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The Role of Socialization, Effortful Control, and Ego Resiliency in French Adolescents' Social Functioning

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Abstract

The relations among effortful control, ego resiliency, socialization, and social functioning were examined with a sample of 182 French adolescents (14–20 years old). Adolescents, their parents, and/or teachers completed questionnaires on these constructs. Effortful control and ego resiliency were correlated with adolescents' social functioning, especially with low externalizing and internalizing behaviors and sometimes with high peer competence. Furthermore, aspects of socialization (parenting practices more than family expressiveness) were associated with adolescents' effortful control, ego resiliency, and social functioning. Effortful control and ego resiliency mediated the relations between parental socialization and adolescents' peer competence and internalizing problems. Furthermore, effortful control mediated the relations between socialization and adolescents' externalizing behavior. Findings are discussed in terms of cultural and developmental variation.

Effortful control, ego resiliency, and parenting have been established as critical constructs related to children's adaptive social and psychological functioning. However, little is known about their relations in populations other than elementary school children in the United States. Furthermore, researchers have examined only a partial combination of these constructs, therefore incompletely modeling their relationships. In this study, these gaps are addressed by examining the relations among all of these constructs in a sample of French adolescents.

EFFORTFUL CONTROL AND SOCIAL FUNCTIONING

Self-regulation is considered by many to be rooted in temperament (Eisenberg et al., 2004; Rothbart & Bates, 2006), which implies that it has a biological basis. One of the major components of temperament is effortful control. *Effortful control* (EC), viewed as underlying voluntary self-regulation, involves the abilities to voluntarily shift and focus attention and inhibit or activate behavior as needed, even when doing so might not be the person's dominant response (Rothbart & Bates, 2006). Well-regulated individuals are expected to be high on EC because it allows them to manage their attention and behavior as needed and to be flexible in their responding and, hence, socially appropriate and well-adjusted.

The areas of the brain associated with executive attention (which is involved in EC; Rothbart & Bates, 2006) and overall regulatory skills continue to mature throughout adolescence (Collins & Steinberg, 2006; Keating, 2004; Zeman, Cassano, Perry-Parrish, & Stegall, 2006). Furthermore, adolescents, in comparison to children, experience higher intensity of affect as well as changes in their interpersonal and social context and,

consequently, need to adjust to new experiences (Collins & Steinberg, 2006). Thus, adolescence is a relevant time to study self-regulation.

Consistent with conceptual expectations, many investigators have reported that unregulated children exhibit more externalizing and/or internalizing problems than their better regulated peers (e.g., Eisenberg et al., 2004; Mezzacappa, Kindlon, & Earls, 1999; Olson, Schilling, & Bates, 1999). Furthermore, regulation has been positively related with social competence (Raver, Blackburn, Bancroft, & Torp, 1999) and social status with peers (Eisenberg et al., 2003; Spinrad et al., 2006).

Although most studies have been conducted in the United States, some researchers have investigated self-regulation in other cultures. It appears that although there might be differences in the mean level of self-regulation across some cultures, it is adaptive in a range of cultures (Hofer & Eisenberg, 2008; Mesquita & Albert, 2007). In fact, relations between regulatory capacities and high-quality social functioning or low levels of problem behaviors have been reported in Indonesia (Eisenberg, Liew, & Pidada, 2001), China (Chang, Schwartz, Dodge, & McBride-Chang, 2003; Eisenberg et al., 2007; Zhou, Eisenberg, Wang, & Reiser, 2004), Sweden (Hagekull & Bohlin, 2004), Australia (Prior, Smart, Sanson, & Oberklaid, 2001), and Germany (Oldehinkel, Hartman, Ferdinand, Verhulst, & Ormel, 2007). In France, Bréjard, Bonnet, and Pedinielli (2005) found that youths with lower emotional awareness were relatively likely to engage in risk-taking behaviors, which is considered a rough index or correlate of low regulation.

Ego Resiliency

Ego-resilient individuals are, by definition, flexible in their use of control in response to the environment (Block & Block, 1980). Ego resiliency is viewed as a component of personality (Block & Block, 1980; Caspi, 1998), and it has been argued that temperamentally based EC or related executive functioning contributes to its development (Eisenberg et al., 2004; Martel et al., 2007). Ego resiliency can be differentiated from EC and aspects of self-regulation based on EC in that it refers to reactions to, and degree or quality of coping with, stress and emotion, whereas EC refers to a general dispositional tendency to willfully use certain processes or capacities (e.g., voluntarily managed attention, the capacities to voluntarily inhibit and activate behavior, and planning) for regulatory purposes. Because EC can be voluntarily controlled by the individual, it provides skills that can be used to adapt in a flexible manner. EC develops rapidly in the early years of life (Rothbart & Bates, 2006), and early temperament generally is viewed as contributing to personality traits (Caspi, 1998); thus, EC might be expected to provide skills needed for ego resiliency.

Consistent with the argument that EC predicts ego resiliency, ego resiliency has been found to mediate the relation between children's EC and social competence or internalizing problems (Eisenberg et al., 2004; Spinrad et al., 2006). Children high in EC are expected to rebound in stressful situations, resulting in socially competent behavior and fewer internalizing problems. However, ego resiliency usually has not been found to mediate the relations between EC and externalizing problems (Eisenberg et al., 2000, 2004). Moreover, Martel et al. (2007) found that although ego resiliency was a predictor of internalizing problems and social competence, it was not a predictor of externalizing, whereas an aspect of executive functioning, which is involved in EC, was a predictor. Children who display externalizing problems tend to be more impulsive, spontaneous children, which might make them appear somewhat more resilient than they really are when dealing with stressful situation.

Socialization

A variety of parenting practices and behaviors have been associated with social and psychological benefits for adolescents. Barber (1997) discussed three that are especially relevant during adolescence. One is *connections* with significant others, because they enable children to develop social skills and to feel that the world is secure, safe, and predictable. Connections may also foster internalization of socializers' expectations for regulation. Furthermore, supportive parenting often involves modeling of regulation and likely helps children to modulate their emotional arousal and learn in disciplinary situations (see Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002). Second, supervision, monitoring, rule setting, and other forms of *behavioral control* are believed to be necessary for the learning of self-regulation, whereas a lack of parental regulation of behavior is hypothesized to increase adolescents' impulsivity, risk taking, and antisocial behavior. Finally, *psychological control* is a form of parenting that is intrusive and manipulates children's psychological self such that the individual's autonomy and independence are compromised (Barber, 1996). Psychological control predicts internalizing problems and sometimes externalizing problems (Barber, Stolz, & Olsen, 2005; Pettit, Laird, Dodge, Bates, & Criss, 2001; Steinberg, 2001). Adolescents whose parents use practices such as psychological control (Barber, 1996) likely induce emotional overarousal in adolescents, which may lead to inadequate emotion regulation and maladjustment (Gottman, Katz, & Hooven, 1997).

Families' verbal and nonverbal expressivity (family expressiveness [FE]) are other aspects of parenting that have been related to children's positive expressivity, social competence, and regulation of negative emotions (Halberstadt, Crisp, & Eaton, 1999). Positive, negative submissive, and negative dominant are the three styles of expressivity typically measured. Adolescents in a negative emotional climate are relatively unlikely to regulate their feeling states competently and tend to display inappropriate negative emotions, which likely contribute to social and psychological problems (Eisenberg, Cumberland, & Spinrad, 1998; Halberstadt et al., 1999; Valiente et al., 2006). Through modeling, they may learn to express negative emotions rather than regulate them. Although Halberstadt et al. (1999) suggested that submissive, softer negative emotions (e.g., disappointment, feeling sorry, crying) might actually foster learning about emotions, harsh, dominant negative parental emotion (e.g., anger) may overly arouse the child and undermine both learning relevant to regulation and the motivation to internalize adults' expectations in regard to self-regulation. In contrast, children exposed to positive FE are relatively likely to display positive emotions, regulate their feelings, and therefore act in a socially competent manner (Halberstadt et al., 1999; Valiente et al., 2006).

The effects of parental socialization on children's socioemotional functioning may be mediated by EC and ego resiliency; such a mediated relation has been tested and found for EC in studies of children and preadolescents/early adolescents (Brody & Ge, 2001; Eisenberg et al., 2005; Valiente et al., 2006; Zhou et al., 2004), but not for ego resiliency. Given relations between quality of parenting and quality of coping (Power, 2004) and the fact that high EC children tend to be more resilient, we expected a doubly mediated path from parenting → EC → ego resiliency → social competence and maladjustment.

Socialization in France

French parents have two goals that might appear somewhat conflicting and, yet, cohabit peacefully (Suizzo, 2004). On one hand, French parents want their children to be autonomous and, on the other, they want their children to be compliant, conform to group values, and be "bien élevés" (well-raised; Suizzo, 2002; Suizzo & Bornstein, 2006). As part of their goal for autonomy, French parents encourage social and cognitive stimulation (Suizzo, 2002) and desire their children to be alert, curious, and attentive (Suizzo &

Bornstein, 2006). As part of their second goal, French parents value closeness, interdependence, and respect: Physical contact is short but frequent, verbal communication is important, and parents emphasize teaching proper table manners and educating their children's palates (Suizzo & Bornstein, 2006). However, in comparison to U.S. mothers, French mothers rated themselves as less sensitive, affectionate, and didactic and less likely to emphasize limit setting (i.e., importance of rules and respect for authority; Bornstein et al., 1996). Similarly, French adolescents rated both their emotional bond with their parents and the degree of parental supervision they experienced lower than Canadian or Italian adolescents (Claes, Lacourse, Bouchard, & Perucchini, 2003). Furthermore, French mothers rated themselves as having a low investment in parenting and did not think that their parenting practices had much influence on their child's development (Bornstein et al., 1992), in contrast to American mothers, who were highly invested in parenting and believed they were competent and their abilities as a parent counted (Bornstein et al., 1998).

Although French parents value affection and close relationships, they are concerned with the self-control of emotions and do not wish for too much closeness (Suizzo, 2002). Therefore, it is possible that in France, control of emotions is more valued than in the United States. French mothers appear to value control more than German mothers (Albert, Trommsdorff, & Sabatier, 2005). However, French families tend to be less nuclear than in North America, especially during adolescence (e.g., Canada; Claes, Lacourse, Bouchard, & Luckow, 2001; Sabatier & Lannegrand-Willems, 2005). It is therefore possible that French children learn about emotions, display rules, and emotion regulation strategies from many people in complementary ways.

Although there might be differences in socialization practices, whether those differences affect the relations between socialization and its correlates in France is unknown. Hofer and Eisenberg (2008) concluded from currently available studies that despite cultural differences in the socialization of emotion, the relations between socialization of emotion and emotion-related regulation are generally, albeit not always, similar. For example, similar to the United States, low regulation was associated with harsh parenting in Chinese kindergarteners (Chang et al., 2003) and high negative parental emotional expressivity was related to low EC in Indonesian children (Eisenberg et al., 2001). Furthermore, Zimmermann (1999) reported that 16-year-old German adolescents' secure attachment was positively related with their adaptive emotion regulation.

The Present Study

There were two main goals to this study. The first goal was to investigate whether the relations among socialization, EC, ego resiliency, and socio-emotional functioning in a sample of older French adolescents were similar to those in studies with North American children and young adolescents. Based on previous findings with children, mostly in the United States, adolescents' EC and ego resiliency were predicted to relate positively with social competence and negatively with externalizing and internalizing problems. We also expected that despite some possible cultural differences in socialization, the relations between the constructs observed in other Western countries would be obtained in our French sample. Partly because French parents appear to value a connection and close relationship with their child and want their children to be socially competent, it was predicted that high connection, monitoring and positive FE, and low psychological control and negative FE (especially dominant FE) would relate positively with social competence and negatively with externalizing and internalizing problems. If the findings in this study were to differ from those found with U.S. participants, it was expected that the relations with parenting variables would be slightly lower, because it appears that French parents do not view their parenting behavior as influential as do U.S. parents. However, most of the studies on

parenting in France have been focused on younger children, and their findings do not necessarily generalize to parental attitudes toward adolescents.

The second goal was to investigate the mediating role of both EC and ego resiliency between socialization variables and adolescents' maladjustment and social competence. To our knowledge, no one has tested this doubly mediated pathway. Based on theory and research reviewed earlier that has found that EC mediates the relations between socialization and all three aspects of social functioning assessed in this study and that ego resiliency mediates the relations between EC and peer competence and internalizing behaviors, we hypothesized the relations in the model in Figure 1.

METHOD

Participants

Participants were 182 adolescents recruited from three high schools in Grenoble, France in the equivalent of the 10th, 11th, or 12th grade. Data were from 179 of the 182 adolescents (M age = 16.69 years, range = 14–20 years old; two older students were removed from the analyses), and 138 parents (125 mothers, 13 fathers), and teachers filled in information on 178 adolescents; 134 adolescents had data from all three reporters.¹ Information on sex was available for 180 participants; 90 were girls (M age = 16.44) and 90 were boys (M age = 16.93).

Thirteen classrooms participated, with a range of 4–22 students per class. One of the high schools was located in downtown Grenoble (12.6% of the sample) and two were located in suburbia (40.7% and 46.7% of the sample). Two of the schools offered technical as well as nontechnical paths (literacy, scientific, and economic); the third offered only the latter. The teachers who participated were volunteers who generally had a stronger knowledge of the students because they were often “professeur principale,” which meant that they were the link between the parents and all the other teachers of the students in that classroom. Some teachers were not “professeur principale” but were motivated volunteer teachers. Parents were asked to provide data on their ethnicity and income. However, the French are very sensitive about providing this information. These requests are often viewed as an intrusion into their private life and a possible way to discriminate against people from certain ethnic or socioeconomic groups. As a result, only 99 parents provided information on their income (see Table 1). As reported by 138 parents, 94.2% of the adolescents were Caucasian. However, this percentage is likely inflated due to the issues that parents had with the question. Other demographic information can be seen in Table 1.

Procedure

All the questionnaires were translated by a bilingual person and back translated by another person. The Youth Self Report (YSR; Achenbach, 1991) was the only questionnaire already available in French, with subscales shown to be comparable to the United States (see Berg, Fombonne, McGuire, & Verhulst, 1997, for a comparison with the CBCL). Questionnaires

¹Of the 48 adolescents who did not have data from all three reporters, 42 had adolescent and teacher reports, 1 had parent and teacher reports, 2 had adolescent and parent reports, 1 had only adolescent report, 1 had only teacher report, and 1 had only parent report. To test whether the participants with data from all reporters differed from the participants with incomplete data, three MANOVAs were conducted on the variables measured in this study: (1) with parent reports of EC, resiliency, peer competence, internalizing problems, externalizing problems, and all three parenting variables, (2) with adolescent reports of EC, peer competence, internalizing problems, externalizing problems, all three family expressiveness variables, and all three parenting variables, and (3) with teacher reports of EC, resiliency, externalizing problems, and peer competence. None of the multivariate tests was significant and only one univariate test was significant (parent report of externalizing behaviors was higher for participants with incomplete data, $F(1, 133) = 4.52, p = .035$), which is lower than expected by chance (22 univariate tests, only 1 significant). Therefore, the participants with missing data did not differ from the participants with data from all three reporters.

were distributed to the adolescents after obtaining consent forms from both adolescents and their parents. Adolescents filled out the questionnaires during one of their class periods. A parent packet was given to the students to take to their mother (or father if the mother was not available).

Measures

Measures assessed parenting, adolescents' EC, ego resiliency, and social functioning.

Effortful control

Attentional focusing: Parents and teachers rated (1 = *extremely untrue*; 7 = *extremely true*) adolescents' attention focusing (Child Behavior Questionnaire [CBQ]; Rothbart, Ahadi, & Hershey, 1994; e.g., "my child will move from one activity to another without completing any of them" [reversed item], α s and number of items for parents and teachers = .77 [10 items] and .89 [9 items], respectively).² One item in the parent version was slightly changed to make it appropriate for the age of the participants (the item "when picking up toys, usually keeps at the task until it's done" was changed to "when doing other jobs, usually keeps at the task until it's done"), and one additional item in the teacher version was deleted because it was unlikely that teachers would be able to rate adolescents on it (sometimes becomes absorbed in a book and reads it for a long time).

Adolescents rated (1 = *very false*; 5 = *very true*) 8 items from the attention subscale from the Early Adolescent Temperament Questionnaire (EATQ; Capaldi & Rothbart, 1992; e.g., "It is easy for me to really concentrate on a problem"), which taps attention focusing and shifting, as well as 1 item from the attention shifting and 2 items from the attention focusing subscales of the CBQ, designed for children (Rothbart, Ahadi, Hershey, & Fisher, 2001; α = .60 for 11 items). This questionnaire was adapted by N. Eisenberg and colleagues (unpublished data) from its original version by adding a few questions from the CBQ to increase the EATQ subscale's reliability. One additional EATQ item (when concentrating on some things, it is difficult to get my attention) was removed because of low internal consistency when retained (α = .49).

Inhibitory control: Parents and teachers rated (1 = *extremely untrue*; 7 = *extremely true*) adolescents' inhibitory control on 12 (α = .71) and 8 items (α = .76), respectively, with the CBQ inhibitory control subscale (Rothbart et al., 1994; e.g., "my child can lower his/her voice when asked to do so"). Four items were not included in the teacher version because researchers have found that many teachers omitted them (e.g., Eisenberg et al., 2005). A few items in each version were adapted slightly so that they would be age-appropriate (mostly dropping examples that often referred to activities for younger children).

Attention focusing and inhibitory control were correlated, $r(134, 153) = .43$ and $.71$, $ps < .001$, respectively, for parents' and teachers' reports. Both subscales were standardized and averaged to form the EC composite (but standardized indices were not used in the models).

²Parents and teachers also rated adolescents on attention shifting (e.g., "my child can easily shift from one activity to another," α s and number of items for parents and teachers = .69 [9 items] and .86 [9 items], respectively) using subscales from the CBQ (Rothbart, Ahadi, & Hershey, 1994). The correlations among attention shifting, focusing, and inhibitory control were not all in the expected direction (e.g., attention shifting and focusing were negatively correlated for parent reports, $r(134) = -.16$, $p < .10$) and in a principal component factor analysis with varimax rotation, attention shifting loaded separately from the other two variables for parents' report. Sometimes attention shifting has not been included as an indicator of EC (Rothbart et al., 2001; see Rothbart & Bates, 2006), and this scale was dropped.

Adolescents' social functioning

Peer competence: Parents and teachers rated (1 = *really false*; 4 = *really true*) children's peer competence using a three-item questionnaire adapted by Eisenberg et al. (1995) from Harter's (1979) Perceived Competence Scale for Children (e.g., "my child finds it hard to make friends"; α s = .69 and .85, respectively).

Adolescents rated (0 = *not true*; 2 = *very true or often true*) their social problems on a subscale of the YSR (Achenbach, 1991; e.g., "I do not get along with other kids"; 7 items). The internal consistency of this full scale was not acceptable (α = .48), and only two of the items tapped peer competence. Therefore, the other items were dropped and only the peer competence items were used (α on the two peer competence items = .65).

Externalizing problem behavior: Parents and teachers rated (1 = *never*; 4 = *often*) externalizing problems with the Child Behavior Checklist (CBC; Lochman and the Conduct Problems Prevention Research Group, 1995; e.g., "argues," "lies"; α s = .87 (23 items) and .85 (21 items), respectively, for parents and teachers). To limit overlap of the items of this scale with the temperament scales, one item that was rated by experts in a prior study as reflecting temperament more than adjustment was removed from the original parent and teacher versions: "easily upset, annoyed, or irritated" (see Eisenberg et al., 2004, for details). Two additional items were not included in the teachers' version because teachers would be unlikely to be able to answer them (i.e., "cruel to animals" and "starts fires").

Adolescents rated (0 = *not true*; 2 = *very true or often true*) the degree to which they engaged in delinquent behavior (e.g., "I steal from places other than home"; 11 items, α = .65) and aggressive behavior (e.g., "I have a hot temper"; 18 items, α = .72) using subscales of the YSR (Achenbach, 1991), an adolescent-report version of the Child Behavior Checklist (CBCL; Achenbach, 1991). Two items rated by experts as temperament more than externalizing problems were dropped from the aggressive behavior composite (i.e., "I am louder than other kids" and "I talk too much"; see Eisenberg et al., 2004). The two scales were correlated, $r(177) = .47$, $p < .001$, and a composite was formed by averaging the scores on the items from the subscales (α = .79 for 29 items).

Internalizing problem behavior: Parents also evaluated (0 = *not true*; 2 = *very or often true*) adolescents on internalizing problem behavior (especially anxiety-related behavior) with a questionnaire derived and adapted from Achenbach's Child Behavior Checklist (Kendall, Henin, MacDonald, & Treadwell, 1998; e.g., "too fearful or anxious"; α = .82, 14 items). Teachers did not complete this questionnaire because the items seemed difficult for high school teachers to assess and also because we had to limit the number of questionnaires completed by them. To avoid overlap of this scale with temperament scales and based on expert ratings obtained by Eisenberg et al. (2004), two items were dropped from the internalizing behaviors composite: "shy or timid" and "self-conscious or easily embarrassed."

Adolescents rated (0 = *not true*; 2 = *very or often true*) the degree to which they are withdrawn (e.g., "I keep from getting involved with others"; 3 items; α = .56), have somatic complaints (e.g., "I feel overtired"; 9 items; α = .71), and are anxious and/or depressed (e.g., "I am unhappy, sad, or depressed"; 15 items; α = .85) using subscales from the YSR (Achenbach, 1991). To avoid confounding with temperament scales (see Eisenberg et al., 2004, for details), one item was removed from the original anxious/depressed subscale (I am self-conscious or easily embarrassed), and three items were dropped from the withdrawn subscale (I don't have much energy, I am shy, and I would rather be alone than with others). Anxiety correlated with somatic complaints and social withdrawal, $r(174, 177) = .39$ and .48, $ps < .001$, respectively, but somatic complaints was not correlated with withdrawn,

$r(174) = .06, ns$. As is typical with the YSR, an aggregate composite of internalizing problems was created by taking the average of all the items from the three subscales ($\alpha = .86$, 27 items).

Ego resiliency—Parents and teachers rated (1 = *most undescriptive*; 9 = *most descriptive*) adolescents' resourceful adaptation to changing situations (i.e., ego resilience; e.g., "can bounce back or recover after a stressful or bad experience"; 11 items; $\alpha s = .79$ for parents and $.89$ for teachers) from items from a measure originally derived from Block and Block's Q-sort (Block & Block, 1980). Experts' ratings were used initially to select items (among those rated by clinicians as tapping ego resilience) that did not tap adjustment, social competence, or simply emotionality (see Eisenberg, Fabes, Guthrie, et al., 1996) and then the measure was further refined based on 10 experts' ratings to eliminate items overlapping with other related constructs (Cumberland-Li, Eisenberg, & Reiser, 2004). The 11-item version used by Eisenberg et al. (2003) was administered in this study.

Socialization

Family expressiveness questionnaire (FEQ): Adolescents rated (1 = *not at all frequent in my family*; 9 = *very frequent in my family*) the positive (e.g., "thanking family members for something they have done"; 19 items; $\alpha = .89$), negative submissive (e.g., "crying after an unpleasant disagreement"; 10 items; $\alpha = .71$), and negative dominant (e.g., "quarreling with a family member"; 11 items; $\alpha = .78$) expressiveness of their entire family with the FEQ (Halberstadt, 1986). The original version had 20, 10, and 10 items, respectively, for positive, negative dominant, and negative submissive FE. In the study, we modified the subscales slightly based on more recent analyses by Halberstadt, Cassidy, Stifter, Parke, and Fox (1995) that showed a slightly different arrangement of the items based on factor analysis (Halberstadt et al., 1995, see footnote, p. 99).

Connection, monitoring, and psychological control: Parents and adolescents rated the participating parent in regard to three dimensions of parenting: connection with the adolescent (see Barber & Olsen, 1997; e.g., "my mother/father makes me feel better after talking over my worries with her/him"; rated from 1 = *not like her/him/me* to 3 = *a lot like her/him/me*; 10 items; $\alpha s = .87$ and $.80$ for adolescents and parents), parents' monitoring (behavioral regulation) of the adolescent (Brown, Mounts, Lamborn, & Steinberg, 1993; see Barber & Olsen, 1997; e.g., "how much does your parent/do you really know/s who your friends are?"; rated from 1 = *doesn't know* to 3 = *knows a lot*; 5 items; $\alpha s = .79$ and $.74$ for adolescents and parents), and parents' psychological control (Barber, 1996; e.g., "change/s the subject whenever I/she/he have/s something to say"; rated from 1 = *not like her/him/me* to 3 = *a lot like her/him/me*; 8 items; $\alpha s = .75$ and $.63$ for adolescents and parents).

RESULTS

Descriptive Analyses

Means, standard deviations, and the type of transformation used to handle variables that were skewed (using the guidelines from Tabachnick & Fidell, 2001) are presented in Table 2.

Relations with the order of the questionnaires—There were two counterbalanced orders for the questionnaires. Three MANOVAs were computed for adolescent-, parent-, and teacher-reported variables with order as the independent variable. None of the multivariate or univariate effects was significant.

Relations with sex—To assess the relation of adolescents' sex to the key variables, separate MANOVAs were conducted for parent-, teacher-, and adolescent-reported variables. Multivariate effects for sex were significant for all three, $F_s(8, 124; 4, 147; 10, 158) = 3.28, 3.10, \text{ and } 5.32, p = .002, .02, \text{ and } .001$, respectively. Based on univariate tests, parents rated girls higher than boys on EC and internalizing problems and reported using more psychological control with girls, $F(1, 131) = 4.74, 7.76, \text{ and } 6.15, p_s = .03, .01, \text{ and } .01$. Teachers rated girls higher on EC, $F(1, 150) = 6.23, p = .01$, and lower on externalizing problems, $F(1, 150) = 6.87, p = .01$. Adolescent girls rated themselves higher than boys on internalizing problems, $F(1, 167) = 21.38, p = .001$, and rated their families higher on positive and negative submissive expressivity, $F_s(1, 167) = 12.21 \text{ and } 11.85, p_s < .001$, respectively.

Correlational Analyses

In order to address our first goal, zero-order correlations and partial correlations controlling age and sex were initially used to examine relations among the variables. The two sets of results were similar; thus, only the former are presented. Sex differences in correlations are noted in the tables.

Relations of measures of social functioning to EC and ego resiliency—The few correlations between EC and peer competence were inconsistent (see Table 3). Reports of EC generally correlated negatively with externalizing problem behaviors. Parent- and adolescent-rated EC were negatively related to internalizing problems. In contrast, boys' internalizing problems were positively related to teacher-reported EC (see Table 3). Adolescents' ego resiliency tended to relate to higher peer competence (within and sometimes across reporters), fewer adult-reported externalizing problems (within-reporter), and fewer internalizing problems (primarily for parents' reports of ego resiliency).

Relations of FE and parenting to EC, ego resiliency, and adjustment—There were a number of near significant or significant relations between parents' and adolescents' (but not teachers') reports of EC and parenting, all consistent with expectations (see Table 4). Teacher-reported ego resiliency was related to parents' reports of monitoring and low psychological control for boys. Parent-reported ego resiliency was correlated with parent- and adolescent-reported high connection and low parental psychological control (see Table 4).

In general, measures of adolescents' peer competence, especially as self-reported, were related to high parental connection and monitoring, low psychological control, and low dominant negative affect (although the overall number of findings was modest). High levels of externalizing problems were related with low levels of positive FE and positive parenting and high psychological control (see Table 4). Similarly, internalizing problems, especially as reported by adolescents, tended to be associated with high parental negative emotionality and psychological control and low levels of positive parenting.

Structural Equation Modeling (SEM)

We tested our second hypothesis within the SEM framework because it allowed us to test the hypothesized mediational model and use multiple indicators to model overall relations among the constructs. In Mplus 4.2 (Muthén & Muthén, 1998–2006), we used maximum likelihood estimation for parameters, using all available data. In this study, there was only one method of measurement (i.e., questionnaires), and the same three reporters provided measurements for several constructs. Therefore, some variance unexplained by the latent constructs (error variance) likely correlates within reporters (Kenny & Kashy, 1992). Indeed, we often correlated the errors of the indicators from the same reporter when

indicated by modification indices, for example, parents' report of children's externalizing problems and social competence. The original scale scores before transformation were used in the analyses.

Confirmatory factor analysis—We first conducted a confirmatory factor analysis to ensure the unidimensionality of each of the latent variables in the model. A seven-factor model was hypothesized: (1) adolescents' EC, indicated by parents', teachers', and adolescents' reports; (2) positive parenting, indicated by parents' and adolescents' reports of connection and monitoring and by adolescents' reports of positive FE; (3) negative parenting, indicated by parents' and adolescents' reports of psychological control and by adolescents' reports of negative submissive and negative dominant FE; (4) adolescents' ego resiliency, indicated by parents' and teachers' reports; (5) adolescents' peer competence, indicated by parents', teachers', and adolescents' reports; (6) adolescents' externalizing behaviors, indicated by parents', teachers', and adolescents' reports; and (7) adolescents' internalizing behaviors, indicated by parents' and adolescents' reports. The model fit the data fairly well, $\chi^2(160, N = 182) = 214.33, p = .003$, CFI = .95, RMSEA = .043 (confidence interval [90% CI] = .026–.058), SRMR = .08. All the indicators loaded significantly on their factors.

Mediational model—Mplus was used to estimate indirect (mediated) relations. In addition to testing the hypothesized model in the traditional way, we tested the model using a bias-corrected bootstrapping method offered in Mplus 4.2 (recommended when testing mediation with samples smaller than 400; McCartney, Burchinal, & Bub, 2006). This method was used to estimate 95% and 99% CI for the parameter estimates. This method takes into account the nonnormality of the parameter estimate distribution so the CIs obtained are not necessarily symmetrical (MacKinnon, Lockwood, & Williams, 2004; Muthén & Muthén, 1998–2006).

Within the traditional approach, after adding the same within-reporter correlated errors as in the CFA, the fit of the model was fairly good, $\chi^2(171, N = 182) = 239.41, p < .001$, CFI = .94, RMSEA = .047 (90% CI = .03–.06), SRMR = .08. As can be seen in Figure 2, all factor loadings and paths were significant. We then drew 1,000 samples to estimate the bias-corrected bootstrap standard errors and obtain CIs for the estimates. Using this method, all indicators loaded significantly on their factors, and all paths were significant and in the same direction as previously reported in Figure 2. Furthermore, all mediational paths were significant at the .01 level, that is, none of the 99% CIs for the indirect effects contained the value 0. Positive parenting predicted higher EC, which in turn predicted fewer externalizing problems, 99% CI = $-.40$ to $(-.03)$. Positive parenting predicted higher EC, which predicted higher ego resiliency, which in turn predicted higher peer competence and fewer internalizing problems, 99% CIs = $.02$ – $.30$ and $-.20$ to $(-.02)$, respectively. Negative parenting predicted lower EC, which in turn predicted more externalizing problems, 99% CI = $.03$ – $.36$. Finally, negative parenting predicted lower EC, which predicted lower ego resiliency, which in turn predicted more internalizing problems and lower peer competence, 99% CIs = $-.44$ to $(-.04)$ and $.02$ – $.33$, respectively.

Alternative models—Although the hypothesized model with mediation was supported, it is likely that equivalent or alternative models exist (MacCallum, Wegener, Uchino, & Fabrigar, 1993; Tomarken & Waller, 2003). We tested two alternative models. First, because it is possible that children's EC and ego resiliency also affect the quality of parenting (Eisenberg et al., 1998), we modeled EC and ego resiliency predicting parenting, which in turn predicted all three outcomes. This model fit adequately, $\chi^2(166, N = 166) = 248.25, p < .001$, CFI = .92, RMSEA = .052 (90% CI = $.04$ – $.07$), SRMR = .08. However, neither EC

nor ego resiliency even nearly significantly predicted positive or negative parenting. Furthermore, parenting predicted only some of the outcomes.

Second, we tested a model in which we removed the direct path between EC and externalizing problems and added a path between ego resiliency and externalizing problems. This model did not run properly (i.e., error messages appeared), and the highest modification index suggested a path between EC and ego resiliency.

Moderation by sex and age—The Box's M test was used to test whether the variance and covariance matrices differed across boys and girls or between younger and older adolescents (age was split around the median). The covariance matrices did not differ significantly for boys and girls, or for older and younger adolescents, when we tested all variables involved in the study at once or separated them by reporters to increase the *N* available for the test. Thus, there was no evidence that sex or age moderated the pattern of findings.

DISCUSSION

The findings of this study highlight the cross-national importance of parenting, EC, and ego resiliency for adolescents' adjustment. In our SEM analyses, ego resiliency directly predicted higher peer competence and lower internalizing problems and mediated the relations between EC and both peer competence and internalizing problems. In addition, EC directly predicted lower externalizing problems. These results are generally consistent with what has been found for younger children (Eisenberg et al., 2003, 2004), despite the new situations to which adolescents need to adapt and the likely increase in intensity of affect as youth move into adolescence (Collins & Steinberg, 2006). Because regulatory skills develop into adolescence (Collins & Steinberg, 2006), they may continue to contribute to adolescents' abilities to modulate their behavior and reactions to stressful events, both of which would be expected to affect the quality of social and psychological functioning. These results suggest that programs designed to prevent both internalizing and externalizing problems might focus both on teaching adolescents methods to rebound in stressful situations (ego resiliency) and on methods to increase attentional focusing and the ability to inhibit behaviors as needed (EC). We cannot determine whether the pattern of findings in adolescence was set in childhood and stable into adolescence (or was still emerging); thus, it will be important in future work to determine whether interventions of this sort can still be effective in adolescence.

The results also supported the hypothesis that EC and ego resiliency mediated the relations between parenting and social functioning (i.e., internalizing problems and peer competence; see Figure 2). This is the first study, to our knowledge, in which both EC and ego resiliency have been investigated as mediators simultaneously or in adolescence. Future studies should continue to investigate these more complex processes as well as examine other potential mediators. Although adolescence is a time of change (biological, social, emotional, and cognitive), the processes involved in the relations between socialization and social functioning appear similar to those identified in childhood and consistent with Eisenberg et al.'s (1998) model in which parenting was hypothesized to affect a host of developmental outcomes through its effects on EC. Furthermore, although peer influences become increasingly important at adolescence (Collins & Steinberg, 2006), the findings support the view that parental socialization is still relevant for adolescents' social and emotional development.

The percent variance explained by the latent constructs (R^2) was often high, indicating that our predictors are potentially influential for adolescents' social and emotional development.

This is a critical finding for parents, researchers designing prevention and intervention programs, and practitioners working with teenagers. The variance in EC accounted for by parenting is substantial, suggesting that parents matter at adolescence and should be involved when addressing adolescents' emotional and behavioral problems. However, there is a need to identify the degree to which changes in parenting as late as adolescence can have effects on children's regulation, ego resiliency, and adjustment. Researchers in the field of parenting, peer relationship, and education should come together to comprehensively assess the influences of parents, peers, and teachers at adolescence. These influences might vary depending on the context and the population. Therefore, intervention and prevention programs might have to become more tailored to the specific needs of the child or population.

Adolescents' perceptions of their parents' practices had somewhat higher loadings than parents' reports of parenting on the latent parenting constructs, especially in regard to psychological control (which may be the harshest measure). One possibility is that adolescents' perceptions matter more than parents' when predicting youths' developmental outcomes. Neiderhiser, Pike, Hetherington, and Reiss (1998) showed that children who perceived their parents as hostile (even if not accurate) were more likely to be antisocial or depressed. Adolescents who perceive a stronger connection with and monitoring from their parents will likely reciprocate with increased closeness and disclosure. Voluntary disclosure has recently been recognized as an important source of parental knowledge (see Smetana, 2008). If youths feel connections with their parent, they might voluntarily provide more information, which would be expected to reduce behavioral problems (Smetana, 2008).

It is also possible that adolescents' reports are more accurate than parental self-reports and parents might underrate their psychological control. In this study, the mean for adolescents' reports was significantly higher than for parents' reports, $t(129) = -2.03, p = .044$, suggesting that adolescents' reports of parenting may be especially valuable in predicting their adjustment.

Of course, it is possible that children's EC and ego resiliency also affect the quality of parenting (see Eisenberg et al., 1998). However, the alternative model in which EC and ego resiliency predicted parenting, which in turn predicted all three outcomes, did not explain the relations among the variables as well as the hypothesized model. Although causality cannot be proved with our data, it is notable that the relations were stronger in the hypothesized direction. Of course, with a larger sample and a longitudinal study, one might find evidence of bidirectional effects across time. Parenting has been predicted by youths' EC and ego resiliency in some studies (e.g., Eisenberg et al., 2008).

The standardized estimates in the SEM model were sometimes large, especially for relations between ego resiliency and internalizing problems, but also between EC and externalizing problems. Although this may raise concerns of discriminant validity—distinctiveness of scales—we have reasons to believe that these are all distinct constructs. First, when we tried to run both a CFA and the actual mediation model with the indicators of internalizing problems and ego resiliency on one factor, the models did not converge. Second, the zero-order correlations were not excessively high among these constructs. Moreover, internalizing problems, externalizing problems, ego resiliency, and EC have been measured extensively in the field and used as separate constructs (e.g., Eisenberg et al., 2004; Huey & Weisz, 1997; Martel et al., 2007). Furthermore, it is often the case that within-reporter zero-order correlations of different constructs are larger than between-reporter correlations of the same construct. This was the case, for example, in both the Huey and Weisz (1997) and the Eisenberg et al. (2004) studies. The problem of correlations between measures from a single reporter often is dealt with in SEM by correlating error terms across measures from the same

reporter (as it was in this study). It is also of note that the standardized estimates for the models presented in the Eisenberg et al. (2004) were similar to those in this study.

In this study, negative submissive FE was positively correlated with both positive FE and negative dominant FE, $r_s(170) = .54$ and $.32$, $ps < .01$, respectively. However, the direction of correlations of submissive FE with other variables tended to match that of negative dominant FE (even though the relations were much weaker) and in the SEM, negative submissive FE loaded with the negative parenting factor. Although, in a literature review, Halberstadt et al. (1999) reported inconsistent results for negative submissive FE, when Halberstadt and Eaton (2002) adopted a developmental perspective in a meta analysis, they found that adolescents and adults appeared to model the expressiveness of their family (regardless of type), which was not the case for children. Negative submissive FE also appeared to be negatively related to emotion understanding during adolescence, but not in the preschool years. Therefore, negative submissive FE might be more relevant to social functioning in adolescence than at younger ages. Moreover, it is possible that negative submissive FE in adolescence fosters coping strategies such as rumination (Halberstadt & Eaton, 2002), which would be expected to relate negatively to emotion regulation and positively with internalizing problems. This possibility is consistent with the negative relation between negative parenting—including negative submissive FE—and low EC in this study.

Our data suggest that although there likely are some cross-cultural differences in the amount of expressiveness displayed in families, in parenting practices, and in the cultural valuing of regulation, the processes linking these constructs may be similar across Western cultures. Nonetheless, Van Goozen and Frijda (1993) found that of the 12 most frequently mentioned emotion words in the English and French, only five were mentioned in both languages. This study highlights the fact that although the relations among the constructs appeared similar to the United States, there may be differences in the constructs themselves. Therefore, in the future, researchers should examine potential cultural differences in the cultural meaning and significance of emotions and their regulation.

A couple of measurement-related issues are noteworthy. In general, across and within measures, parents' reports were often not as highly correlated to teachers' reports as they were to adolescents' reports. Similarly, teachers' reports were often not as related to parents' reports as to adolescents' reports.³ These findings suggest that parents' and teachers' reports may tap different aspects of adolescents' behaviors because they see adolescents in different contexts. However, adolescents rated their own behavior across all contexts, and their reports were generally correlated with both parents' and teachers' reports. These findings support the view that context influences adolescents' social behavior, although, overall, reporters agreed somewhat (i.e., relations were at least marginally significant) most of the time on their reports of social functioning, EC, and ego resiliency (marginally), and parenting.

Although EC was originally hypothesized to include attention focusing, attention shifting, and inhibitory control, parents' reports of attention shifting did not load with the other two (see footnote 2). Difficulties in using attention shifting sometimes have been noted previously. Zhou et al. (2004) reported low reliability for this scale in a Chinese sample; in addition, Rothbart et al. (2001) did not include the attention shifting subscale in the revised version of childhood measure of EC. One problem is that attention shifting sometimes tends to factor inversely with negative emotionality (perhaps because it is used to modulate negative emotion; Eisenberg et al., 1997) rather than with other indices of EC; this could

³These correlations are not presented but are available upon request to the first author.

cause difficulties in using it as an index of EC in some age groups or samples. It is also possible that, especially as children get older, attention shifting is not as powerful an indicator of EC. In adolescence, many activities may require mostly attention focusing or inhibitory control. For example, French adolescents have to focus during their long school day (classes go from 8:00 a.m. to 5:00 or even 6:00 p.m.) and on their homework. In addition, to conform with French parents' pressure to be "bien élevé" (well-raised; Suizzo, 2002), adolescents would need to exercise inhibitory control.

Contrary to our expectations and to what other studies with younger children have reported (e.g., Eisenberg et al., 1997; Spinrad et al., 2006), EC and peer competence were not consistently or significantly related in the correlations. Although during adolescence, some unregulated behaviors such as defiance with adults and impulsive risk-taking may increase peer competence among teenagers, Allen, Porter, McFarland, Marsh, and McElhaney (2005) reported that popular kids engage in only modest levels of those behaviors. Therefore, the lack of relation between EC and peer competence is more likely linked to measurement. Peer competence is difficult to assess at adolescence. In addition to self-reports and adult reports, peer sociometrics might have improved our measure of peer competence, and possibly strengthened the relation between EC and peer competence. It is also possible that there are some cross-national differences in the behaviors that people view as correlates and indicators of peer competence. Cross-cultural studies comparing the characteristics of adolescents nominated by their peers might provide further insight on this question.

Parents' reports of EC were negatively correlated with age, probably due to some youths remaining in high school past the typical age of 18 because they were retained in one or more grades. These students likely had more problems with EC than their younger classmates.

Several interesting sex differences were observed in this study. Overall, girls were rated higher than boys on EC—a finding consistent with other studies in the United States, mostly with younger samples (e.g., Eisenberg et al., 2003, 2004; Else-Quest, Shibley Hyde, Goldsmith, & Van Hulle, 2006). Girls were also rated higher than boys on both parent- and self-reported internalizing problems, another finding that concurs with previous research, including the literature on depression in adolescence (Hankin & Abramson, 1999; Garber, Kelley, & Martin, 2002). It has been argued that the higher rate for depression among girls is likely a result of the pressure of body image and appearances (Hankin & Abramson, 1999), as well as the tendency to ruminate (Rusting & Nolen-Hoeksema, 1998). In addition, boys tended to be rated as higher in externalizing problems (only as reported by teachers), as has been found in other studies both with children and adolescents (Besser & Blatt, 2007; Eisenberg et al., 2004; Zhou et al., 2004).

Although there was no sex difference for adolescents' reports, parents of daughters reported higher use of psychological control than parents of sons. This is unexpected based on previous studies (e.g., Bean, Barber, & Crane, 2006). Albert et al. (2005) reported that French parents use higher control and are stricter than German parents. It is possible that, especially at adolescence, parents use more psychological control with girls and more behavioral control with boys.

Finally, daughters rated their family expressiveness as higher in positive and negative submissive expressivity than did sons. Although other researchers have not reported such differences (Eisenberg et al., 2001; Valiente et al., 2006), in previous studies, researchers generally have used mothers', not children's, reports of family expressiveness. Girls have generally been found to be more "emotional"; for example, they are more sensitive to the emotions of others (Eisenberg et al., 1996) and view themselves as more empathic and

sympathetic (Eisenberg & Fabes, 1998). In addition, there is evidence that mothers talk about some emotions more with girls than boys (Fivush, 1989). As a consequence, girls may have noticed and reported more expressiveness in their family than boys. In addition, it is possible that cultural differences or the age of the participants accounts for the difference across studies; this variable has not been studied in France, and in most extant research, the children have been younger than in the present study. Michalik et al. (2007) found a nearly significant sex difference favoring girls in mother-reported positive expressivity in a sample of somewhat younger adolescents (that relation was not reported in the paper due to its marginal significance); perhaps sex differences in regard to FE increase with the age of the child.

A few limitations of this study should be highlighted. First, although it provided support for relations of parenting and family with adolescents' EC, ego resiliency, and social functioning, it is likely that adolescents' EC, ego resiliency, and social functioning also influence their parents' parenting practices, as well as family expressivity, over time. The cross-sectional nature of this study does not enable us to draw firm conclusions about the causal relations. Furthermore, although we tested two alternative models and showed that they did not represent the data as well the hypothesized model, it is likely that other equivalent or alternative models exist (MacCallum et al., 1993; Tomarken & Waller, 2003). Second, the literature stresses the importance of peers at adolescence; however, peer reports were not obtained. It is likely that peers' reports would have tapped into yet different aspects of adolescents' behavior in a different context. Finally, this study relied on questionnaire measures. Although multiple reporters were used, which limits some problems linked with self-reports (i.e., biased or inaccurate reports), this study is based on perceptions of behaviors and not on more objective measures that can be obtained through observational procedures.

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FIGURE 1.
Hypothesized mediation model.

FIGURE 2.
Mediation model.

TABLE 1

Sample Demographics

	Mother (n = 138)	Father (n = 129)
<i>Education level^a</i>		
No high-school diploma	29.0%	31.8%
High-school diploma	18.8%	14.0%
2-year college degree (DEUG)	14.5%	15.5%
Bachelor degree (Maitrise)	18.8%	9.3%
Higher level education (> bachelor)	18.8%	29.5%
<i>Family income (n = 99)^a</i>		
99,999 Fr or below		5.1%
100,000 Fr (US\$14,285) – 149,999 Fr		16.1%
150,000 Fr (US\$21,428) – 199,999 Fr		20.2%
200,000 Fr (US\$28,571) – 299,999 Fr		28.3%
300,000 Fr (US\$42,857) – 399,999 Fr		19.2%
400,000 (US\$57,142) or more		11.1%
<i>Household (n = 176)^{b,c}</i>		
Parents live together or are married		73.3%
Parents are divorced or separated		22.7%
<i>Grade averages (n = 178)^b</i>		
< 7 (very low)		0.6%
7–9.9 (low)		12.9%
10–11.9 (average)		55.1%
12–15.9 (high)		30.9%
16–20 (very high)		0.6%

^aMother report.

^bAdolescent report.

^cThe remaining 4% had some other type of household.

TABLE 2

Means and Standard Deviations of the Variables

Variables	Sample		Boys		Girls	
	Mean ^a	SD	Mean	SD	Mean	SD
<i>Adolescents' regulation</i>						
Effortful control (P)	0.00 ^c	0.85	-.15	0.85	0.14	0.85
Attention shifting (P)	4.05	0.96	3.98	1.03	4.10	0.91
Attention focusing (P)	4.80	1.10	4.64	1.08	4.93	1.11
Inhibitory control (P)	5.16 ^c	0.91	5.03	0.93	5.32	0.86
Effortful control (T)	0.00	0.93	-.16	0.95	0.16	0.89
Attention shifting (T)	4.97	1.12	5.01	1.11	4.93	1.14
Attention focusing (T)	4.79	1.31	4.46	1.34	5.12	1.20
Inhibitory control (T)	5.56 ^c	0.99	5.49	0.99	5.64	0.99
Attention (A)	3.42	0.47	3.45	0.49	3.40	0.46
<i>Adolescent's ego resiliency</i>						
Parent report	6.27 ^c	1.31	6.29	1.38	6.23	1.28
Teacher report	6.30 ^c	1.50	6.40	1.45	6.24	1.50
<i>Socialization</i>						
Connection (P)	2.52 ^f	0.35	2.49	0.36	2.54	0.34
Connection (A)	2.28 ^c	0.49	2.26	0.47	2.30	0.51
Monitoring (P)	2.61 ^f	0.36	2.62	0.33	2.60	0.40
Monitoring (A)	2.25 ^c	0.51	2.17	0.52	2.32	0.49
Psychological control (P)	1.34 ^e	0.28	1.28	0.20	1.40	0.33
Psychological control (A)	1.43 ^e	0.37	1.39	0.34	1.47	0.40
Positive FE	5.94 ^c	1.34	5.57	1.36	6.29	1.22
Negative submissive FE	5.32	1.20	5.01	1.18	5.62	1.15
Negative dominant FE	4.28	1.24	4.29	1.18	4.26	1.30
<i>Adolescents' social functioning</i>						
Externalizing (P)	1.88 ^d	.42	1.82	0.39	1.93	0.45

Variables	Sample		Boys		Girls	
	Mean ^a	SD	Mean	SD	Mean	SD
Externalizing (T)	1.42 ^e	.35	1.47	0.35	1.36	0.35
Externalizing (A)	.54 ^b	.22	.53	0.22	.54	0.22
Aggression (A)	.58	.24	.55	0.23	.60	0.25
Delinquency (A)	.41 ^e	.28	.47	0.30	.35	0.26
Internalizing (P)	1.53 ^e	.36	1.45	0.33	1.60	0.36
Internalizing (A)	.52 ^d	.29	.42	0.23	.61	0.30
Somatic complaints (A)	.45 ^d	.33	.33	0.23	.56	0.37
Withdrawn behaviors (A)	.38 ^e	.49	.42	0.48	.34	0.50
Anxious behaviors (A)	.53 ^d	.35	.43	0.30	.63	0.38
Peer competence (P)	3.05 ^c	.72	3.07	0.73	3.01	0.72
Peer competence (T)	2.80	.77	2.78	0.79	2.82	0.75
Peer competence (A)	1.74 ^f	.43	1.75	0.38	1.73	0.47

Note. A = adolescent report; FE = family expressiveness; P = parent report; T = teacher report.

^a Means before transformation. Information on transformations is below.

^b Moderate positive skew (square root transformation).

^c Moderate negative skew (square root transformation).

^d Substantial positive skew (log transformation).

^e Severe positive skew (inverse transformation).

^f Severe negative skew (inverse transformation).

TABLE 3
Correlations of Social Functioning and Ego Resiliency With Effortful Control and Ego Resiliency

	Effortful Control/Attention			Ego Resiliency	
	Parent	Teacher	Adolescent	Parent	Teacher
Social functioning					
1. Peer comp. P	.10	-.36**	.10	.32**	-.12
2. Peer comp. T	-.06	.13	.18*	.14	.50**
3. Peer comp. A	.15 ⁺	-.09 ^a	.11	.27**	.05
4. Externalizing P	-.40**	.05	-.17 ⁺	-.36**	.04 ^b
5. Externalizing T	-.13	-.54**	-.17* ^c	-.11	-.24**
6. Externalizing A	-.28**	-.11	-.23**	-.14	.02
7. Internalizing P	-.30**	.13 ^d	-.23**	-.63**	.05
8. Internalizing A	-.17*	.04 ^e	-.28**	-.31**	-.13 ⁺
Ego resiliency					
12. Parent	.57**	.03 ^f	.28**		
13. Teacher	.13	.54**	.29**		.15 ⁺

Note. A = adolescent report; P = parent report; Peer comp. = peer competence; T = teacher report.

⁺ $p < .10$;

* $p < .05$;

** $p < .01$.

^a $z = 3.67, p < .01$, for the sex difference in correlations (.19 for girls and $-.38^{**}$ for boys).

^b $z = 2.10, p < .05$, for the sex difference in correlations ($-.11$ for girls and $.26^{*}$ for boys).

^c $z = 2.58, p < .01$, for the sex difference in correlations (.02 for girls and $-.37^{**}$ for boys).

^d $z = 2.48, p < .05$, for the sex difference in correlations ($-.14$ for girls and $.31^{*}$ for boys).

^e $z = 3.02, p < .01$, for the sex difference in correlations ($-.25^{*}$ for girls and $.23^{*}$ for boys).

^f $z = 2.49, p < .05$, for the sex difference in correlations (.27* for girls and $-.19$ for boys).

TABLE 4
Correlations Across Effortful Control, Ego Resiliency, Outcomes, and Socialization Variables

	Family Expressiveness				Parenting			
	+FE		NS FE		Connection		Monitoring	
	Ado.	Psy. Control	Ado.	Psy. Control	Ado.	Psy. Control	Ado.	Psy. Control
Effortful control								
Parent	.18*	.08 ^c	.01	.32**	.11	.21*	.20*	-.30**
Teacher	.03	.02	.07	.02	.07	.11 ^f	.12	-.01 ⁱ
Attention A	.13+	-.10	-.16*	.08	.15+	.00	.15*	-.18*
Ego resiliency								
Parent	.14	.04	-.10	.20*	.17*	.11	.16+	-.33**
Teacher	.05	.07	.08	-.05	-.03	-.09 ^g	.08	.07 ^j
Social functioning								
Peer comp. P	.14 ^a	.10	-.09	.16+	.18*	.03	.03	-.09
Peer comp. T	.20*	.08	-.01	-.05	.07	-.14	.14+	.17+
Peer comp. A	.10	-.10	-.17*	.10	.19*	.15+	.20**	-.15 ⁺
Externalizing P	-.25**	-.06	.12	-.25**	-.23**	-.10	.19 ^h	.46**
Externalizing T	-.21**	-.05	.10	-.17 ⁺	-.12	-.26**	-.17*	.02
Externalizing A	-.12	.18*	.42**	-.13	-.23*	-.29**	-.30**	.11
Internalizing P	-.08 ^b	.10	.17 ^d	-.05	-.13	-.17*	-.11	.29**
Internalizing A	-.10	.30**	.33**	-.10	-.21** ^e	-.06	-.15 ⁺	.22*

Note. A = adolescent report; Ado. = adolescent report; P = parent report; Peer comp. = peer competence; Psy. control = psychological control; ND FE = negative dominant FE; NS FE = negative submissive FE; T = teacher report; +FE = positive family expressiveness (FE).

⁺ $p < .10$;

* $p < .05$;

** $p < .01$.

^a $z = 2.20, p < .05$, for the sex difference in correlations (–.04 for girls and .34* for boys).

^b $z = 3.14, p < .01$, for the sex difference in correlations (.16 for girls and –.38** for boys).

- $c_z = 1.98, p < .05$, for the sex difference in correlations ($-.12$ for girls and $.23^{+}$ for boys),
- $d_z = 2.51, p < .05$, for the sex difference in correlations ($-.05$ for girls and $.38^{**}$ for boys),
- $e_z = 2.20, p < .05$, for the sex difference in correlations ($-.37^{**}$ for girls and $-.05$ for boys),
- $f_z = 1.98, p < .05$, for the sex difference in correlations ($.30^{*}$ for girls and $-.06$ for boys),
- $g_z = 2.11, p < .05$ for the sex difference in correlations ($.09$ for girls and $-.28^{*}$ for boys),
- $h_z = 2.30, p < .05$, for the sex difference in correlations ($-.04$ for girls and $-.42^{**}$ for boys),
- $i_z = 2.34, p < .05$, for the sex difference in correlations ($-.26^{*}$ for girls and $.17$ for boys),
- $j_z = 1.99, p < .05$, for the sex difference in correlations ($-.07$ for girls and $.28^{*}$ for boys),
- $k_z = 2.58, p < .01$, for the sex difference in correlations ($-.39^{**}$ for girls and $.01$ for boys).