

Change in Parenting Democracy During the Transition to Adolescence: The Roles of Young Adolescents' Noncompliance and Mothers' Perceived Influence

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SYNOPSIS

Objective. This study assessed the direct relation between young adolescents' regulated noncompliance and mothers' democratic childrearing practices as well as the potential mediating role of mothers' perceived influence during the transition to adolescence. **Design.** 3 years of self-reported regulated noncompliance, perceived influence, and parenting democracy were gathered from 166 mothers and their firstborn children (55% female), ages 9 to 11 years at Time 1. **Results.** Longitudinal path analysis indicated a total effect between adolescents' regulated noncompliance and higher maternal democracy. In addition, the total effect was mediated by mothers' perceived influence, such that adolescents' regulated noncompliance at Time 1 was associated with greater perceptions of influence at Time 2, which, in turn, was associated with greater maternal democracy at Time 3. **Conclusions.** Mothers with young adolescents who resist in a relatively mature, regulated manner tend to have more positive perceptions of their influence on their emerging adolescents' behavior. In turn, mothers expecting to maintain their influence despite normative adolescent resistance are more likely to use democratic parenting strategies, granting their adolescents more input in decisions.

INTRODUCTION

The transition to adolescence is marked by enhanced reasoning, an increased desire for autonomy, and less direct parental supervision accompanied by continuing needs for parental involvement and nurturance (Collins, Madsen, & Susman-Stillman, 2002; Youniss & Smollar, 1987). To balance young adolescents' autonomy striving with the provision of appropriate boundaries and support, parenting during adolescence should reflect a reasonably democratic stance that includes rational explanations for directives, flexibility in response to adolescent concerns, and adolescent involvement in decision making. Parenting behaviors indicative of democracy, such as reasonable flexibility and give-and-take (Robinson, Mandlco, Olsen, & Har, 1995), have been consistently associated with better adjustment among children and adolescents, including more positive emotional functioning (Qin, Pomerantz, & Wang, 2009), higher social competence (Steinberg, 2007), greater academic achievement (Spera, 2005), and fewer psychological and behavioral problems (Darling, 1999). Given the positive correlates of parenting democracy, it is important to identify factors that promote parenting democracy in parent-adolescent interactions.

One important predictor of parenting democracy might be the quality of adolescent noncompliance with parental guidance and directives. During adolescence, youth begin to feel increasingly impeded by their parents. This is partly because adolescents experience expansion in what they can do and want to do (Collins et al., 2002) and because they increasingly feel that they should have jurisdiction over their goals and plans (Smetana, 2002). Some degree of young adolescent noncompliance is normative (e.g., Patterson & Forgatch, 1987) and may serve as a catalyst for greater mutuality in the parent-adolescent relationship (e.g., Smetana, 2002). Whereas negative, dysregulated forms of adolescent noncompliance (e.g., anger, defiance, other forms of coercive behavior) might contribute to inflexible, overly controlling, coercive parenting (e.g., Patterson, 1982), relatively positive, regulated noncompliance (e.g., negotiating, being assertive yet controlling anger well) might contribute to parenting democracy. That is, parents may be more likely to be flexible, seek and consider adolescent input, and provide more explanations for directives if adolescents demonstrate reasonably well-regulated resistance, rather than negative forms of opposition.

A number of findings support our hypothesis that adolescent-regulated noncompliance may contribute to parenting democracy. Children's negotiations while resisting maternal directives have been associated with a flexible parenting style characterized by the use of reasoning and suggestions rather than commands (Kuczynski & Kochanska, 1990; Kuczynski, Kochanska, Radke-Yarrow, & Girnius-Brown, 1987). Adolescents' openness to communication with their parents has also been associated with parenting democracy (Persson, Stattin, & Kerr, 2004). In contrast, longitudinal studies of nonclinical samples have found that adolescent aggression, characterized by stubbornness and other coercive behaviors, predicts subsequent coercive parenting (Albrecht, Galambos, & Jansson, 2007; Steeger & Gondoli, 2011). Interaction studies also reveal that adolescent noncompliance characterized by anger or intentional defiance is likely to provoke overdirectiveness from parents (e.g., Patterson, 1982). Thus, clear connections exist between the quality or the nature of adolescent noncompliance and parenting related to flexibility and coerciveness.

It is important to note that well-functioning young adolescents are often noncompliant. Patterson and Forgatch (1987) suggested that a noncompliance rate as high as 50% is reasonable for well-adjusted preadolescents. From this perspective, we believed that noncompliance occurs too often to be conceptualized solely in terms of dysfunction. In accordance with Kuczynski and colleagues (1987), we believed that regulated (i.e., less aversive) forms of noncompliance reflect positive assertive behavior and create a context for the expression and development of autonomy. We also posited that parents of adolescents who express noncompliance in a relatively well-regulated manner might be more willing or able to engage in flexible, reasonably democratic parenting strategies.

Taken together, the literature suggests that the quality of resistance to parental control is an important correlate and perhaps predictor of parenting democracy. Thus, the connection between adolescent-regulated noncompliance and parenting democracy may be relatively direct. Alternatively, the connection may be indirect and mediated by other variables more proximal to parenting democracy. More specifically, we hypothesized that adolescent-regulated noncompliance may contribute to mothers feeling generally in control—that is, despite normative resistance, mothers may still perceive that they can be effective in influencing their adolescent's behavior, if the adolescent's noncompliance is well-regulated and not particularly aversive. Feeling influential, mothers might be more inclined to be democratic and less inclined to be over-controlling.

For maternal-perceived influence to function as a mediator, it must be associated with noncompliance and parenting democracy. Focusing first on the association between adolescent-regulated noncompliance and perceived influence, Goldberg (1977) proposed a model of parent-child interaction emphasizing clarity and regularity of child cues as determinants of parental feelings. Supporting this model, research has shown that children who display more advanced or sophisticated social skills might influence mothers' positive feelings of competence and satisfaction (Dix, Stewart, Gershoff, & Day, 2007). Such mothers may be more likely to gain positive feedback about their parenting and perceive themselves as more competent, feel more satisfied, and have feelings of greater well-being (e.g., Putnam, Sanson, & Rothbart, 2002; Silverberg & Steinberg, 1990). In contrast, parents with obstinate, defiant, or otherwise difficult children tend to have lower parenting self-perceptions (Cutrona & Troutman, 1986; Dunst, Trivette, & Cross, 1986; Mash & Johnston, 1983). More specifically, child factors such as openness to socialization (Darling & Steinberg, 1993) and sociability (Coleman & Karraker, 2000) have been positively correlated with parenting efficacy, whereas temperamental difficulty (Porter & Hsu, 2003), frequently expressed externalizing behaviors (Breen & Barkley, 1988), and high levels of emotional reactivity (Coleman & Karraker, 2000) have been correlated negatively with parenting efficacy. A number of empirical studies support the idea that positive child social-cognitive attributes, likely correlated with adolescent-regulated noncompliance, are associated with positive parenting self-appraisals.

Turning to the second path in our particular mediating view, to our knowledge research has not focused on mothers' perceived influence and parenting democracy specifically as constructs, although research on similar constructs suggests that perceived influence and parents' use of flexible, democratic parenting strategies are correlated. For instance, mothers' sense of parenting competence predicts mothers' ability to provide an adaptive, nurturing environment that is conducive to healthy child development (Locke & Prinz, 2002). Perceptions of competence have been positively linked to warmth (de Haan, Prinzie, & Deković, 2009), maternal sensitivity, and consistency (Asscher, Hermanns, & Deković, 2008), whereas mothers' perceptions of low power over parenting outcomes have been associated with harsh, punitive parenting, particularly when children have characteristics that are challenging (e.g., Bugental & Happaney, 2004; see also Donovan, Leavitt, & Walsh, 2000). Perceptions of competence have also been found to correlate negatively with maternal negative affect (e.g., anger) and coercive parenting (e.g., yelling and physical discipline; Bondy & Mash, 1999; Zahn-Waxler, Iannotti, Cummings, & Denham, 1990). In addition, individuals with low self-perceived efficacy tend to avoid engagement in challenging tasks (Sexton & Tuckman, 1991), which, in the parenting arena, may be revealed as avoidance of more effortful parenting techniques (e.g., use of parenting democracy) and reliance on coercive strategies to control child behaviors (Dix, 1991). To summarize, higher parenting self-perceptions are associated with positive parenting, whereas lower parenting self-perceptions are linked to less positive parenting. Although there are limited studies focused on parenting democracy, it is likely that mothers with more favorable parenting self-perceptions, including greater perceived parenting influence, will demonstrate greater parenting democracy in parenting young adolescents.

This study investigated longitudinal associations among adolescent-regulated noncompliance, maternal-perceived influence, and parenting democracy during the transition to adolescence. We hypothesized that there would be a positive total effect

between regulated noncompliance in fourth grade (M age = 9.69 years, SD = .52) and parenting democracy in sixth grade (M age = 11.66 years, SD = .51). In addition, we hypothesized an indirect pattern of relations, such that mothers' perceived influence in fifth grade (M age = 10.66 years, SD = .50) would mediate the connection between adolescent-regulated noncompliance and parenting democracy. We expected that adolescent-regulated noncompliance in fourth grade would be associated with greater maternal perceptions of influence in fifth grade, which, in turn, would be associated with greater parenting democracy in sixth grade. We also tested several alternative models with different time orderings of the variables. Thus, the present study specified three alternative models and compared each with our hypothesized model (shown in Figure 1).

METHOD

Participants and Procedure

Data for the present study were drawn from a broader 5-year longitudinal study examining parenting and adolescent adjustment during the transition to adolescence. Participants were recruited from several school districts in a medium-sized, Midwestern U.S. city. Initial contact letters were distributed to fourth-grade students. The contact letters briefly described the study and instructed mothers to call the research office if interested. Eligibility was determined by screening questions administered over the phone by research assistants. To ensure that mothers had the same degree of parenting experience during the adolescent transition, mother-child dyads were eligible if the

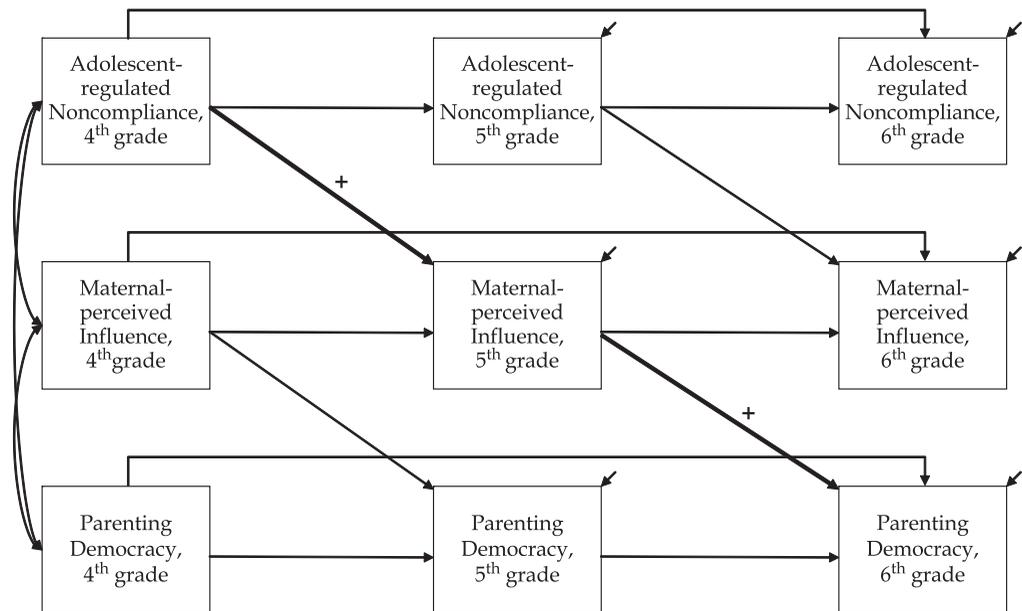


FIGURE 1

Hypothesized mediation model. Error variances at concurrent time points are correlated. Mediating path is indicated in bold.

fourth-grade student was the oldest child in the family. Dyads were also eligible if the mother was currently married or currently divorced, but not remarried, as a result of the added complexity of step-family structures.

Of the 537 who initially contacted the research office, 198 met the criteria. Of the eligible dyads, 181 (91%) completed the study at Year 1; 4 dyads (2%) dropped out after repeatedly canceling their laboratory appointment, and 13 dyads (7%) decided not to participate after hearing more about the study. Once annually, mothers and their adolescents visited a university research laboratory for approximately 2 hr. Dyads independently and separately completed self-report measures during each laboratory visit. For their participation, the dyads were paid \$30 in Year 1. Compensation increased incrementally by \$10 at each year of data collection, such that dyads were paid \$70 for their participation in Year 5.

The analyses for the present study were based on 166 dyads with complete data for the first 3 years of the study. This sample consisted of 74 boys and 92 girls who were between the ages of 9 and 11 years at Time 1, $M = 9.69$, $SD = .52$. The mothers' mean age was 37.51, $SD = 4.41$. The study participants were primarily European American (93%). At the time of the first year of data collection, 152 (92%) were married and 14 were divorced (8%). The mothers were generally well-educated and primarily middle class, although poor dyads from urban and rural neighborhoods were also represented. The annual household incomes of the study sample ranged from \$5,400 to \$400,000, with an average annual income of \$76,406 ($SD = \$52,963$).

Measures

The study measures were administered in identical forms each year. Mothers provided information regarding adolescent-regulated noncompliance and maternal-perceived influence, and adolescents completed measures to assess mothers' use of parenting democracy.

Adolescent-regulated noncompliance. We developed a 16-item noncompliance scale for this study. The scale measured the degree to which adolescents are prosocially assertive when resisting mothers' attempts to control, direct, or guide their behavior. When developing this scale, conceptual descriptions were drawn from the toddler noncompliance literature (e.g., Kuczynski & Kochanska, 1990) and items were written to reflect the adolescent time period. A sample item was "How often does it happen that when your child wants to resist your control, direction, or guidance, he or she stays open to give and take?" A reverse-scored sample item was "How often does it happen that when your child wants to resist your control, direction, or guidance, he or she throws a big tantrum?" Mothers indicated how often their adolescents acted like each statement on a 5-point Likert-type scale ranging from 0 (*never*) to 4 (*always*). Items reflecting aversive behavior were reverse-scored and summed with items reflecting assertive behavior to compute a total adolescent-regulated noncompliance variable. Higher scores indicated greater adolescent-regulated noncompliance. Coefficient alpha across the three waves of data collection ranged from .89 to .90.

To provide evidence for the validity of the regulated noncompliance scale, we correlated it with several other measures. The scale demonstrated good convergent validity across the 3 years of data collection. Adolescent-regulated noncompliance had significant negative relations ($p < .05$) with maternal reports of child delinquency as

assessed by the Child Behavior Checklist (Achenbach, 1991), mean $r(164) = -.34$ and significant positive relations ($p < .05$) with maternal reports of child behavioral competence as assessed with the parent version of the Perceived Competence Scale (Cole, Gondoli, & Peeke, 1998; Harter, 1982), mean $r(164) = .44$. In addition, maternal reports of adolescent-regulated noncompliance had significant negative relations ($p < .05$) with adolescent reports of child delinquency as assessed by the Youth Self-Report (Achenbach, 1991), mean $r(164) = -.19$ and significant positive relations ($p < .05$) with adolescent reports of behavioral competence as assessed with the Self-Perception Profile for Children (Harter, 1985), mean $r(164) = .19$.

Maternal-perceived influence. We measured perceived influence with a 24-item scale that assessed the degree to which mothers felt they were capable of influencing their adolescent's behavior and interests. The scale consists of two subscales with identical items, with one oriented toward current perceptions of influence and the other oriented toward anticipated influence in the next few years. Our perceived influence scale was closely based on one previously used in a large-scale longitudinal study of early adolescent development (Freedman-Doan, Arbretton, Harold, & Eccles, 1993). Sample items from each subscale include the following: "How much can you do now to get your child to accept your guidance and direction?" and "Over the next few years, how much will you be able to do to get your child to accept your guidance and direction?" Responses ranged from 1 (*very little*) to 7 (*a great deal*). Items were summed to compute a total perceived influence composite variable because the subscales were highly correlated, $r_s(164) = .71-.85$ across the three time points. Higher scores indicated greater perceptions of influence. Coefficient alpha across the three waves of data collection ranged from .95 to .96.

To provide evidence of the validity of the perceived influence scale, we correlated it with additional measures of mothers' subjective experience of parenting. These analyses suggested that the perceived influence scale demonstrated good convergent validity, as it was significantly correlated with mothers' reports of parenting efficacy (Wells-Parker, Miller, & Topping, 1990), mean $r(164) = .34$ and parenting stress (Pearlin & Schooler, 1978), mean $r(164) = -.39$.

Parenting democracy. Adolescent perceptions of maternal democracy were measured with an 18-item scale (Sturge-Apple, Gondoli, Bonds, & Salem, 2003). The scale measured the extent to which a mother demonstrated flexibility in response to adolescent concerns, used induction and rational explanations to gain compliance, and solicited adolescent involvement in decision making. The parenting democracy scale was developed after examining similar parent self-report measures (e.g., Robinson et al., 1995) and considering conceptual descriptions of democracy in parenting (e.g., Collins et al., 2002; Maccoby & Martin, 1983; Steinberg, 1990). We conceptualize democracy as a parenting dimension rather than an authoritative parenting style within a typology. Consistent with this conceptualization, our approach answers the call to investigate specific parenting practices that occur within the context of Baumrind's typology (e.g., Darling & Steinberg, 1993; Smetana, 1994) and follows previous work that has empirically identified democracy as just one of the conceptually coherent practices or dimensions of parenting that comprises the authoritative style (Robinson et al., 1995).

A sample item from our measure was "My mom will change a rule she has for me if I come up with a good reason for the change." Adolescents indicated how often their

mothers acted like each statement on a 5-point Likert-type scale ranging from 0 (*never*) to 4 (*always*). Higher scores indicated greater parenting democracy. Coefficient alpha across the 3 years of data collection ranged from .83 to .90.

To provide evidence of the validity of the parenting democracy scale, we correlated it with several other parenting measures. Parenting democracy was positively correlated ($ps < .05$) with adolescent reports of maternal warmth (Bonds, Gondoli, Sturge-Apple, & Salem, 2002), mean $r(164) = .61$, and mutuality in mother-adolescent decision making (Steinberg, Elmen, & Mounts, 1989), mean $r(164) = .18$. Parenting democracy was negatively correlated with adolescent reports of maternal psychological control (Youth Self-Report; Barber, 1996), mean $r(164) = -.41$, and maternal behavioral control (Child's Report of Parent Behavior Inventory; Barber, Olsen, & Shagle, 1994), mean $r(164) = -.23$.

RESULTS

Preliminary Analyses and Model Analysis Procedures

Descriptive statistics and correlations between the study variables are presented in Tables 1 and 2, respectively. As depicted, correlations between the model variables were statistically significant and in the expected directions. For instance, mothers' reports of their adolescents' regulated noncompliance at Time 1 (T1) were positively associated with adolescents' reports of their mothers' use of parenting democracy at Time 3 (T3).

The process of model testing included examination of relevant total-effect, full, and mediation or indirect-effect models, as is typically done in the Baron and Kenny (1986) approach. Following the guidelines for testing longitudinal mediation by Cole and Maxwell (2003), we included all variables at all time points and included all adjacent autoregressive paths for the variables. Not including adjacent autoregressive paths assumes that prior levels of the variables are unrelated to subsequent levels of the variables, which is an unlikely supposition for parenting-related variables. Furthermore, failure to include relevant paths is likely to result in biased estimates for the paths that are specified, including the hypothesized mediating pathways (Cole & Maxwell, 2003). We minimized these serious errors by including all variables measured at all time points. Our approach also allowed testing alternative models with different time orderings of

TABLE 1
Descriptive Statistics and Reliability Values for Study Variables

Variable	<i>M</i>	<i>SD</i>	Minimum	Maximum	α
Maternal reports					
Regulated noncompliance, T1	39.89	8.24	15	59	.89
Regulated noncompliance, T2	41.12	8.08	19	63	.90
Regulated noncompliance, T3	41.18	7.64	22	62	.89
Perceived influence, T1	135.66	16.34	76	168	.95
Perceived influence, T2	136.66	18.34	74	168	.96
Perceived influence, T3	135.22	17.82	84	168	.96
Adolescent reports					
Democracy, T1	50.02	9.34	21	70	.83
Democracy, T2	51.43	8.59	29	71	.84
Democracy, T3	49.69	9.98	17	69	.90

Note. $N = 166$.

TABLE 2
Intercorrelations Among Study Variables

Variable	1	2	3	4	5	6	7	8	9
Maternal reports									
1. Regulated noncompliance, T1	—	.81***	.75***	.28***	.33***	.22**	.09	.15*	.23**
2. Regulated noncompliance, T2		—	.80***	.27***	.40***	.28***	.16*	.29***	.27***
3. Regulated noncompliance, T3			—	.20*	.32***	.28***	.05	.16*	.22**
4. Perceived influence, T1				—	.74***	.74***	.13	.16*	.21**
5. Perceived influence, T2					—	.75***	.14	.23**	.31***
6. Perceived influence, T3						—	.13	.21**	.26**
Adolescent reports									
7. Democracy, T1							—	.53***	.53***
8. Democracy, T2								—	.57***
9. Democracy, T3									—

Note. $N = 166$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

the variables, thus meeting the call to test competing models, rather than simply comparing a single hypothesized model to a null model (see Fincham, Grych, & Osborne, 1994; Rutter, 1994).

We used AMOS 16.0 (Arbuckle, 2007) software to derive model estimates and evaluate model fit. We assessed the fit of the models with the chi-square statistic, the comparative fit index (CFI; Bentler, 1990), and the root mean square error of approximation (RMSEA; Steiger, 1990). According to Hu and Bentler (1999), models that yield acceptable fit to the observed data have nonsignificant ($p > .05$) chi-square values, CFIs greater than .95, and RMSEAs less than .06.

Hypothesized Mediation Model Using Mother Reports of Regulated Noncompliance and Perceived Influence and Adolescent Reports of Parenting Democracy

To begin, the total-effect model assessed the association between adolescent-regulated noncompliance at T1 and parenting democracy at T3, including all adjacent autoregressive paths for both variables. The fit of the model was good, $\chi^2(5) = 9.08$, $p = .11$, CFI = .99, RMSEA = .07, and the association between adolescent-regulated noncompliance at T1 and change in parenting democracy at T3 was positive, $\gamma = .15$, $p < .05$. We next examined a full model that included adolescent-regulated noncompliance, perceived influence, and parenting democracy measured at all three time points, including all adjacent autoregressive paths for the variables. In addition, the direct path between adolescent-regulated noncompliance at T1 and parenting democracy at T3 was included, as were the indirect paths between adolescent-regulated noncompliance, perceived influence, and parenting democracy. When the indirect paths were included, the direct path between T1 adolescent-regulated noncompliance and T3 parenting democracy was reduced from .15 to .11, and was no longer statistically significant. The model also had a good fit to the data, $\chi^2(13) = 14.43$, $p = .34$, CFI = 1.00, RMSEA = .03. We then tested a complete mediation model in which the direct path between T1 adolescent-regulated noncompliance and change in T3 parenting democracy was eliminated (Figure 2). The model had a good fit to the data, $\chi^2(14) = 17.24$, $p = .24$, CFI = 1.00, RMSEA = .04, and the indirect paths between adolescent-regulated

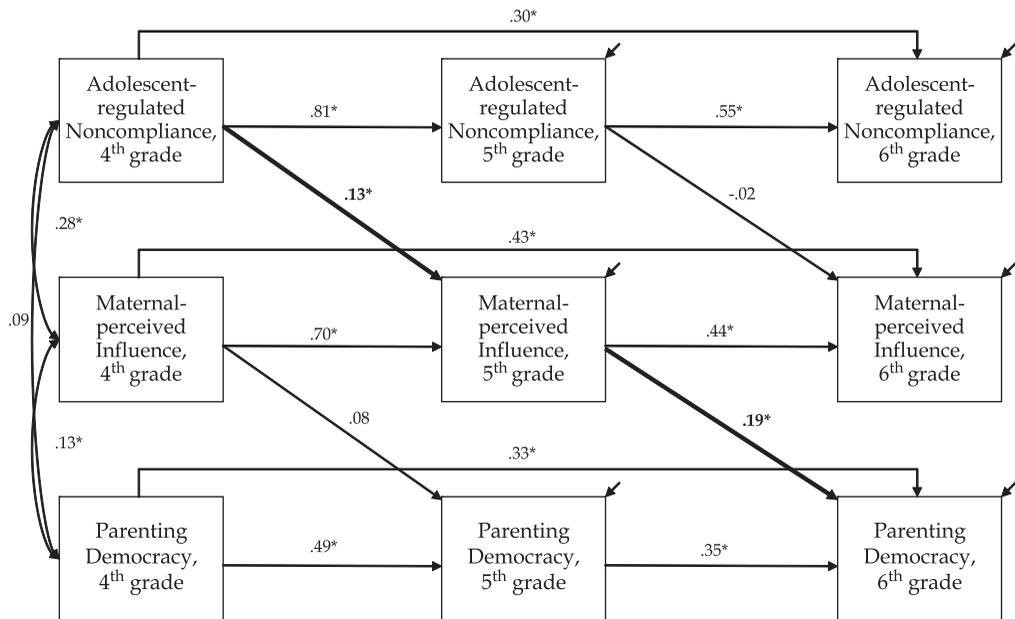


FIGURE 2

Standardized path coefficients for hypothesized model, $*p < .05$. $\chi^2(14) = 17.24$, $p = .24$, Comparative Fit Index = 1.00, Root Mean Square Error of Approximation = .04. Error variances at concurrent time points are correlated but not illustrated for presentation purposes.

noncompliance, perceived influence, and parenting democracy were positive and statistically significant. Because the mediation and full models both fit well, we compared them by conducting a chi-square difference test, $\chi^2(1, N = 166) = 2.81$, $p > .05$, indicating that the more parsimonious mediation model represented the underlying data structure as well as the full model.

Tests of the significance of and confidence limits for indirect effects based on the distribution of the product method have more accurate Type I error rates and more power than other more commonly used tests (MacKinnon, Fritz, Williams, & Lockwood, 2007; MacKinnon, Lockwood, & Williams, 2004). Therefore, we also tested the significance of the indirect effect in our mediation model using the PRODCLIN program (MacKinnon et al., 2007), in which values for the two paths involved in the indirect effect and their standard errors were entered and confidence limits generated. If the confidence interval of the indirect effect does not include zero, the mediating path is significant. For our hypothesized model, the specific indirect effect was significant, 95% CI [.00385, .06186].

Alternative Models

We also tested several alternative models. The first alternative model involved switching the time-ordering of the independent variable and the mediator. We hypothesized that T1 perceived influence led to T2 adolescent-regulated noncompliance, which, in turn, led to T3 parenting democracy. Results indicated that

the total effect between T1 perceived influence and change in T3 parenting democracy was not statistically significant, $\gamma = .11$, but that the model fit was acceptable, $\chi^2(5) = 10.29$, $p = .07$, CFI = .99, RMSEA = .08. Given that the total effect between T1 perceived influence and T3 parenting democracy was not statistically significant, we did not test a full model. However, an indirect-effect model was specified to examine the potential for T2 adolescent-regulated noncompliance to be both predicted by T1 perceived influence as well as a proximal predictor of change in T3 parenting democracy. The model had a poor fit to the data, $\chi^2(14) = 27.44$, $p = .02$, CFI = .98, RMSEA = .08. Furthermore, the path between T1 perceived influence and T2 adolescent-regulated noncompliance was not statistically significant, $\gamma = .04$, $p = .35$, nor was the path between T2 adolescent-regulated noncompliance and T3 parenting democracy, $\beta = .11$, $p = .07$.

We also tested two additional alternative models using parenting democracy at T1 as the independent variable. We began by testing the total effect between T1 parenting democracy and T3 adolescent-regulated noncompliance, including all adjacent autoregressive paths. Results indicated that T1 parenting democracy and T3 adolescent-regulated noncompliance were not directly related, $\gamma = -.07$, $p = .15$, so a full model was not explored in this case. However, we explored an indirect-effect model that linked parenting democracy to adolescent-regulated noncompliance via perceived influence. The model had a poor fit to the data, $\chi^2(14) = 30.78$, $p = .01$, CFI = .98, RMSEA = .09. In addition, the path between T1 parenting democracy and T2 perceived influence was not statistically significant, $\gamma = .02$, $p = .77$, nor was the path between T2 perceived influence and T3 adolescent-regulated noncompliance, $\beta = -.01$, $p = .89$. Next, we tested the total effect between T1 parenting democracy and T3 perceived influence. The fit of the model was poor, $\chi^2(5) = 13.28$, $p = .02$, CFI = .98, RMSEA = .08, and there was no direct relation between the variables examined, $\gamma = .02$, $p = .75$. Thus, we specified an indirect-effect model in which all adjacent autoregressive pathways were examined at all three time points. This model had a good fit to our data, $\chi^2(14) = 22.64$, $p = .07$, CFI = .99, RMSEA = .06. However, neither of the pathways of primary interest were statistically significant, as $\gamma = .08$, $p = .06$, for the path linking T1 parenting democracy and T2 adolescent-regulated noncompliance and $\beta = -.02$, $p = .72$, for the path linking T2 adolescent-regulated noncompliance and T3 perceived influence.

To summarize, our original hypothesized mediating model with T1 adolescent-regulated noncompliance leading to T2 mothers' perceived influence, and T2 mothers' perceived influence leading to change in T3 parenting democracy, was the best fitting and most parsimonious representation of our data.

DISCUSSION

In the present study, we investigated relations between adolescent-regulated noncompliance, mothers' perceived influence, and parenting democracy. Our hypothesized model was supported. Adolescent-regulated noncompliance was associated with higher levels of parenting democracy, and this effect was mediated when maternal-perceived influence was included in the model; that is, adolescent-regulated noncompliance predicted increased perceived influence, which, in turn, predicted increased parenting democracy. Although several alternative models were tested, none supported a mediating pattern or fit the data as well. We subsequently discuss the

mediating pathway in our hypothesized model, focusing, first, on the link between adolescent-regulated noncompliance and perceived influence and, second, on the link between perceived influence and parenting democracy.

Adolescent-Regulated Noncompliance and Mothers' Perceived Influence

Higher levels of adolescent-regulated noncompliance predicted higher levels of mothers' subsequent perceived influence. Our findings are consistent with literature suggesting that children's more advanced social-cognitive skills are associated with higher parenting self-perceptions (Dix et al., 2007; Silverberg & Steinberg, 1990) as well as studies indicating that children who are more emotionally reactive or less socially competent tend to have parents with lower parenting self-perceptions (Bornstein et al., 2003; Coleman & Karraker, 2000; Jackson & Huang, 2000; Teti & Gelfand, 1991). When parents encounter less success in their initiatives to direct their adolescent's behavior as a result of challenging adolescent characteristics (e.g., dysregulated emotional expressions, coercive/hostile behaviors), such negative experiences are likely to contribute to parents feeling that they have less control over their adolescent's behavior (e.g., Patterson, 1982). The present study lends support for the converse pattern, suggesting that mothers whose young adolescents resist their control in prosocial, assertive ways perceive themselves as more capable of influencing their adolescents' behavior.

There are numerous explanations for the relatively adolescent-driven association we found between adolescent-regulated noncompliance and maternal-perceived influence. Adolescent-regulated noncompliance is likely to involve a high degree of social-cognitive proficiency, reflecting an ability to keep one's emotional and behavioral reactance at a minimum, a respect for the other party's goals while feeling one's own goals have been impeded, and careful communication of one's position, likely constructed with an anticipation of how the other party will respond. Such mature, positive adolescent attributes are likely to be welcomed in the face of occasional challenges and provocations (Silverberg, 1996), especially because American parents are subject to receiving cultural messages portraying adolescence as difficult (Steinberg, 1990). Although storm-and-stress views of normative adolescence have been largely discarded, there remains a theme that parental well-being typically declines during this era (Steinberg, 2001). In contrast, our findings suggest that mothers who encounter the normative challenge of adolescent resistance may respond favorably to adolescents' calm, collected efforts to negotiate situations in which they feel impeded, gaining in positive self-perceptions over time despite the difficulties often inherent in such interactions. Thus, the challenge of parenting young adolescents may, in some instances, be growth promoting for mothers, a possibility that could be further explored in future research.

Mothers' Perceived Influence and Parenting Democracy

Turning to the second path in our hypothesized model, mothers with higher perceived influence were more likely to use democratic parenting strategies. Our results are consistent with literature revealing that mothers' positive beliefs about their effectiveness in the parenting role are among the most salient determinants of positive forms of parenting (Jones & Prinz, 2005). A number of studies have demonstrated a link between higher parenting self-perceptions (e.g., efficacy, competence) and optimal

parenting, including parental responsiveness (Gondoli & Silverberg, 1997), parental involvement and monitoring (Shumow & Lomax, 2002), parental warmth and adaptive control (Izzo, Weiss, Shanahan, & Rodriguez-Brown, 2000), and less inconsistent discipline and love withdrawal (Hill & Bush, 2001). The present study adds parenting democracy to the repertoire of parenting behaviors that may be affected by parenting self-perceptions. Perhaps mothers who feel relatively secure about their influence are more comfortable with loosening the reins without feeling like their sense of control is being meaningfully jeopardized and, consequently, are more apt to use democratic parenting practices.

Limitations and Contributions

Some limitations of this study provide direction for future efforts. First, our assessments were based on self-report data, and future studies might also include observational procedures to measure adolescent-regulated noncompliance and parenting democracy. In addition, although our longitudinal analysis provides evidence for temporal precedence, it is possible that unmeasured variables account for some degree of change in our model variables over time. For instance, maternal psychological well-being might affect the patterns of observed relations. Although this third variable problem is difficult to address in parenting research, it might be countered in parenting intervention studies that include random assignment and experimental manipulation. In addition, the effects, while consistent with our conceptual model, may, in some cases, be considered small.

We did not have a measure of the overall level of noncompliance in the sample. It may be that the associations among study variables change based on how frequently the adolescent is noncompliant. For example, adolescents who are more frequently noncompliant may be less likely to do so in a regulated way, whereas the opposite may be true for adolescents who are rarely noncompliant. It may be that mothers' perceptions of influence or use of democratic parenting strategies are affected differently on the basis of adolescents' absolute levels of noncompliance. Future work should explore these associations, taking both the quantity and quality of noncompliance into account.

Another limitation arises with respect to demographic characteristics of our sample, which consisted of primarily European American, middle-class participants from maritally intact households. Although previous research with more diverse samples has not revealed that demographic variables affect the predictors or outcomes of parenting practices (e.g., Steinberg, 2001), we acknowledge that a more heterogeneous sample would allow for generalization of our findings to a broader population.

Last, we did not include fathers or collect adolescents' reports about fathers. However, we note that prior work has often aggregated mother and father reports, as they are typically highly correlated (e.g., Galambos, Barker, & Almeida, 2003). When mother and father data have been analyzed separately, few meaningful differences in terms of reports of parenting have emerged (e.g., Galambos & Almeida, 1992; Kakihara, Tilton-Weaver, Kerr, & Stattin, 2010). Thus, our lack of father data does not necessarily mean that we missed an opportunity to find patterns specific to fathers. Furthermore, because adolescents tend to disagree over obedience and rule issues with their mothers more than their fathers (e.g., Youniss & Smollar, 1987), our focus on mothers was likely more informative for the processes under investigation. We also note that although we did not collect father reports, we did collect parenting reports from adolescents, helping to reduce mono-reporter bias in our models.

Those limitations notwithstanding, the present study makes several contributions to the literature. First, few studies have examined predictors of change in parenting democracy. To our knowledge, Persson and colleagues (2009) are the only others to examine democracy longitudinally, identifying adolescents' delinquency, defiance, and nondisclosure as democracy-undermining behaviors. Our study extends these findings by examining democracy-promoting attributes involved in a particular mediational process over time, identifying child and parent characteristics (and changes in these) that may encourage democracy.

In addition, we applied a rigorous method for assessing mediation with longitudinal data (see Cole & Maxwell, 2003). We measured our study variables at all three available time points, controlling for all prior levels of each variable as well as cross-sectional covariances. In doing so, we were able to examine change in these variables over time as well as reduce the likelihood that our model would yield biased estimates of the longitudinal relations among the variables. Importantly, this approach also allowed us to test a number of competing theoretical models, as opposed to solely comparing a single model to a null hypothesis (Rutter, 1994).

Our results suggest a relatively adolescent-driven direction of effects, illustrating that adolescents function as agents of influence in their own right and take on an active role during parenting interactions (see Kuczynski & Lollis, 2004). The early adolescent years may be an important time for child-driven behaviors to predict later parenting behaviors, both directly and indirectly through mothers' self-appraisals. Given the normative changes incurred between middle childhood and early adolescence and the need for parents to adjust continually to young adolescents' changing characteristics, child effects on parenting (i.e., how parents feel and what they do) may be more apparent and perhaps enduring during this transition. We note, of course, that a child's regulated noncompliance may be influenced by prior parent-related variables. In the context of our study, for example, parenting practices occurring prior to fourth grade and not captured by our assessment period may have affected mothers' appraisals of noncompliance. For a more complete picture, multiwave data, such as those we collected in the present project, are necessary and should be included in future efforts aimed at assessing child and parent effects on parent-child relationships.

Our results also highlight the importance of adolescents' social-cognitive and emotional regulatory skills in influencing mothers' parenting self-perceptions and practices. Encountering noncompliance is an inevitable feature of childrearing, especially during early adolescence. Despite the generally negative connotation that noncompliance carries, we found that young adolescents who use assertive, regulated forms of noncompliance tend to have mothers who feel that they are capable of influencing their adolescent's behaviors. Feeling influential, such mothers tend to exhibit the use of more flexible, democratic parenting practices. Bringing this particular process to light may ultimately benefit future intervention efforts, especially at the start of the adolescent epoch, when democracy is an especially salient predictor of healthy adjustment.

IMPLICATIONS FOR PRACTICE AND APPLICATION

Adolescent-regulated noncompliance may positively alter subjective and behavioral parenting responses, even under somewhat taxing circumstances (as it would certainly be easier if the adolescent wasn't expressing resistance in the first place). Encountering this form of resistance, mothers seem to feel more capable of influencing their

adolescent's behavior—even if they may not actually be influencing their adolescent's behavior at all—and more willing to engage in the substantial effort it takes to parent democratically. This is encouraging for future intervention efforts using community samples and may be particularly relevant to cognitive-behavioral strategies for improving parenting. Parents and adolescents may hold perceptions or behaviors in their repertoires that are favorable or detrimental for encouraging democracy. It may be beneficial, therefore, to design interventions targeted at teaching adolescents and parents how to express and respond to resistance in more optimal ways, perhaps through programs emphasizing realistic versus unrealistic cognitions, problem-solving, and communication skills (e.g., Robin & Foster, 2002). In addition, developing programs aimed at (1) educating parents on the developmental appropriateness of resistance during early adolescence, (2) elevating parental self-efficacy (e.g., Asscher et al., 2008), or (3) directly teaching parents strategies for being more democratic would also likely facilitate parents' actualization and implementation of a reasonable balance between autonomy-granting and providing necessary boundaries and support for their young adolescent.

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ACKNOWLEDGMENTS

This research was supported by grants awarded to Dawn M. Gondoli from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (1R03HD041955-01 and 5R03HD041955-02), the University of Notre Dame Graduate School, and the University of Notre Dame College of Arts and Letters.

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