public school teachers.

The many different personal characteristics and structural variables that existed between home school and conventional teachers (see Table 1) allowed us to explore our principle finding further by examining why home school teachers preferred the more controlling style. Being a home school teacher, being male, and frequent church attendance all individually and uniquely predicted a controlling motivating style (thus supporting Hypothesis 1 and a limited version of Hypothesis 3). We conclude that, even after controlling for the potentially confounding variables of gender, level of education, teacher certification, political conservatism, frequent church attendance, and teaching at the elementary grade level, the religiously motivated home school context explained unique and meaningful variance in a controlling motivating style. Why this is so can be partly explained by the finding that frequent church attendance also predicted a controlling style (even after statistically controlling for the school context effect). That is, conventional teachers who frequently attended church also preferred a relatively controlling style toward children. Because both the religiously motivated home school context and frequent church attendance independently predicted the controlling motivating style, we conclude that an adherence to a preset agenda (a prescribed or targeted way of thinking, feeling, and behaving) orients teachers toward a relatively controlling style. This interpretation is supported by Deci et al.'s (1982) finding that conventional teachers tend to adopt a relatively controlling motivating style when administrators pressure them into making sure their students perform up to standards (a type of preset agenda). Thus, it is not a religious agenda per se that orients teachers toward a controlling style but an adherence to a preset agenda that prescribes in advance

of instruction how children should think, feel, and behave during that instruction.

Before we can generalize our findings to home education in general, we need to collect data from a sample of nonreligiously motivated home educators. Van Galen (1988) categorized home school parents as either ideologues or pedagogues. As home educators, ideologues are parents who home school out of a desire to pass on to their children a particular set of values, beliefs, and worldview (i.e., what we refer to here as a preset agenda in how to think, feel, and behave). In contrast, pedagogues are parents who home school simply out of a conviction that they can educate children better than public schools can. To the extent that religiously motivated (ideologues) and nonreligiously motivated (pedagogues) home school teachers embrace different ideologies and preinstructional agendas, we would expect their motivating styles to differ accordingly. Adding the data from a sample of nonreligiously motivated home school educators would allow us to better separate the school context (home school vs. conventional school) and religiously motivated (ideologues vs. pedagogues) effects.

Religiously motivated home school educators represent a culture within the American educational system that is united around a child-rearing system that prioritizes church attendance, restricted socialization experiences, and parent-centered decision making. A controlling motivating style therefore is highly consistent with religiously motivated home schooling, as Deci, Schwartz, et al. (1981) defined a controlling motivating style as one that seeks to shape children into particular ways of thinking, feeling, and behaving. As such, our sample of religiously motivated home school teachers provides an enlightening look into a group of educators who very much want to steer their children toward particular ways of thinking, feeling, and behaving. Indeed, steering children toward a particular value orientation (and away from alternative value orientations) is most of the point of religiously motivated home schooling (Ray, 1999).

Most of the reason why motivating style is an important educational construct is because it impacts children's motivational development. Among children participating in public schooling, children with controlling parents (Grolnick & Apostoleris, 2002) and children with controlling teachers (Reeve, 2002) generally show relatively poorer motivational, developmental, and academic outcomes. That is, children benefit when adults support their autonomy. Another line of thought, however, is to acknowledge that adults often know what is best for children. To guide their children toward what they believe is best, religiously motivated home school parent–teachers establish a highly structured learning environment with its roots in discipline, obedience, and behavioral management (Mayberry & Knowles, 1989). These two antagonistic conclusions (i.e., children thrive when teachers support their autonomy; parents impose structure to guide their children) can be integrated so that both developmental objectives are met. If students are to receive both autonomy support and optimal structure, then teachers can begin to do so by recognizing that any element of classroom structure (e.g., rule, consequence, feedback) can be presented to students in a way that is either highly controlling or highly autonomy supportive (Connell, 1990; Connell & Wellborn, 1991; Deci & Ryan, 1985, 1987; Skinner & Belmont, 1993). For instance, the same high-structure rule (e.g., "go to church twice a week") can be communicated to children in a way that is highly controlling (teacher-directed, pressuring language, inflexible) and

therefore frustrates children's motivational development or in a way that is highly autonomy supportive (with supporting rationale, informational language, acknowledgment of negative feelings) and therefore nurtures children's motivational development. When cultural representatives find ways to communicate elements of structure in autonomy-supportive ways, then children's motivational development will be more likely to move toward assimilating (rather than rejecting and reacting against) these expectations and behavioral regulations (Ryan & Deci, 2000).

In addition to school context and frequent church attendance, gender also predicted motivating style. Male teachers had a more controlling style. Our test for the effect of gender was exploratory, however, because, though the Problems in Schools questionnaire has been used frequently in school settings, these studies did not report the relationship between gender and motivating style. In one recent study, however, men scored as more controlling on the Problems in Schools questionnaire than did women (Reeve, 1998). Something about being male leads teachers to prefer a relatively controlling style toward students.

Several limitations of this research need to be acknowledged. One limitation is that our data represent teachers' self-reported motivating styles rather than behavioral ratings of teachers' actual motivating behaviors in a classroom setting. This acknowledgment raises the question of how well teachers' controlling scores on the Problems in Schools questionnaire actually predict their controlling behaviors toward children. Among conventional teachers, scores on the Problems in Schools questionnaire do predict teachers' motivating behaviors (Reeve et al., 1999) as well as raters' judgements of teachers' styles as controlling or autonomy supportive (Boggiano, 1998). Still, we need further study to assess whether relatively controlling home school teachers try to solve their children's motivational problems through controlling utterances and instructional behaviors. A second limitation is that our results apply only to religiously motivated home school teachers. Future studies should include the fuller range of home school educators (ideologues, pedagogues), use more sophisticated assessments of religious affiliation and political orientation, or both, so that these constructs will be stronger candidates to emerge as significant predictors of motivating style. A third limitation is that our sample was fairly small and geographically limited to a single Southern city. We recommend that home school researchers consider the merits of adding measures of children's motivational development to their list of outcome assessments (e.g., academic achievement) as they chronicle and document the effectiveness and appeal of home school education across the nation.

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