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Reducing Risks for Problem Behaviors During the High School Transition: Proximal Outcomes in the Common Sense Parenting Trial

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Abstract

This study tests Common Sense Parenting (CSP)®, a widely used parent-training program, in its standard form and in a modified form known as *CSP Plus*, with low-income 8th graders and their families during the high school transition. The six-session CSP program proximally targets parenting and child emotion regulation skills. *CSP Plus* adds two sessions that include youth, and the eight-session program further targets skills for avoiding negative peers and activities in high school. Over two cohorts, 321 families were enrolled and randomly assigned to either CSP, *CSP Plus*, or minimal-contact control conditions. To date, pretest and posttest assessments have been completed, with 93% retention over about a 6-month interval. Here, analyses of preliminary outcomes from pretest to posttest focus on data collected from parents, who represent the primary proximal intervention targets. Intent-to-treat structural equation modeling analyses were conducted. CSP and *CSP Plus* had statistically significant effects on increased parent-reported child emotion regulation skills. *CSP Plus* further showed a statistically significant effect on increased parent perceptions of their adolescent being prepared for high school, but only in a model that excluded the CSP condition. Neither program had a significant proximal effect on parenting practices. Emotion regulation, one indicator of self-control, is a robust protective factor against problem behaviors. Intervention effects on this outcome may translate into reduced

problems during high school. Moreover, *CSP Plus* showed some limited signs of added value for preparing families for the high school transition.

Keywords

parent-training; family intervention; prevention; transition; high school; parenting; emotion regulation

Introduction

Adolescent problem behaviors, such as drug use and risky sex, are prevalent (Centers for Disease Control and Prevention, 2012) and result in significant morbidity and mortality (Catalano et al., 2012), especially among vulnerable (e.g., low-income; Mason et al., 2010) youth. Poor parenting (Hoeve et al., 2009; Lereya, Samara, & Wolke, 2013; Norman et al., 2012) and low child self-control (Boisvert, Wright, Knopik, & Vaske, 2012; King, Fleming, Monahan, & Catalano, 2011; Vazsonyi, Trejos-Castillo, & Huang, 2006) have robust predictive associations with adolescent problem behaviors. Although self-control sometimes is viewed as a stable trait-like characteristic (Gottfredson & Hirschi, 1990), research has demonstrated naturalistic changes in self-control among youth (King et al., 2011), suggesting that it is a promising malleable intervention target. Recent studies indicate that brain systems related to impulse control and self-regulation appear to develop more slowly than those related to reward sensitivity (Strang, Chein, & Steinberg, 2013). As brain maturation continues to unfold during and beyond adolescence, the development of self-regulation skills becomes critically important (Dahl, 2004).

This knowledge has contributed to the development of family-focused interventions designed to improve parenting and increase child self-control to prevent problem behaviors among youth (Sandler, Schoenfelder, Wolchik, & MacKinnon, 2011). Effective family interventions, when disseminated broadly, hold promise for improving public health by reducing the prevalence of adverse outcomes such as drug use and risky sex (Spath, 2008). However, at least two key gaps in both the research and practice of family-focused preventive intervention remain. First, effective family-focused preventive interventions have not been implemented on a large scale. One reason for this science-to-practice gap is that many interventions were not developed with a delivery vehicle in mind, limiting their dissemination potential (Glasgow, Lichtenstein, & Marcus, 2003; Klesges, Estabrooks, Dziewaltowski, Bull, & Glasgow, 2005). A strategy for addressing this problem is to rigorously test promising preventive interventions that are already being distributed and implemented (Mason, Fleming, Thompson, Haggerty, & Snyder, 2013; Rotherham-Borus & Duan, 2003). If such programs are supported by research, then expanded dissemination efforts can build on existing infrastructure and distribution channels that already are being used successfully. This strategy has been put into practice infrequently; therefore, rigorous tests of widely used but understudied promising programs are needed.

Second, there also is a need to more fully capitalize on the windows of opportunity for family intervention provided by developmental transitions. One of the most important transitions for adolescents is the move to high school (Eccles & Roeser, 2009; Jackson &

Schulenberg, 2013), which brings new opportunities that can either promote positive or exacerbate negative development. Many preventive interventions target families of children who fall within a broad age range. However, timing interventions for delivery at key developmental transitions may increase the relevance and impact for participants. Most programs to support a positive transition to high school are school-based and focus on student academics rather than problem behaviors (Kennelly & Monrad, 2007). The degree to which parent-training can be tailored for the transition to high school to prevent problem behavior outcomes among vulnerable youth remains uncertain.

To address the above-mentioned gaps, the current study tests the Common Sense Parenting® (CSP; Burke, Schuchmann, & Barnes, 2006) parent-training program developed by Boys Town, a national service provider. Based on positive support from preliminary research, which has provided some evidence for hypothesized CSP effects on targeted parent and child outcomes (e.g., decreased child problem behaviors; Thompson, Ruma, Schuchmann, & Burke, 1996; Thompson, Ruma, Brewster, Besetsney, & Burke, 1997), CSP is in widespread use. CSP services are growing and now reach over 6,000 children in more than 3,000 families each year across Boys Town sites in 10 states, with further dissemination outside of the organization via external training activities. Extending preliminary CSP research, an experimental test of the standard six-session, group workshop-based program, along with a modified version known as *CSP Plus* that adds two parent and adolescent sessions adapted from the *Stepping Up to High School* curriculum (Brown, Catalano, Fleming, Haggerty, & Abbott, 2005), is being conducted. The current study is providing the first large-scale experimental test of the widely used CSP program, targeting families of 8th grade students attending poor-performing middle schools that feed into high schools with elevated dropout rates. The program adaptations incorporated into *CSP Plus* help address the need to capitalize on a key opportunity for intervention by tailoring content to the developmental tasks and concerns that are salient to students and parents in the transition to high school.

CSP was guided by an adaptation of the Teaching Family Model (TFM; Wolf et al., 1976) and social interaction theory (Patterson, Reid, & Dishion, 1992). These theories emphasize the role of poor parenting in the development of child problem outcomes. Thus, both CSP and *CSP Plus* include skill-building components related to parental monitoring and supervision, discipline, and the provision of praise. Both programs also include training for parents in providing rationales to children to reinforce the reasons for making positive choices. The theories underlying CSP further emphasize the role that child self-control plays in the promotion of positive behaviors as well as the prevention of problem behaviors. Accordingly, both CSP and *CSP Plus* include core components designed to help parents promote child self-control through the development of child emotion regulation skills by teaching parents to model and teach their children coping and problem solving strategies as well as anger management techniques. Emotion regulation is a key dimension of self-control (Fox & Calkins, 2003; Tice & Bratslavsky, 2000). *CSP Plus* has an additional focus on facilitating the transition to high school by teaching parents and adolescents how to set goals, and by directly teaching youth skills for avoiding negative peers and activities (e.g., drug use) and for solving problems during the high school years.

The current analyses are the first in a planned series of analyses examining intervention outcomes at different follow-up time points over the course of the longitudinal study. To date, data have been collected from parents and adolescents at pretest and posttest, spanning approximately a 6-month period; thus, the current analyses address preliminary proximal outcomes, focusing on hypothesized changes in primary parent-reported intervention targets. Based on the theory-driven program components, it is expected that both CSP and CSP *Plus* parents will report reduced poor parenting and increased child emotion regulation skills from pretest to posttest compared to control parents. Moreover, it is expected that CSP *Plus* parents at this early stage of the project will report increased perceptions of feeling that their adolescent is adequately prepared for the high school transition compared to control parents.

Method

Participants

Recruitment, assignment to experimental conditions, pretesting, and posttesting are summarized in Figure 1. Each family in the study includes a target parent and a target eighth grader who attended one of five middle schools in Tacoma, Washington. At all five schools, the percent of students in Grades 6 through 8 who were receiving free or reduced-price school lunch was above 70% in the 2010/2011 school year. Three of the five schools fed into a high school with a 5-year graduation rate of 52% for the class of 2010. Research staff presented information about the study during core classes and distributed permission slips for the students to take home to their parents. Schools aided the recruitment effort by disseminating notices of the study (e.g., emails, automated phone reminders). Schools also mailed a copy of the permission slip directly to families who had not responded to initial recruitment efforts.

Procedure

Families who were interested in learning more about the project returned a signed form agreeing to release their contact information (a district requirement). From the returned forms, a list of 658 interested families was compiled. These families were assigned identification numbers in the order in which permission slips were returned and then blocked by school and adolescent gender. Within blocks, families were sequentially assigned to one of the three experimental conditions: standard CSP program, CSP *Plus* program, or a minimal contact control condition. Families were then contacted by data collection staff members, who were not informed of condition assignments, to schedule times to obtain parental consent and child assent to participate in the research project and conduct a pretest interview. Families learned of their condition assignment after consenting to participate and completing the pretest assessment.

Families were enrolled in the project in two cohorts, including 122 families in the 2010/2011 school year and 199 families in 2011/2012. Of the 321 families enrolled, 108 were assigned to the control condition, 118 were in the CSP program condition, and 95 were in the CSP *Plus* program condition. Characteristics of the sample are reported in Table 1. Comparisons of the sample with the population of 8th grade families in participating schools based on district data revealed several similarities (e.g., sample/population: free lunch = 78%/80%,

student special education status = 17%/15%) and some generally small differences (e.g., sample/population: student female gender = 54%/47%). Note that eligibility criteria required that parents speak English to participate in the parenting workshops for the trial; thus, there was a lower rate of Hispanic participants compared to the population (sample/population: Hispanic = 14%/23%). All procedures were reviewed and approved by the University of Washington and Father Flanagan's Boys' Home (Boys Town) Institutional Review Boards as well as the participating school district.

Interviews took place in families' homes. Surveys were self-administered on laptop computers, with a researcher present to provide assistance. In both recruitment years, enrollment and pretest interviews began in November/December and were completed by April. Posttest interviews began in May/June and were completed by September. Overall, 299 (93%) of the families enrolled in the study were interviewed at posttest. Completion rates did not differ by race, ethnicity, or whether families received food stamps. The completion rate for families of boys (97%) was significantly higher than that for families of girls (90%) ($X^2 = 6.22, p = .013$). Parents who did not complete the posttest interview were significantly older than those who did ($m = 43.70$ years, $sd = 9.58$ years, vs. $m = 39.94$ years, $sd = 7.25$ years, $t = 2.33, p = .020$). The completion rate was slightly, but not significantly, lower in the CSP *Plus* condition (CSP *Plus* = 88%, CSP = 95%, control = 94%, $X^2 = 3.97, p > .05$). Families were compensated \$40 at pretest and \$50 at posttest for their interviews.

Interventions

To reduce participation barriers, families with young children were offered a stipend to pay for childcare and reimbursement for any transportation costs. To help motivate and reward attendance, a lottery system was used. At the end of each session, one attendee was randomly selected to receive a cash prize. At the first five sessions in the CSP condition and the first seven sessions in the CSP *Plus* condition, the prize was \$35. At the last session of each workshop group the prize was \$150 and was based on attendance throughout the class such that participants who attended more sessions had higher odds of winning.

The standard CSP program consists of six weekly two hour sessions. CSP sessions consisted of the following primary learning activities or components: instruction in new parenting skills related to discipline, praise, rationales, coping, problem solving, and anger management; discussion of short videos demonstrating these skills; and guided skills practice. Sessions also included reviews and summaries, as well as assignment of homework activities. Two sessions were added for the CSP *Plus* condition, one before and one after the standard CSP sessions. Adolescents were asked to attend each of these two sessions with their parents. The CSP *Plus* sessions adopted the same structure as CSP and included new content on goal setting for parents and teens in relation to the transition to high school and guided skills practice in family communication and decision making regarding the opportunities and responsibilities involved in this transition. Fidelity assessments conducted by coding a random sample of videotaped workshop sessions with 96% agreement across two independent raters indicated that 95% of the core components of the interventions were delivered as designed (Oats, Cross, Mason, Casey-Goldstein, Haggerty, & Hanson, 2014).

Participation did not differ significantly across intervention conditions (Fleming, Mason, Thompson, Haggerty, Fernandez, Casey-Goldstein, & Oats, 2014). Initial engagement (attending at least one of the first two sessions) was slightly higher in the CSP *Plus* condition (76%) compared to the CSP condition (69%). Among those who came to at least one of the first two sessions, retention was similar for the two intervention conditions (mean of possible sessions attended = 70%, $sd = 29\%$ in CSP *Plus* vs. mean = 72%, $sd = 28\%$ in CSP). Twenty-one percent of CSP participants came to all six sessions compared to 17% in the CSP *Plus* condition who attended all eight of the sessions. In both intervention conditions, 20% of participants never attended any sessions. Minimal-contact control families were mailed general newsletters.

Measures

Parenting was measured with four indicators. Three of these indicators were subscales from the short-form Alabama Parenting Questionnaire (APQ; Shelton, Frick, & Wootton, 1996): positive parenting (mean of 3 items; e.g., “How often do you let your child know when he/she is doing a good job with something?”; pretest $\alpha = .81$; posttest $\alpha = .89$); inconsistent discipline (mean of 3 items; e.g., “How often do you threaten to punish your child and then do not actually punish him/her?”; pretest $\alpha = .61$; posttest $\alpha = .64$); and poor supervision (mean of 3 items; e.g., “How often does your child go out with friends you don’t know?”; pretest $\alpha = .64$; posttest $\alpha = .65$). The fourth indicator was a two item measure of the parent’s use of rationales for parental decisions and consequences (e.g., “How often do you give reasons to this child for your decisions?”). The correlation between the two rationales items was $r = .52$ at pretest and $r = .57$ at posttest. All items asked about the current frequency of parenting behaviors and had response options ranging from 1 = “Never” to 5 = “Always.” Both positive parenting and rationales were allowed to load negatively on a poor parenting factor in the latent variable analyses.

Child emotion regulation skills were measured with a subscale from the Social Competence Scale-Parent (P-COMP-P; Webster-Stratton, 1998). The subscale is the mean of six items (e.g., “(Your child) can accept things not going his/her way” and “(Your child) can calm down by himself/herself when excited or all wound up”; pretest $\alpha = .87$; posttest $\alpha = .85$). The items describe coping, problem solving, and anger management skills during encounters with difficult day-to-day situations. Each item had response options ranging from 1 = “Not at all” to 5 = “Very well”.

High school preparedness was based on two parent-report items: “The transition to high school will be easy for (your child)” and “(Your child) is socially prepared for high school”. The items had response options ranging from 1 = “Strongly agree” to 5 = “Strongly disagree,” were reverse coded and averaged. The correlation between the two items was $r = .68$ at pretest and $r = .67$ at posttest.

Covariates included in the primary analyses were parent age, parent race (White/Caucasian = 1; other = 0), parent ethnicity (Hispanic = 1; non-Hispanic = 0), and student gender (male = 1; female = 0). Supplemental analyses included dummy codes to represent the schools from which students were recruited. No consistent pattern of school effects on the outcomes

was observed and including the school dummy codes did not alter the pattern of findings reported below; thus, school covariates were omitted from the primary analyses.

Data Analyses

Primary intent-to-treat intervention analyses were conducted via structural equation modeling (SEM) with maximum likelihood estimation in Amos 18 (Arbuckle, 2009). To isolate program effects in each intervention condition, two models were estimated. First, a CSP (versus control) model examined CSP effects on pretest-posttest changes in poor parenting and child emotion regulation skills. Second, a CSP *Plus* (versus control) model examined CSP *Plus* effects on these outcomes, and also tested for CSP *Plus* effects on pretest-posttest changes in high school preparedness. An additional model was estimated using the full sample and two dummy coded experimental condition variables (reference group = control condition) to test for differences in the effects of CSP versus the effects of CSP *Plus* on the outcomes via parameter constraints on the path coefficients testing intervention effects and chi-square difference tests corresponding to those constraints. Missing data were handled using full information maximum likelihood estimation (Schafer & Graham, 2002). The chi-square (X^2) statistic, Tucker-Lewis Index (TLI), and root mean square error of approximation (RMSEA) index were used to evaluate model fit according to recommended guidelines (TLI around .95 or greater and RMSEA around .06 or less; Hu & Bentler, 1999). Covariate effects are not reported in full but are available on request.

Results

Means and standard deviations for the outcome variables at pretest and posttest across experimental conditions are reported in Table 2. Preliminary repeated measures analyses of variance tested for statistically significant group (CSP or CSP *Plus* versus control) by time (pretest-posttest) interactions. Covariates were excluded from these preliminary tests. There was a trend for increased child emotion regulation skills in the CSP group compared to the control group ($p < .10$), and there was a statistically significant increase in high school preparedness for the CSP *Plus* group compared to the control group ($p < .05$).

Figure 2 displays the CSP model. High school preparedness was not a target of CSP and was excluded from the model; a supplemental SEM that included high school preparedness found no CSP effect on this non-targeted outcome (not shown, but available on request). The fit between the data and the CSP model was acceptable, X^2 (60 *df*, $N = 226$) = 68.69, $p = .21$, TLI = .97, RMSEA = .03. All factor loadings were statistically significant ($p < .05$), with standardized estimates ranging from |.27| to |.65|. Poor parenting was highly stable over time ($\beta = .75$), whereas child emotion regulation was somewhat less stable ($\beta = .66$). Only parent age predicted decreased poor parenting from pretest to posttest ($\beta = -.15$). There was a statistically significant effect of CSP on increased child emotion regulation skills over time ($\beta = .10$). The unstandardized coefficient for this path in the model indicates an effect size (d) of .18 standard deviation units based on the pooled standard deviation of emotion regulation at baseline. Among the covariates, Hispanic ethnicity also was associated with increased child emotion regulation skills ($\beta = .13$). The correlation between the residuals of the posttest measures of poor parenting and child emotion regulation skills was negative and

statistically significant ($r = -.53$). This parameter helps account for any relationship between the two outcomes that remains after adjusting for influences of the exogenous variables in the model.

Figure 3 displays the CSP *Plus* model. High school preparedness was a CSP *Plus* target and was included in the model. The fit between the data and the CSP *Plus* model was acceptable, $X^2 (72 \text{ df}, N = 203) = 82.31, p = .19, \text{TLI} = .97, \text{RMSEA} = .03$. All factor loadings were statistically significant ($p < .05$), with standardized estimates ranging from $|.33|$ to $|.75|$. Again, poor parenting was highly stable over time ($\beta = .70$), whereas child emotion regulation was somewhat less stable ($\beta = .57$). High school preparedness displayed moderate stability ($\beta = .61$). None of the variables in the model predicted change in poor parenting. There was a statistically significant effect of CSP *Plus* on increased child emotion regulation skills over time ($\beta = .10; d = .25$). Pretest level of high school preparedness also predicted increased child emotion regulation skills ($\beta = .29$). Finally, there was a statistically significant effect of CSP *Plus* on increased high school preparedness from pretest to posttest ($\beta = .12, d = .16$). Correlations among the residuals of the outcome variables were statistically significant in expected directions. For example, child emotion regulation skills was correlated negatively with poor parenting ($r = -.36$) and positively with high school preparedness ($r = .18$). Again, these parameters indicate that relationships among the outcomes persist, even after accounting for the influences of the exogenous variables in the model.

The model depicted in Figure 3 was reestimated using the full sample and including two dummy coded experimental condition variables (reference group = control condition) to directly test for differences in the effects of CSP versus the effects of CSP *Plus* on the three outcomes. These analyses are not reported in full, but are available on request. The fit between the data and an unconstrained model was acceptable, $X^2 (78 \text{ df}, N = 321) = 97.88, p = .06, \text{TLI} = .96, \text{RMSEA} = .03$. A series of three constrained models was estimated, and the fit of each model was compared to that of the unconstrained model using a chi-square difference test. First, a model was estimated that fixed to equality the paths from CSP and CSP *Plus* to poor parenting at posttest and results indicated a statistically significant difference, $X^2 (1 \text{ df}, N = 321) = 3.32, p = .07$. Next, a model that fixed to equality the paths from the two intervention conditions to child emotion regulation skills at posttest was estimated and results indicated a statistically non-significant difference, $X^2 (1 \text{ df}, N = 321) = 2.32, p > .05$. Finally, a model was estimated testing a constraint on the paths from CSP and CSP *Plus* to high school preparedness and results indicated a statistically non-significant difference, $X^2 (1 \text{ df}, N = 321) = .37, p > .05$.

Based on these findings a final partially constrained model using the full sample was estimated that retained the two equality constraints on the paths from CSP and CSP *Plus* to child emotion regulation skills and high school preparedness, while allowing the paths from the two intervention conditions to poor parenting to take on different values, $X^2 (80 \text{ df}, N = 321) = 101.16, p > .05, \text{TLI} = .96, \text{RMSEA} = .03$. Although the path estimates for poor parenting were significantly different for CSP ($b = .08, \text{s.e.} = .06, p > .05; \beta = .09$) versus CSP *Plus* ($b = -.04, \text{s.e.} = .07, p > .05; \beta = -.04$), neither was significantly different from zero. The estimated effect of the two interventions on child emotion regulation skills was

statistically significant ($b = .15$, $s.e. = .07$, $p < .05$; $\beta = .09$), whereas the CSP and CSP *Plus* effect on high school preparedness was statistically non-significant ($b = .08$, $s.e. = .08$, $p > .05$; $\beta = .04$).

Discussion

This study is unique and contributes to the literature by testing a parent training intervention that is already in widespread use, but is just now being evaluated in a large-scale experimental prevention trial, and by targeting the transition to high school. Results provided evidence of proximal CSP and CSP *Plus* effects on increased parent-reported child emotion regulation skills among families of 8th graders attending poor performing middle schools. Results further suggested that CSP *Plus* increased parents' perception that their participating child is prepared for a successful transition to high school at this critical juncture for adolescents, but this effect was only statistically significant in a model that excluded the CSP condition. Neither CSP nor CSP *Plus*, although significantly different from one another, had a statistically significant proximal effect on parenting practices (e.g., discipline, monitoring).

Low self-control is a robust risk factor for adolescent problem behaviors (Boisvert et al., 2012; King et al., 2011; Vazsonyi et al., 2006). Indeed, neurodevelopmental theory and research suggest that problem behaviors may result, in part, from the asynchronous development of brain systems related to reward sensitivity and self-regulation, the latter of which appear to mature more slowly (Strang et al., 2013). Self-control is malleable during adolescence (King et al., 2011) and represents an important target of interventions, as self-regulatory processes continue to develop throughout the teen years and beyond (Dahl, 2004). The current study provided evidence of intervention-induced increases in a key indicator of self-control, child emotion regulation skills, which reflect improved coping, decision making, and anger management. In both CSP and CSP *Plus*, parents are taught how to use and model coping, decision making, and anger management skills, as well as how to impart such skills to their children. For example, intervention components address strategies for staying calm when angry and steps for finding positive solutions to problems. These skills are distinct from general parenting practices, such as monitoring and discipline. Given the pervasive adverse consequences of low self-control, short-term intervention effects on child emotion regulation skills hold promise for preventing problem outcomes over the long-term, a hypothesis that will be tested with forthcoming follow-up data.

The high school transition presents opportunities for risky behavior and provides a window of opportunity for preventive intervention (Eccles & Roeser, 2009; Jackson & Schulenberg, 2013). This trial tests the standard CSP program with a focus on the transition to high school. Moreover, the trial tests a modified program, CSP *Plus*, that adds content from the *Stepping Up to High School* curriculum and incorporates youth involvement. Results provided some limited evidence for the added value of CSP *Plus* as indicated by an increase in parents' perception of their youth's high school preparedness in the CSP *Plus* versus control model. High school preparedness is a proximal outcome that could be expected to change at this early stage of the transition. To the degree that such change exists, it might translate into subsequent changes during high school, such as increased family

communication and adolescent skills for refusing involvement in risky behaviors, that could protect against problem outcomes. Again, longer-term follow-up will permit a test of this hypothesis.

Neither CSP nor CSP *Plus* significantly affected parenting practices over the short-term. Potential explanations for this finding relate to the brief time interval between the pretest and posttest (approximately 6 months), and the high stability of the poor parenting construct. In this regard, it is noteworthy that the autoregressive SEM analyses provided a stringent test of the degree to which the intervention conditions predicted rank-order change in the outcomes over a relatively brief period of time (Windle, 1997). It may take more time for parenting effects to emerge. For example, Reed et al., (2013) reported that the beneficial effects of the Oregon Model of Parent Management Training on parenting skills was not apparent immediately after intervention but only appeared at longer-term follow-up. They concluded “It appears to take time for parents to fully incorporate and coordinate skills in their daily parenting activities. Parents’ full capacity to do so may not be most readily apparent immediately after intervention but rather may increment steadily over time” (p. 353). Subsequent analyses will test for CSP and CSP *Plus* effects on parenting at 1-year and 2-year follow-ups, using more sensitive growth models of change (Muthen & Curran, 1997), and also will explore whether effects of the two intervention conditions on parenting (and other outcomes) converge or diverge over time.

Strengths of this study include the experimental design, diverse sample, focus on the high school transition, longitudinal intent-to-treat analyses, and evaluation of a widely used but understudied program. Because CSP is already in use, evidence to support the efficacy of both the standard and modified programs for impacting targeted outcomes, should such evidence accrue, holds promise for being translated into practice relatively efficiently to promote public health (Mason et al., 2013). Regarding limitations, all outcomes in these initial analyses were based on parent self-reports, which are subject to bias (e.g., social desirability). Additional tests are needed that draw on alternative data collection methods (Snyder et al., 2006). Future tests of more distal outcomes will draw more fully on adolescent-reports and school records data. Certain factor loadings were lower than desired, although good model fit was obtained. An additional limitation is that statistically significant intervention effect sizes were not large in magnitude. Still, it has been shown that interventions with small effects sizes can have a meaningful impact when implemented on a large scale (Frieden, 2010). Moreover, as noted, initial intervention effects on proximal targets, particularly emotion regulation, are hypothesized to translate into impact on more distal outcomes, including the longer-term prevention of adolescent problem behaviors. Analyses of follow-up data will examine differences between intervention and control conditions that are expected to increase as youth progress during this prevention trial into peak periods of risk for problem outcomes during the high school years. In summary, early results from this ongoing prevention trial provide preliminary evidence of hypothesized short-term changes in parent-reported child emotion regulation skills and, to a lesser degree, perceived high school preparedness.

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Figure 1.

Participation summary for the experimental conditions. *The completion rate was slightly, but not significantly, lower in the CSP Plus condition (CSP Plus = 88%, CSP = 95%, control = 94%, $X^2 = 3.97$, $p = .137$).

Figure 2.

CSP (versus control) model. Unstandardized estimates are reported with standardized estimates in parentheses. 1.0^r = reference indicator fixed at unity for scaling and identification purposes. APQ = Alabama Parenting Questionnaire. ID = Inconsistent Discipline. PS = Poor Supervision. Ration = Rationales. PP = Poor Parenting. Pr = pretest. Po = posttest. Covariates are not shown but include parent race, parent ethnicity, parent age, and child gender. Correlations among exogenous variables and measurement errors (e) over time are not shown but are available on request. * $p < .05$. Note: CSP workshops began after pretesting.

Figure 3.

CSP *Plus* (versus control) model. Unstandardized estimates are reported with standardized estimates in parentheses. 1.0^r = reference indicator fixed at unity for scaling and identification purposes. APQ = Alabama Parenting Questionnaire. ID = Inconsistent Discipline. PS = Poor Supervision. Ration = Rationales. PP = Poor Parenting. Pr = pretest. Po = posttest. Covariates are not shown but include parent race, parent ethnicity, parent age, and child gender. Correlations among exogenous variables and measurement errors (e) over time are not shown but are available on request. $*p < .05$. Note: CSP *Plus* workshops began after pretesting.

Table 1
Parent, household and student characteristics at enrollment

	n (%)	M (SD)
PARENT CHARACTERISTICS		
Race		
Caucasian/White	153 (48)	
African American	84 (26)	
Asian American	14 (4)	
Pacific Islander	14 (4)	
Native American	5 (2)	
Hispanic/Latino	30 (9)	
Mixed or "other"	21 (7)	
Hispanic/Latino Ethnicity	44 (14)	
Relationship to student		
Biological mother	233 (73)	
Biological father	45 (14)	
Stepparent, grandparent or some other guardian	43 (13)	
Female	267 (83)	
Relationship status		
Married	148 (46)	
In a committed relationship but not married	73 (23)	
Single	99 (31)	
Live with significant other	191 (60)	
Employment status		
Employed full time	141 (44)	
Employed half time	49 (15)	
Unemployed	43 (13)	
Not in labor force (e.g., "full time homemaker")	88 (28)	
Educational attainment		
Less than high school	26 (8)	
High school or GED, no post-secondary	59 (18)	
education		
Some college or other post-secondary vocational	124 (39)	
education		
AA degree or completed vocational/technical	53 (17)	
training		
Bachelor's or more advanced degree	40 (13)	
Other	18 (6)	
Average age		40.21 (7.49)
HOUSEHOLD CHARACTERISTICS		
Household annual income less than \$24,000	134 (42)	
Household receive food stamps	188 (59)	
STUDENT CHARACTERISTICS		

	n (%)	M (SD)
Female	171 (53)	
Average age		13.41 (0.52)

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Table 2
Means (standard deviations) of outcome variables at pretest and posttest by experimental condition

Variable	Control (<i>n</i> = 108)		CSP (<i>n</i> = 118)		CSP <i>Plus</i> (<i>n</i> = 95)	
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Inconsistent discipline	2.48 (0.77)	2.23 (0.69)	2.62 (0.82)	2.44 (0.81)	2.44 (0.74)	2.24 (0.76)
Poor supervision	1.62 (0.66)	1.60 (0.67)	1.59 (0.66)	1.70 (0.71)	1.69 (0.67)	1.58 (0.57)
Rationales	2.02 (0.79)	2.00 (0.74)	2.08 (0.86)	2.06 (0.64)	1.98 (0.70)	1.94 (0.75)
Positive parenting	4.37 (0.62)	4.36 (0.65)	4.31 (0.68)	4.24 (0.70)	4.34 (0.60)	4.35 (0.66)
Child emotion regulation	3.26 (0.84)	3.38 (0.73)	3.19 (0.92)	3.45 (0.83)*	3.31 (0.86)	3.47 (0.79)
High school preparedness	3.61 (0.91)	3.80 (0.87)	3.50 (1.02)	3.80 (0.83)	3.27 (1.02)	3.81 (.88)**

Tests of group (CSP or CSP *Plus* versus control) $\times$ time (pretest-posttest) interactions were conducted using repeated measures analysis of variance in SPSS 18 (sample sizes for the analyses varied due to missing data).

* $p < .10$.

** $p < .05$.