

Understanding the Authoritative Parenting—Early Adolescent Tobacco Use Link: The Mediating Role of Peer Tobacco Use

By: Stacey L. Adamczyk-Robinette, [Anne C. Fletcher](#), and Kristie Wright

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Abstract:

Eighth-grade students ($N = 156$) completed questionnaires in which they reported on their perceptions of parents' warmth, structure, and psychological autonomy granting (used to create an index of authoritative parenting) and their own levels of tobacco use. Adolescents were also asked to list the names of other students at their school with whom they spent time ("friends"). Independent reports obtained from these friends were used to form an index of the mean level of tobacco use among each adolescent's friends. Higher levels of authoritative parenting were associated with lower levels of tobacco use among target adolescents. The association between parental authoritative parenting and adolescent tobacco use was mediated by levels of tobacco use among peers. An amplification effect was observed in which adolescents were particularly unlikely to use tobacco products when they both received authoritative parenting at home and were members of non-tobacco-using peer groups.

Key Words: parenting; adolescent; tobacco.

Article:

Developmental researchers have consistently demonstrated that one specific style of parenting, termed *authoritative*, is both associated with and predictive of a wide range of indicators of adolescent competence. Authoritative parenting (see Steinberg, 1990) is conceptualized as being high in three components; warmth (authoritative parents are involved in their children's lives and responsive to their needs), structure (authoritative parents set clear and age-appropriate limits for their children's behavior), and psychological autonomy granting (authoritative parents encourage offspring to develop their own ideas and opinions, even when such opinions may differ from their own). Parents who are perceived by their offspring to be authoritative have children who are more academically competent, engage in less problem behavior, exhibit more positive psychosocial development, and report lower levels of internalized distress, than do their peers raised in nonauthoritative homes (Lamborn *et al.*, 1991).

Demonstrated links between authoritative parenting and adolescent well-being have indicated that adolescents from authoritative homes are less likely to engage in one specific type of problem behavior: use of drugs and alcohol (Cohen and Rice, 1997; Lamborn *et al.*, 1991; Steinberg *et al.*, 1994). However, parenting style researchers have typically examined links between authoritative parenting and composite measures of adolescent substance use. Such composite measures combine adolescent responses to questions concerning use of tobacco, alcohol, and a variety of illicit drugs (Lamborn *et al.*, 1991; Steinberg *et al.*, 1994). This approach ignores important between-substance distinctions in legality, accessibility, and whether use of a given substance is mood-altering or behaviorally impairing. Researchers who have examined patterns of adolescent substance use in a more detailed manner (Barnes *et al.*, 1994; Beck *et al.*, 1997; Brook *et al.*, 1985; Reifman *et al.*, 1998) have typically considered how use and abuse of specific substances (e.g., alcohol or tobacco) may be linked with parental characteristics (e.g., parents' own substance use, parental monitoring). However, these

researchers have been less likely to consider associations between parenting styles and adolescent use of specific types of illicit substances. Exceptions to this tendency include the work of Cohen and Rice (1997), who demonstrated that authoritative parenting was linked with lower levels of both tobacco and alcohol use, considered separately. In general, however, there has been a lack of communication between parenting style and substance-specific research. This may limit our understanding of how the home environment supports or discourages substance use, and particularly use of those substances which are easy to obtain, such as tobacco.

Research linking authoritative parenting with adolescent substance use has also been limited by its failure to consider mechanisms that may link parenting style with such use. In other words, although we suspect that authoritative parents will have children who are less frequent users of tobacco products, we are still unsure of exactly how authoritative parenting translates into a reduced risk of engaging in such use. In other words, what are the mechanisms that may explain links between authoritative parenting and adolescent tobacco use?

Research has indicated that peer tobacco use plays a particularly important role in determining the likelihood that adolescents will use tobacco products themselves. Early adolescents whose friends use tobacco products are more likely to themselves use such products (Ried *et al.*, 1987). The high degree of similarity in rates of tobacco use among peers is partially attributable to the tendency of tobacco-using adolescents to selectively affiliate with one another. However, research has demonstrated that in the case of substance use in general, similarity among peers is due both to selective affiliation and to the likelihood that peers will grow more similar to each other over time (Kandel, 1978). Accordingly, there is reason to suspect that both selection and socialization influences are at work with regard to peer similarity in tobacco use.

A number of researchers have considered ways in which parental and peer influences may work together to explain the likelihood that adolescents will engage in tobacco use. *Such* efforts have typically focused on parental behaviors and practices such as levels of parents' own tobacco use (Kandel and Wu, 1995), parental monitoring and control (Ary *et al.*, 1999; Chassin *et al.*, 1998; Stacy *et al.*, 1992), and parental support (Wills *et al.*, 1995).

Findings have indicated that levels of tobacco use are lowest when parents are nontobacco users, and monitor, supervise, and support their offspring. However, to our knowledge, there have been no research efforts that have examined ways in which *parenting style* and peer patterns of tobacco use work together to influence the likelihood that an adolescent will engage in tobacco use. It is possible that these two factors play independent roles in relation to adolescent tobacco use. However, it is also likely that the associations among these variables are more complex.

Child socialization researchers have suggested that a key way in which parents influence the well-being of children is by steering them toward membership in prosocial peer groups (see Parke and Ladd, 1992). Positive influences from peers may then benefit adolescents in terms of academic competence (Natriello and McDill, 1986) and lower levels of involvement in problem behavior (Ried *et al.*, 1987). We propose that any observed associations between authoritative parenting and lower levels of tobacco use may be explained by the greater likelihood that children from authoritative homes will affiliate with nontobacco-using peers, who will in turn influence one another to avoid use of such products. In other words, peer levels of tobacco use may *mediate* associations between authoritative parenting and adolescents' own tobacco use.

The establishment of such associations is of both theoretical and practical importance. It has been suggested (Harris, 1995) that parents play a minimal role in shaping their children's behavior and personality development. Instead, peers have been proposed as the primary socialization influences at work in children's lives. Such claims seem absurd to most developmental experts and run contrary to a substantial literature documenting both cross-sectional and longitudinal links between parenting behaviors and child well-being. Yet the work of Harris continues to receive a troubling amount of attention from the popular press, if not within the more traditional academic arena. We are concerned that an increasing number of parents may be wondering about their own abilities to influence their adolescent offspring's involvement in problem behavior, including tobacco use. We

believe it is important to develop research questions that simultaneously consider the roles of parents and peers in influencing child and adolescent well-being. In particular, it is of interest to document the role parents may play in steering their children toward involvement with prosocial peers. This is especially true when the measure of prosocial behavior is one of great concern to parents and health practitioners alike—the likelihood that children will engage in tobacco use.

The purpose of this paper was to examine ways in which parental authoritativeness and peer levels of tobacco use work together to influence the likelihood that an adolescent will use tobacco. We hypothesized that although both authoritative parenting and peer levels of tobacco use would be associated with target adolescents' own levels of tobacco use, peer tobacco use would mediate associations between authoritative parenting and individual tobacco use. In addition, we hypothesized that an amplification effect would be evident in associations among these variables—that adolescents would be particularly unlikely to use tobacco products when they both had authoritative parents and friends who were lower in tobacco use.

The average age of initiation of tobacco use in the United States is 12.3 years (Harrell *et al.*, 1998), and 17.5% of eighth-grade students report having smoked one or more cigarettes within the past 30 days (Monitoring the Future, 1999). Accordingly, it is especially important to examine the nature of associations among these variables among early (middle school aged) adolescents. Such adolescents are at an age at which they are increasingly exposed to tobacco use, have opportunities to experiment with tobacco, and are establishing behavioral patterns that may extend well into their adult years.

Available evidence suggests that tobacco use patterns vary by gender (with adolescent boys being more likely to smoke than are girls, but rates of tobacco use rising faster for girls), ethnicity (with European American adolescents more likely to smoke than minority adolescents), and social class (with higher levels of tobacco use among adolescents from less affluent backgrounds). Accordingly, we controlled for these variables in analyses.

METHOD

Participants and Research Procedures

During the 1997-98 school year, researchers mailed letters describing the study to the homes of all students enrolled in a suburban middle school in the southeastern portion of the United States. Parents were asked to return consent forms to the participating school indicating whether they would be willing to have their children participate in this project. Letters and consent forms were mailed to the homes of 306 enrolled eighth-grade students. Consent to participate was provided by parents of 65% ($N = 200$) of potential participants. Researchers then visited homeroom classes at the target school and administered self-report surveys to all students who both had parental consent for participation and attended school on the day of testing. Forty-four students were eliminated from the final sample for a variety of reasons, including failure to attend school on the day of data collection, failure to complete measures in entirety, membership in an underrepresented ethnic group, or failure to identify at least one friend who also attended the target school.

The final sample consisted of 156 eighth-grade students. Participants were evenly split between boys and girls. The sample was 74% European American and 26% African American (a small number of Hispanic American and Asian American adolescents also completed surveys, but were excluded from analyses because of difficulties associated with entering ethnicity as a control variable when there are extremely small numbers of participants from one or more ethnic groups). Mothers' and fathers' education levels ranged from having less than a ninth-grade education to having a graduate degree, with the modal education levels for mothers and fathers of being high school graduation or obtaining a GED.

Measures

Demographic Variables

Adolescents reported their own sex (0 = male; 1 = female), ethnicity (0 = African American; 1 = European American), and the highest levels of parental education attained by parents. Parental education scores were averaged across mothers and fathers to obtain a measure of parental education level (a proxy for socioeconomic

status [SES]). If educational information was available for only one parent, that value stood alone in the computation of this mean.

Authoritative Parenting

Adolescents completed scales designed to measure perceptions of three different parental qualities. The parental warmth/involvement scale (10 items, $\alpha = 0.75$, sample item, "You can count on them to help you out if you have some kind of problem") was designed to measure the extent to which parents were actively involved with and engaged in their children's lives. The Behavioral Control Scale (12 items, $\alpha = 0.80$, sample item, "Do your parents know exactly where you are most afternoons after school?") assessed adolescents' perceptions of parental monitoring and limit setting. The psychological autonomy granting scale (9 items, $\alpha = 0.66$, sample item, "How often do your parents emphasize that you shouldn't argue with adults") measured the extent to which parents encouraged adolescents to develop their own ideas and express their own opinions. Scales were identical to those used by Steinberg and colleagues in their research on parenting style and adolescent development and have been demonstrated to be linked with and predictive of a wide range of positive outcomes including academic competence, lower levels of problem behavior, and positive psychosocial development (Lamborn *et al.*, 1991; Steinberg *et al.*, 1994). Sample medians were determined for each of three dimensions of parenting and families were classified on a 4-point scale indicating where they fell on these median splits. Families were given a 3 (authoritative) if they scored above the sample medians on all 3 dimensions, a 2 (somewhat authoritative) if they scored above the sample medians on 2 out of 3 dimensions, a 1 (somewhat nonauthoritative) if they scored above the sample medians on only 1 of the 3 dimensions, and a 0 (nonauthoritative) if they scored below the sample Medians on all 3 parenting dimensions. This construction of our measure of authoritative parenting recognizes the role each individual parenting dimension plays in determining the parental authoritativeness perceived by adolescents. For example, a high level of parental warmth/involvement, in and of itself, is not necessarily predictive of child or adolescent well-being (see Eisenberg and Murphy, 1995) or indicative of authoritative parenting. However, in combination with similarly high levels of behavioral control and psychological autonomy granting, parental warmth/responsiveness becomes a defining feature of authoritativeness. The synergistic nature of parental authoritativeness is thus best captured by a measurement strategy that acknowledges the contributions of each individual dimension of parenting style, rather than averaging across all such dimensions. This approach is consistent with previous empirical efforts that have operationalized parenting style in a continuous, rather than a categorical, manner (Fletcher *et al.*, 1995).

Peer Group Affiliations

Participating students were asked the question, "Do you hang around with a group of teenagers in your grade at (name of school)?" They were then asked to identify those schoolmates with whom they spent time by listing their first names on the questionnaire. Students were not limited in the number of peer affiliates ("friends") they could list. However, data from only the first 10 individuals listed were included in subsequent analyses. The cutoff of 10 was selected because for most participants (95%), this number comprised their entire peer groups.

Peer Tobacco Use

Students' social affiliates were identified using the procedures described above. For all identified affiliates who themselves participated in the project, we obtained self-report data on individual students' tobacco use (see below). The level of tobacco use within each participating adolescent's peer group was then obtained by averaging levels of self-reported use across these peers (excluding the target adolescent). This procedure yielded peer tobacco use data from peer groups ranging in size from 1 to 9 peers, with an average group size of 4.46 peers.

Adolescent Tobacco Use

On the basis of the work of Jessor *et al.* (1992) and in an attempt to distinguish where adolescents fell on a continuum of tobacco use ranging from nonuse to experimentation to regular tobacco use, we assessed adolescents' involvement with cigarettes or chewing tobacco by asking them whether they had ever engaged in tobacco use and the frequency of current use. On the basis of responses to these questions, students were

assigned a score representing frequency of tobacco use, ranging from 1 (never used tobacco products) to 6 (daily user). The majority (85%) of participants were nonusers of tobacco products. Four percent of participants reported daily use of tobacco products, while the remaining 11% fell between these two extremes. Means and standard deviations of all variables are presented in Table I.

Table I. Descriptive Statistics and Bivariate Correlations Among Authoritative Parenting, Peer Tobacco Use, and Adolescent Tobacco Use

Variable	1	2	3
1. Authoritative parenting	—		
2. Peer tobacco use	-0.21*	—	
3. Target child tobacco use	-0.25**	0.71**	—
Mean	1.49	1.42	1.41
SD	1.04	0.84	1.16
Range	0.00-3.00	1.00-6.00	1.00-6.00

* $p < 0.05$; ** $p < 0.01$.

Plan of Analysis

We followed strategies outlined by Baron and Kenny (1986) for establishing mediator relations. To determine whether levels of peer tobacco use mediated associations between parental authoritative parenting and adolescent tobacco use, correlation matrices were examined to determine whether the potential mediator (peer tobacco use) would be associated both with perceived authoritative parenting and with adolescent tobacco use, and to determine whether perceived authoritative parenting would be associated with measures of adolescent tobacco use. When such patterns of association were observed, we considered whether associations between parental authoritative parenting and adolescent tobacco use were reduced to below significance levels when parental authoritative parenting and peer tobacco use were considered simultaneously as predictors of adolescent tobacco use. Such a reduction would be indicative of a mediating effect. To do this, we performed a hierarchical regression analysis predicting adolescent tobacco use from demographic variables, authoritative parenting, peer tobacco use, and interaction terms entered in the following order. In Block 1, we entered as predictors demographic controls of adolescent sex, ethnicity, and parental education level. In Block 2, we added the level of adolescent-perceived authoritative parenting. In Block 3, we added the mean level of tobacco use within the peer group (to test for mediating effects as described above). In Block 4, we added the interaction of parental authoritative parenting and peer tobacco use (to determine whether adolescents would be particularly unlikely to use tobacco products when they both had authoritative parents and friends who were lower in tobacco use).

RESULTS

Bivariate Associations Among Variables

Authoritative parenting, peer tobacco use, and target adolescents' own tobacco use were all intercorrelated (Table I). Children raised by more authoritative parents were less likely to use tobacco themselves and had friends who were less likely to use tobacco products. Adolescents whose friends reported lower levels of tobacco use were themselves less likely to use tobacco products.

Associations Between Demographic Variables and Adolescent Tobacco Use

Table II indicates unstandardized and standardized regression coefficients, and standard errors, for all predictors of adolescent tobacco use on each block, of the regression equation. In Block 1, demographic variables (sex, SES, ethnicity) were unrelated to tobacco use, indicating that levels of such use did not vary according to sex, social class, or ethnic group. Although they did not reach statistical significance, the directions of coefficients are consistent with previous research indicating higher levels of tobacco use among European American adolescents and adolescents from lower socioeconomic backgrounds. However, rates of tobacco use were roughly equivalent for girls versus boys in this sample.

Prediction of Adolescent Tobacco Use From Authoritative Parenting and Peer Tobacco Use

Results from Block 2 indicated that adolescents with more authoritative parents were less likely to use tobacco products than were their peers from less authoritative homes, $B = -0.28$, $\beta = -0.25$, 0.055 — 3.25 , $p < 0.01$.

Table II. Regressions Predicting Adolescent Tobacco Use From Demographic Variables, Authoritative Parenting, Peer Tobacco Use, and Interaction Term

Block	Predictors	B	SE	β	R ²	ΔR^2
1	Sex	0.09	0.18	0.04		
	SES	-0.15	0.09	-0.14		
	Ethnicity	0.32	0.21	0.12	0.04	0.04
2	Sex	0.13	0.18	0.06		
	SES	-0.12	0.09	-0.11		
	Ethnicity	0.38	0.21	0.14		
	Authoritative parenting	-0.28	0.09	-0.25**	0.10	0.06**
3	Sex	-0.00	0.13	0.00		
	SES	-0.15	0.06	-0.13*		
	Ethnicity	0.16	0.15	0.06		
	Authoritative parenting	-0.11	0.06	-0.10		
	Peer tobacco use	0.94	0.08	0.68**	0.53	0.43**
4	Sex	0.05	0.13	0.02		
	SES	-0.14	0.06	-0.13*		
	Ethnicity	0.18	0.15	0.07		
	Authoritative parenting	0.26	0.13	0.23*		
	Peer tobacco use	1.15	0.10	0.83**		
	Authoritative Parenting × Peer Tobacco Use	-0.27	0.08	-0.38**	0.56	0.03**

* $p < 0.05$; ** $p < 0.01$.

We had hypothesized that the association between authoritative parenting and adolescent tobacco use would be mediated by the level of tobacco use among adolescents' peers. A prerequisite for conducting tests of mediation was that the predictor, the mediator, and the outcome variable all be significantly correlated. This was found to be true for our variables of interest. Accordingly, in Block 3, we added as a predictor the average level of tobacco use among adolescents' peers. Adolescents whose friends used less tobacco were themselves less likely to use tobacco, $B = 0.94$, $\beta = 0.68$, $t(155) = 11.75$, $p < 0.01$. However, when levels of peer tobacco use were taken into account, the previously significant association between authoritative parenting and adolescent tobacco use dropped to below significance levels: Associations between authoritative parenting and adolescent tobacco use can be explained by the likelihood that adolescents from more authoritative homes will affiliate with non-tobacco-using peers.

Amplification Effects in the Prediction of Adolescent Tobacco Use

On Block 4, we observed a significant Authoritative Parenting × Peer Tobacco Use interaction for the prediction of adolescent tobacco use, $B = -0.27$, $\beta = -0.38$, $t(155) = -3.28$, $p < 0.01$. The direction of the regression coefficients for this effect indicated that it was an amplification effect—adolescents were particularly unlikely to use tobacco products when they both affiliated with low-tobacco-using peers and when they had parents high in authoritativeness.

DISCUSSION

Results reported here indicated that higher levels of parental authoritativeness were associated with lower levels of adolescent tobacco use, over and above effects of demographic controls. The association between parental authoritativeness and adolescent tobacco use was mediated by levels of tobacco use within the adolescent peer group. An amplification effect was observed whereby the greatest benefits of parental authoritativeness were observed among adolescents whose friends reported lower levels of tobacco use.

Findings regarding the beneficial effects of authoritative parenting (observed here for bivariate correlations and after adding controls for demographic variables) are consistent with a large and established literature documenting that adolescents benefit, behaviorally and psychologically, from parenting that is high in warmth, behavioral control and psychological autonomy granting (Lamborn *et al.*, 1991; Steinberg *et al.*, 1994).

However, the current project has, as expected, established that this link exists for a type of adolescent problem behavior understudied in the parenting style literature—the use of tobacco products. In all likelihood, lower levels of tobacco use among adolescents from authoritative homes are explained in part by the tendency for authoritative parents to maintain high behavioral expectations for offspring and to monitor their children's behavior (Lamborn *et al.*, 1991; Steinberg *et al.*, 1994). However, authoritative parents are also likely to exhibit high levels of trust and communication with their offspring. Stattin and Kerr (Kerr *et al.*, 1999; Kerr and Stattin, 2000; Stattin and Kerr, 2000) have suggested that lower levels of adolescent involvement in problem behavior are attributable largely to the affiliative aspects of parent—child relationships. When parents maintain warm, trusting relationships with their offspring, children are more likely to spontaneously disclose information to their parents. The parental knowledge gained from such disclosure is in turn responsible for low levels of adolescent problem behavior. Although the work of Stattin, Kerr, and colleagues emphasizes the key role of parental responsiveness in relation to levels of problem behavior, it is important to note that other researchers (Fletcher *et al.*, 2001) have demonstrated that parental warmth and structure play independent roles in protecting adolescents from involvement in problem behavior. In addition, links between parental warmth and children's moral development are inconsistently observed unless levels of parental demandingness are also taken into account (Eisenberg and Murphy, 1995). The importance of parental authoritativeness in relation to adolescent tobacco use lies in its simultaneous consideration of levels of both parental warmth and behavioral control.

Findings presented here are also consistent with a large body of literature indicating that adolescents tend to affiliate with peers who are similar to themselves in terms of involvement in problem behavior (see McCord, 1990). This is not to suggest that adolescents make their choices of friends based solely upon the extent to which they perceive one another as engaging in high (or low) levels of tobacco use. We find it more likely that exposure to a nonauthoritative parenting style increases the likelihood that adolescents will gravitate toward affiliations with peers who engage in a variety of interdependent activities perceived by adults as "problem" behaviors—one such behavior being tobacco use.

Of greater interest is the finding that levels of peer tobacco use mediated the association between authoritative parenting and adolescents' own tobacco use. In other words, authoritative parents have children who are less likely to affiliate with tobacco-using peers. Adolescents who affiliate with peers low in tobacco use are then less likely to use tobacco products themselves. Parents appear to play a key role in relation to levels of tobacco use among their adolescent offspring. However, this influence is best understood as a distal one. In all likelihood, the mediating role of peer tobacco use is explained by the tendency of the comparatively well-adjusted children of authoritative parents to establish and maintain friendships with other well-adjusted (and consequently non-tobacco-using) peers. In contrast, peers appear to play a more proximal role in influencing levels of tobacco use among one another. This may be due the day-to-day nature of peer interactions in concert with day-to-day opportunities to engage in tobacco use. Peers are likely presented with more opportunities than are parents to influence one another to use, or not to use, tobacco products. In addition, the strong proximal role of peer influence in relation to tobacco use may be due to tobacco's being a legal (at least among adults) and highly accessible product. Parents might be observed to play a stronger, and more proximal, role in relation to adolescent use of substances that are less readily available within the adolescent milieu, such as alcohol and marijuana.

An amplification effect was observed with regard to the dual influences of authoritative parenting and peer tobacco use on adolescent tobacco use. In other words, the lowest levels of tobacco use were observed among adolescents who both experienced authoritative parenting at home, and had friendships with non-tobacco-using peers. Such findings are further confirmation of the important role of parents in influencing whether their offspring will engage in tobacco use. They also emphasize the importance of encompassing adolescents in networks of relationships with key others who send consistent messages concerning the undesirability of using tobacco products. In many ways, an amplification effect can be thought of as an effect of membership in such networks, as it indicates that the benefits of receiving consistent negative messages regarding tobacco use are greater than the sum the individual influences of authoritative parenting and peer tobacco use. Similarly, there

are special risks to adolescents who both lack exposure to authoritative parenting at home and affiliate with tobacco-using peers.

This amplification effect may be partially accounted for by the different ways in which parents versus peers communicate attitudes toward tobacco use. Authoritative parents establish warm, positive bonds with their children. Such connections may decrease the likelihood that offspring will wish to engage in behaviors that are not valued and supported by parents. In addition, authoritative parents are more likely to monitor and exert control over their offspring's behavior, resulting in fewer opportunities for tobacco use and risks of consequences at home should tobacco use be discovered. In contrast, peers are likely to exert their influence in the day-to-day contexts in which tobacco use may occur. Such influences may operate as adolescents model the behaviors of their peers or as peers deliberately encourage one another to engage, or not to engage, in tobacco use.

The research reported here is not without its limitations. Data are cross-sectional in nature. Accordingly, although they meet statistical requirements for demonstrating mediating relations, without longitudinal data we were not able to demonstrate that authoritative parenting was longitudinally predictive of adolescents' patterns of peer affiliations, or that such peer affiliations were longitudinally predictive of adolescents' own levels of tobacco use. Further research should make use of longitudinal samples and methods to demonstrate such causal relations. Further research should also focus on identifying ways in which parents influence the types of peer affiliations their offspring develop, as well as ways in which peers influence one another with regard to tobacco use.

The current sample was restricted to African American and European American adolescents, with adolescents from other ethnic groups omitted from statistical analyses because of the small size of such subgroups. The ethnic composition of the sample was representative of the geographic area from which data were obtained. Still, it cannot be assumed that findings reported here would be replicated among adolescents from other ethnic groups. Further research would benefit from inclusion of more diverse samples.

Strengths of the data included its reliance on adolescent reports of perceptions of parenting style and tobacco use. Research has indicated that adolescents are accurate reporters of parenting practices (see Golden, 1969; Moscovitz and Schwarz, 1982). In addition, adolescents are generally believed to be the only reliable reporters of their own levels of substance use (McCord, 1990). A particular strength of the current data lies in the use of independent reports of friends themselves to form an index of peer substance use. Such a strategy overcomes a major limitation associated with adolescents' reporting of their friends' behaviors—that adolescents tend to perceive their friends' to be more behaviorally similar to themselves than is actually the case.

The unique contribution of this project within the parenting style and tobacco-use literatures lies not within its findings of links between levels of authoritative parenting and adolescent tobacco use or between levels of peer tobacco use and adolescents' own tobacco use. Such findings are secondary to the more central results indicating the mediating role of peer tobacco use with regard to parental authoritativeness/peer tobacco use relations and the amplification effect involving these two influences. Such findings highlight the key role of parents in relation to their adolescent children's levels of tobacco. Clearly, there are multiple ways in which authoritative parents confer behavioral advantages upon their children. An important way in which parents can influence their offspring's tobacco use patterns is by exposing them to high levels of warmth, behavioral control, and psychological autonomy granting. Authoritative parenting lowers the likelihood of adolescent tobacco use not only directly, but also by increasing the likelihood that adolescents will affiliate with non-tobacco-using peers who will further influence one another's likelihood of using tobacco products.

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