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The Association of Parental Self-Efficacy and Parent–Youth Connectedness With Youth Smoking Intentions

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Abstract

Little attention has been paid to understanding how parents of differing race/ethnicity perceive their effectiveness in exercising anti-smoking parenting practices and how these behaviors affect youth’s smoking intentions. We explored the association of parent–youth connectedness and parental self-efficacy and youths’ smoking intentions in a group of African American and Caucasian never-smokers. Based on Social Bonding Theory and Social Learning Theory, a questionnaire was administered to non-smoking, 9–16-year-old youth and parent dyads, assessing youth smoking intentions and parental measures of connectedness and self-efficacy. Youth risk factors for intending to smoke were increased parent–youth conflict and protective factors were increased parental monitoring, increased parental rule setting, and higher parental self-efficacy. Parent–youth connectedness and parental self-efficacy did not differ by parental smoking status or by race/ethnicity. Our findings underscore the importance of strong parenting practices and parental self-efficacy in protecting against youth intention to smoke and these may be important to target in future interventions.

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Keywords

adolescence; parenting; prevention; smoking

Youth smoking remains a significant problem, with 22% and 35% of 8th and 10th graders, respectively, reporting lifetime smoking (Johnston et al., 2007). In addition, patterns of youth smoking initiation and progression differ among racial/ethnic groups. Caucasian adolescents show the highest prevalence of cigarette smoking, followed by Hispanic, and African-American youth (Griesler, Kandel, & Davies, 2002; Johnston et al., 2007; Kandel, Kiros, Schaffran, & Hu, 2004; Kopstein, Crum, Celentano, & Martin, 2001). Several studies have recommended preventing early onset of smoking as a principal strategy for reducing youth smoking (Breslau & Peterson, 1996; Okoli, Richardson, Ratner, & Johnson, 2009; Robins & Przybeck, 1985; Sherman & Primack, 2009). The teen years are critical in the initiation of lifetime smoking, and the earlier children first try smoking the higher their chances are of ultimately becoming regular smokers, and the less likely they are to quit successfully. It is a critical public health concern and a key goal of Healthy People 2010 to develop effective youth tobacco prevention strategies to prevent the initiation of smoking (United States Dept. of Health and Human Services, 2000).

FAMILY INFLUENCES AS PREDICTORS OF SMOKING INITIATION

Family influences such as youth–parent connectedness, which can be defined as the degree of closeness/warmth experienced in the relationship that children have with their parents, are important predictors of youth smoking initiation. Youth who report low levels of parent–youth connectedness exhibit the highest levels of problem behaviors in adolescence, including tobacco use (Chassin et al., 2005; Fleming, Kim, Harachi, & Catalano, 2002; Griesler & Kandel, 1998; Jackson, Bee-Gates, & Henriksen, 1994). Poor parental connectedness, such as lack of parent–youth closeness, weak or excessive controls, inconsistent discipline, and ineffective monitoring have been found to be positively associated with cigarette initiation and current smoking behavior in Caucasian, African American, and Hispanic youths (Chilcoat, Dishion, & Anthony, 1995; Headen, Bauman, Deane, & Koch, 1991; Kandel et al., 2004). In addition to strong family connectedness, the presence of anti-smoking parenting practices, such as parental monitoring, concrete rule-setting, communication about smoking, and negative attitudes about smoking have been shown to protect against youth smoking initiation (Chassin, Presson, Todd, Rose, & Sherman, 2005; Harakeh, Scholte, de Vries, & Engels, 2005; Henriksen & Jackson, 1998; Jackson & Dickinson, 2006; Jackson & Henriksen, 1997; Kodl & Mermelstein, 2004; Sargent & Dalton, 2001).

PARENTAL SELF-EFFICACY REGARDING TOBACCO USE

There is a growing interest in developing interventions that encourage strong general and smoking-specific parenting practices as a way to prevent youth smoking initiation (Chassin et al., 2005; Harakeh et al., 2005; Otten, Engels, & van den Eijnden, 2008). However, relatively little attention has been paid to understanding how efficacious parents perceive they are in exercising such parenting practices. There is good reason to believe that when

parents perceive they are effective in preventing or reducing their children's tobacco use, there are increases in parent-child tobacco communication (Jackson, 1998). These increases may, in turn, result in decreases in children's intentions to smoke and reductions in future smoking initiation (Jackson, 1998). Kodl and Mermelstein (2004) found that parents with lower perceptions of self-efficacy to influence their children's smoking behavior were more likely to report that they had: a history of smoking, adolescents who were smokers or experimenters, and fewer household smoking rules. These findings suggest that parental efficacy may be important to target in smoking prevention interventions (Kodl & Mermelstein, 2004).

In addition, perceived parental self-efficacy may differ by race/ethnicity. Clark and colleagues found that compared to Caucasian parents, African American parents felt more empowered and confident about their effectiveness in preventing childhood tobacco use through setting rules and consequences for tobacco use, which may contribute to the variance in the ages of smoking initiation in Caucasian and African American children (Clark, Scarisbrick-Hauser, Gautam, & Wirk, 1999b). Similarly, Mermelstein (1999) found that African American youth reported stronger anti-smoking messages reinforced by strict punishment by their parents compared to Caucasian youth.

THEORETICAL CONSTRUCTS AND STUDY PURPOSE

The social bonding theory (Gottfredson & Hirschi, 1990; Hirschi, 1969) posits that youth with strong bonds to society are less likely to deviate from conventional behavior than are those with weak bonds. Hirschi specifies four elements of the social bond: attachment to conventional people, commitment to conventional activities, involvement in conventional activities, and belief in conventional rules of society. Social bonding theory suggests that strong parental bonding and involvement, anti-smoking parenting, as well as strong bonds with schools and religion are factors protective against initiation and continuation of youth smoking. Attachment to family is considered the most important of all elements in the bond (Hirschi, 1969; Matsueda & Heimer, 1987). Specifically, strong parental attachment has been found to have a protective effect on youth cigarette smoking initiation (Ary, Duncan, Duncan, & Hops, 1999; Fleming et al., 2002; Foshee & Bauman, 1994; Jackson et al., 1994; Reimers, Pomrehn, Becker, & Lauer, 1990).

Social learning theory (Bandura, 1997) emphasizes the degree to which parents, peers, and other important figures in the young person's environment both model and reinforce behavior (Akers, Krohn, Lanza-Kaduce, & Radosevich, 1979; Bandura, 1997). Under this model, differential vulnerability to pro-smoking social influences, such as parent and peer smoking may explain ethnic differences in smoking. This theory also posits that self-efficacy beliefs help determine how much effort and time an individual will devote to an activity (Bandura & Locke, 2003; Pajares, 2002).

Using these theories and the extant literature as a framework, the purpose of this study was to examine how parent-youth connectedness, parental self-efficacy in overall parenting, and parental self-efficacy about anti-smoking practices in particular, affects youth smoking intentions in a group of African American and Caucasian youth "never-smokers" who

reported that they had never smoked even a puff. We hypothesized that youth whose parents reported higher parent–youth connectedness and parental self-efficacy would have lower intentions to smoke. We wanted to explore the association between parent–youth connectedness or parental self-efficacy and youth intention to smoke, and whether any association was moderated by race/ethnicity or parental smoking status. The current study adds to the literature by collecting data from a population of lower socioeconomic status parents with a balanced mix of Caucasians and African Americans, and a high prevalence of smoking.

METHOD

Study Design

A questionnaire was administered to a cross-sectional sample of parent–youth dyads who presented to a pediatric Emergency Department (ED) for a non-urgent pediatric complaint. Eligible participants were identified and approached for potential participation in the study by either a trained clinical research coordinator (CRC) or by the Principal Investigator, who supervised and monitored the administration of all of the study material. The study was approved by the hospital’s Institutional Review Board. Participating parental participants provided written informed consent and youth provided written assent. The parental informed consent included a stipulation that parents were not allowed to view their youth’s responses to the questionnaire, and this was monitored by the CRC during the study. Dyads completed the questionnaire while youth were awaiting medical evaluation by an ED physician. Dyads received a \$15 gift card to a local department store for their participation.

Participants

Participants included 272 parent–youth dyads who presented to the ED of Cincinnati Children’s Hospital Medical Center (CCHMC), a large, urban-based tertiary pediatric hospital. The ED at CCHMC is a level 1 trauma center, which provided 24-hour care for over 90,000 annual visits in 2009. CCHMC is the only pediatric facility that serves the greater Cincinnati area including southwest Ohio, northern Kentucky, and southeast Indiana; thus it serves a heterogeneous and underserved community population. CCHMC provides numerous community-based service programs that have as their major goal health promotion and disease prevention among children and adolescents. In our study, eligible youth participants were “never-smokers”, 9–16 years of age, presenting to the ED with a non-urgent complaint (e.g., cough, rash, ear pain, cold) as defined by the ED nurse, and accompanied by a parent or legal guardian. Exclusion criteria were triage categories in the urgent or critically ill categories or the youth’s inability to complete the study secondary to illness, injury, or developmental delay as determined by the parent. Of the approximately 468 parents approached, 427 were eligible (91.2%), 299 parent–youth dyads consented to participate (70%), and of those that consented, 272 (91%) were included in the analyses. Data were excluded from analysis if: participants were not of African-American or Caucasian race ($n = 10$); race was not specified ($n = 7$); a questionnaire was missing more than 20% of data items ($n = 3$); or the youth was a regular smoker or experimenter as indicated on both the parent and youth questionnaire ($n = 7$).

Of the 272 dyads included in the analyses, youth ranged in age from 9–16 years (mean = 12.9 years, $SD = 2.1$) and parents ranged in age from 25–70 years (mean 40.4 years, $SD = 8.1$). The majority of the parents were female (87%) and 50% of the youth were female. The racial/ethnic distribution showed that 47.6% were African-American and 52.4% were Caucasian.

Measures

Youth smoking-related items—Youth questionnaire items addressed whether youth had tried cigarettes or if they were regular smokers. Youth were considered “regular smokers” if they reported daily smoking for the prior 30 days. Youth were considered “experimenters” if they reported that they had ever smoked at least one puff of a cigarette, and they were considered “never-smokers” if they reported that they had never smoked (not even one puff). Youth were also asked if their parents, siblings, or close friends currently smoke.

Youth intention to smoke—Youth intention to smoke was measured by two items assessing the likelihood of smoking as a teen and as an adult. Each item was measured on a 5-point scale, with 1 representing “definitely not” and 5 representing “definitely will” (phi coefficient between items of 0.67 and polychoric correlation 0.91). Youth were classified as having intentions to smoke as a teen if they did not answer “definitely not” to the question: “Do you think you will smoke a cigarette in the next 6 months?” and they were classified as having intentions to smoke as an adult if they did not answer “definitely not” to the question: “Do you think you will smoke a cigarette as an adult?”

Parental demographics and smoking status—Parent questionnaire items assessed demographics of race/ethnicity, age, and highest level of education completed. Parents were asked if they had ever smoked, and were considered regular smokers if they reported smoking during the prior 7 days.

Parent–youth connectedness—The parent–youth connectedness constructs used in the study were previously examined, tested for reliability, and validated (Metzler, Biglan, Ary, & Li, 1998). Response formats used a 7-point Likert-type scale for parents, with higher values indicating a higher intensity or frequency of the item. Items included measured family conflict (4 items, $\alpha = 0.59$), positive family relations (6 items, $\alpha = 0.88$), parental monitoring (5 items, $\alpha = 0.89$), and parental rule setting (4 items, $\alpha = 0.67$).

Control beliefs: parental self-efficacy—Self-efficacy for overall parenting was measured using the 11 questions from the General Parental Efficacy Scale (e.g., confidence in helping their child stay out of trouble, keeping their child away from the wrong kind of kids) developed by Elder Jr., Eccles, Ardel, and Lord (1995) (Cronbach’s $\alpha = 0.91$). In addition, parental self-efficacy to influence their child’s smoking-related behavior (e.g., confidence in their ability to prevent their child from smoking, enforce house rules about smoking, talk to their child about smoking) was assessed using 7 items developed by Kodl and Mermelstein (2004). Responses ranged from 1 (not at all confident) to 10 (extremely confident), with higher mean scale scores representing greater efficacy (Cronbach’s $\alpha = 0.87$).

Data Analysis

We conducted bivariate and multivariate analyses relating the measures to youth intention to smoke. SAS/STAT V9.1 was used for all analyses (SAS Institute, 2003). Given the wide range of ages in youth and Healthy People 2010's recommendation to increase the average age of smoking initiation to 14 (United States Dept. of Health and Human Services, 2000), we dichotomized age into 14 years of age and older and less than 14 years of age. For the dependent variables of youth intention to smoke as a teen and as an adult, responses were dichotomized to "definitely not" versus all other responses as per the work of Hampson and colleagues, which showed that a response other than "definitely not" represented intention to smoke and predicted future smoking behavior (Hampson, Andrews, & Barckley, 2007).

Bivariate relationships were assessed via Chi square or Fisher's exact test for categorical variables and t tests for continuous variables. Kruskal-Wallis nonparametric tests were used for non-normally distributed continuous variables. All independent variables were evaluated simultaneously using logistic regression (Hosmer & Lemeshow, 2000), with potential important interaction terms examined.

RESULTS

Relationship of Youth Intention to Smoke to Demographics, Parent–Youth Connectedness, and Parental Self-Efficacy

The majority of youth respondents reported that they had no intentions to smoke as a teen (86%) or as an adult (81%). Forty-eight percent of parents were current smokers. Descriptive and comparative statistics by intention to smoke as a teen and adult are presented in Table 1. Compared to youth who intended to smoke as a teen, youth who did not intend to smoke as a teen were: younger (mean, *SD*: 12.8, 2 vs. 13.7, 2), had parents with higher parental self-efficacy overall (mean, *SD*: 9.2, 2 vs. 8.2, 2), higher smoking related parental self-efficacy (mean, *SD*: 9, 1 vs. 8.2, 2), had lower parent–youth conflict (mean, *SD*: 1.4, 0.5 vs. 1.9, 0.8), higher parental monitoring (mean, *SD*: 6.5, 0.7 vs. 6.0, 1), and higher parental rule setting (mean, *SD*: 3.7, 0.3 vs. 3.5, 0.4).

We found that 63% of African-American youth intended to smoke as an adult compared to 37% of Caucasian youth ($p = .02$). In addition, compared to youth who intended to smoke as an adult, youth who did not intend to smoke as an adult were statistically more likely to have had parents who reported: more than a high school education (63% vs. 44%), that they were nonsmokers (55% vs. 37%), higher smoking related parental self-efficacy (mean, *SD*: 9, 1 vs. 8.5, 2), lower parent–youth conflict (mean, *SD*: 1.4, 0.5 vs. 1.7, 0.8), higher parental monitoring (mean, *SD*: 6.5, 0.7 vs. 6.1, 1), and higher parental rule setting (mean, *SD*: 3.7, 0.3 vs. 3.6, 0.5).

Multivariate Analysis Examining Youth Intention to Smoke by Demographics, Parent Smoking Status, Parent–Youth Connectedness, and Parental Self-Efficacy

To examine differences in youth smoking intentions, a logistic regression analysis was conducted with the independent variables of youth age and gender, highest level of parent education, parent smoking status, race/ethnicity; parent–youth connectedness measures of

parent–youth conflict, positive family relations, parental monitoring, and parental rule setting; overall parental self-efficacy, and parental self-efficacy as related to smoking. Odds ratios were adjusted for age, gender, highest level of parental education, parental smoking status, and race/ethnicity, as these variables were significantly related to youth smoking intentions in our population.

We hypothesized that parents who endorsed higher levels of parent–youth connectedness and parental efficacy would have youth with lower intentions to smoke. Results from the multivariate analyses supported this hypothesis. As displayed in Tables 2 and 3, we found significant effects for several of these connectedness and efficacy measures on youth intentions to smoke as a teen and as an adult. Protective factors against intention to smoke as both a teen and as an adult were: greater overall parental self-efficacy, greater parental self-efficacy as specifically related to smoking, lower parent–youth conflict, higher parental monitoring, and higher parental rule setting.

There were no significant moderating effects of parental smoking status or parental race/ethnicity on the association between either parent–youth connectedness or parental self-efficacy and youth intention to smoke.

DISCUSSION

In this study, the pediatric ED provided a novel and innovative setting in which to explore how parent–youth connectedness and parental self-efficacy was associated with youth intention to smoke in the future. The pediatric ED, with 24-hour availability of emergency and sub-specialty services is used as a source of routine or non-urgent healthcare by the economically disadvantaged, minorities, and the uninsured (Baker & Stevens, 1994; O'Brien et al., 1997). Our parental study population and prior studies in this setting found a high prevalence of parental smoking (Mahabee-Gittens, 2002; Mahabee-Gittens, Gordon, Krugh, Henry, & Leonard, 2008), which places their children at greater risk of initiating smoking in the future and is resonant with the suggestion that the ED may offer a promising and innovative setting for a variety of preventative services, (D'Onofrio & Degutis, 2002; Wei & Camargo, 2000; Ziv, Boulet, & Slap, 1998), including the prevention of tobacco use. Consistent with other studies in a variety of non-ED settings, we found an association with youth smoking and decreased parent–youth connectedness (Biglan, Duncan, Ary, & Smolkowski, 1995; Chilcoat et al., 1995; Pederson, Koval, McGrady, & Tyas, 1998; Simons-Morton et al., 1999; Simons-Morton, 2004). Our results show that parents who reported increased parent–youth conflict were 2.6 times more likely to have children who intended to smoke as a teen and twice as likely to have children who intended to smoke as an adult. Additionally, increased parental monitoring decreased the odds of intention to smoke as a teen by up to 41% and increased parental rule setting decreased the odds of intention to smoke as a teen by up to 65%.

Our results add to the literature by examining the measure of parental self-efficacy, which is a construct that refers to the belief in one's ability to parent successfully (Bandura, 1977). Parents who have a high self-efficacy are more likely to be engaged in promotive and effective parenting strategies of their youth such as parental monitoring, involvement in

youth activities, and responsiveness to their youth (Bogenschneider, Small, & Tsay, 1997; Shumow & Lomax, 2002). Parental self-efficacy has previously been evaluated in the context of adolescent and parental smoking status (Kodl & Mermelstein, 2004). Kodl and Mermelstein (2004) posited that self-efficacy for parenting in general and for smoking-specific parenting may affect adolescent smoking directly and may affect a parent's antismoking practices. They found that parents with a history of smoking and parents of youth who had tried smoking had lower self-efficacy. While we did not study youth who had already begun smoking, we did find that higher parental self-efficacy was highly protective against smoking intentions in youth non-smokers. Our findings showed that higher mean parental self-efficacy scores overall and specifically as related to smoking decreased the odds of intending to smoke as a teen by up to 28% and 25%, respectively. Similar protective effects were found with higher parental self-efficacy and decreased odds of youth intention to smoke as an adult.

While our findings support our hypothesis that higher parental self-efficacy and connectedness is protective against youth smoking intentions, we did not find differential levels of parental self-efficacy or connectedness by either race/ethnicity or parental smoking status and these findings need to be confirmed in a larger study. Prior studies have found racial/ethnic differences in connectedness and parenting practices (Griesler et al., 2002; Shakib et al., 2003) and differing levels of parental self-efficacy by parental smoking status and race/ethnicity (Clark, Scarisbrick-Hauser, Gautam, & Wirk, 1999a; Elder Jr. et al., 1995; Kodl & Mermelstein, 2004).

Limitations

Our study has several potential limitations. First, this cross-sectional study did not follow the transition from intention to smoke to experimental or regular smoking. Although it is reasonable to assume that intentions to smoke will lead to smoking initiation in the future (Pierce, Choi, Gilpin, Farkas, & Merritt, 1996; Sargent & Dalton, 2001), the results need to be confirmed within a single cohort through follow-up studies. Second, this study lacked objective measures to test the validity of self-reported smoking behavior, which could lead to some misclassification of youth and parental smokers. In addition, because the questionnaire was completed in the presence of the youth's parents, there may have been under-reporting of smoking behavior by parents (Caraballo, Giovino, & Pechacek, 2004) and over-reporting of connectedness and self-efficacy on the part of parents due to social desirability pressures which may be greater in the hospital setting (Gregson et al., 1997). The majority of our youth participants reported that they had no intention to smoke in the future, which may be due to a reporting bias or due to the low mean age of our population. These low overall numbers, however, limits the ability of our analysis to determine the differences in our measures and youth intention to smoke. Third, respondents were only representative of parent and youth dyads who were drawn from a Midwestern setting who presented to a tertiary care, pediatric ED. Specifically, the majority of parental participants had a low socioeconomic status and a higher prevalence of smoking than the general population, thus limiting generalizability. Fourth, inclusion of youth between the ages of 9–16 years of age is broad resulting in potential differences in developmental stages as well as changes in smoking intentions, parent–youth connectedness, and smoking behavior.

Conclusions

In summary, we found that increased parent–youth connectedness and higher perceived parental self-efficacy are protective against youth smoking intentions in a low socioeconomic, balanced racial/ethnic community population with a high prevalence of parental smoking. Like many previous studies, these results suggest that increases in parent–youth connectedness are important in preventing youth smoking intentions and possibly future smoking behavior (Chassin et al., 2005; Chassin, Presson, Todd, Rose, & Sherman, 1998). Additionally, given that high parental self-efficacy was protective against smoking intentions in youth regardless of whether or not the parents smoked, this study supports the premise that even parental smokers can feel efficacious in affecting their child’s future smoking intentions and possibly smoking behavior (Jackson & Dickinson, 2003, 2006; Sargent & Dalton, 2001). Future investigations should target both parental self-efficacy and connectedness when developing and testing smoking prevention interventions and investigating the use of the pediatric ED to provide such interventions.

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TABLE 1

Differences in Youth Intention to Smoke as a Teen and as an Adult

Variables	Intend to smoke as a teen	Do not intend to smoke as a teen	<i>p</i>	Intend to smoke as an adult	Do not intend to smoke as an adult	<i>p</i>
Gender—Female	23 (61%)	114 (49%)	.18	30 (58%)	107 (49)	.24
Mean age (<i>SD</i>)	13.7 (2)	12.8 (2)	.01 *	13.3 (2.0)	12.8 (2.1)	.11
Race						
African American	20 (53%)	108 (47%)		32 (63%)	96 (44%)	
Caucasian	18 (47%)	123 (53%)	.50	19 (37%)	122 (56%)	.02
Less than high school parental education level	21 (55%)	90 (39%)	.05	29 (56%)	82 (37%)	.02
Parental smoker	20 (53%)	111 (48%)	.57	33 (63%)	98 (45%)	.02
<i>Parental self-efficacy</i>						
Mean parental self-efficacy overall (<i>SD</i>)	8.2 (2)	9.0 (2)	.04	8.4 (2)	9.0 (2)	.05
Mean parental smoking-related self-efficacy (<i>SD</i>)	8.2 (2)	9.0 (1)	.004	8.5 (2)	9.0 (1)	.04
<i>Parent–youth connectedness measures</i>						
Mean parent–youth conflict	1.9 (0.8)	1.4 (0.5)	<.0001	1.7 (0.8)	1.4 (0.5)	.004
Mean positive family relations (<i>SD</i>)	5.5 (0.9)	5.8 (1)	.12	5.5 (1)	5.8 (1)	.08
Mean parental monitoring (<i>SD</i>)	6.0 (1)	6.5 (0.7)	.002	6.1 (1)	6.5 (0.7)	.04
Mean parental rule setting (<i>SD</i>)	3.5 (0.4)	3.7 (0.3)	.003	3.6 (0.5)	3.7 (0.3)	.02

* Bold print indicates statistically significant results of $p < .05$.

TABLE 2

Logistic Regression Multivariate Analyses Examining Intention to Smoke as a Teen as a Function Parental Self-Efficacy and Parent–Youth Connectedness

Cross-sectional intention to smoke model	Adjusted odds ratio [†] (95% Confidence Interval)
<i>Parental self-efficacy</i>	
Mean parental self-efficacy overall	0.72* (0.54–0.96)
Mean parental smoking related self-efficacy	0.75* (0.59–0.94)
<i>Parent–youth connectedness measures</i>	
Mean parent–youth conflict	2.55*** (1.51–4.29)
Mean positive family relations	0.87 (0.62–1.22)
Mean parental monitoring	0.59** (0.41–0.86)
Mean parental rule setting	0.35* (0.14–0.83)

[†]Odds ratios were adjusted for age, gender, highest level of parental education, parental smoking status, and race/ethnicity.

* $p < .05$;

** $p < .01$;

*** $p < .001$.

TABLE 3

Logistic Regression Multivariate Analyses Examining Intention to Smoke as an Adult as a Function of Parental Self-Efficacy and Parent–Youth Connectedness

Cross-sectional intention to smoke model	Adjusted odds ratio[†] (95% Confidence Interval)
<i>Parental self-efficacy</i>	
Mean parental self-efficacy overall	0.75* (0.57–0.93)
Mean parental smoking-related self-efficacy	0.79* (0.63–0.99)
<i>Parent–youth connectedness measures</i>	
Mean parent–youth conflict	2.13** (1.28–3.53)
Mean positive family relations	0.82 (0.60–1.12)
Mean parental monitoring	0.66* (0.47–0.94)
Mean parental rule setting	0.36* (0.16–0.83)

[†]Odds ratios were adjusted for age, gender, highest level of parental education, parental smoking status, and race/ethnicity.

* $p < .05$;

** $p < .01$;

*** $p < .001$.