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Early Adolescent Substance Use in Mexican Origin Families: Peer Selection, Peer Influence, and Parental Monitoring*

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Abstract

Background—Because adolescents vary in their susceptibility to peer influence, the current study addresses potential reciprocal effects between associating with deviant peers and use of alcohol, tobacco and other drugs (ATOD), as well as the potential buffering role of parental monitoring on these reciprocal effects.

Method—674 children of Mexican origin reported at fifth and seventh grade(10.4 years old at fifth grade)on the degree to which they associated with deviant peers, intended to use alcohol, tobacco or other drugs (ATOD) in the future, and had used controlled substances during the past year. Trained observers rated parental monitoring from video-recorded family interactions at the first assessment.

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We confirm that the manuscript has been read and approved by all named authors and that there are no other persons who satisfied the criteria for authorship but are not listed. We further confirm that the order of authors listed in the manuscript has been approved by all of us. We confirm that we have given due consideration to the protection of intellectual property associated with this work and that there are no impediments to publication, including the timing of publication, with respect to intellectual property. In so doing we confirm that we have followed the regulations of our institutions concerning intellectual property.

We further confirm that any aspect of the work covered in this manuscript that has involved either experimental animals or human patients has been conducted with the ethical approval of all relevant bodies and that such approvals are acknowledged within the manuscript.

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Results—Youth who intended to use ATODs during fifth grade experienced a relative increase in number of deviant peers by seventh grade, and youth with more deviant peers in fifth grade were more likely to use ATODs by seventh grade. Parental monitoring buffered (i.e., moderated) the reciprocal association between involvement with deviant peers and both intent to use ATODs and actual use of ATODs.

Conclusions—Parental monitoring can disrupt the reciprocal associations between deviant peers and ATOD use during the transition from childhood to adolescence

Keywords

Parenting style; parenting; childrearing practices; ATOD use; Mexican Americans; peer relations; parent child communication

1. Introduction

1.1. Overview

Early use of alcohol, tobacco and other drugs (ATOD)constitutes a major health risk(Anthony et al., 2005; van Leeuwen et al., 2011). Furthermore, although many adolescents experiment with ATODs only to abandon them, ATOD use before mid-adolescence often predicts later substance abuse, delinquency, antisocial behavior, and psychiatric disorders (Ellickson et al., 2003). Therefore, it is important to identify factors that either exacerbate or inhibit ATOD use during early adolescence. In early adolescence (i.e., eighth grade), Latinos report the highest usage rates for most types of drugs compared to Anglo and African American students of the same age (Johnston et al., 2012). For this reason, in the current investigation we focus on factors hypothesized to affect involvement with ATOD among a cohort of over 600 Mexican American youth during the transition from childhood to early adolescence (fifth to seventh grades). In particular, we examine the potential risk of ATOD use due to deviant peers and the degree to which parental monitoring protects against this risk.

1.2. Pathways to ATOD use

We assess two reciprocal pathways implicated in the association between deviant peers and substance use. The *peer socialization pathway* reflects how associating with deviant peers increases the likelihood of ATOD use. The *peer selection pathway* reflects how children who use or intend to use ATOD actively seek out and passively select into peer groups that will facilitate their use (Hirschi, 2002). Scientists find support for both pathways among white American samples (Dishion, 2013). Because adolescents vary in their susceptibility to peer influence (Steinberg and Silverberg, 1986), recent emphasis has turned to identifying mechanisms or processes that buffer youth from the effects of deviant peers on ATOD use and intention to use ATOD (Prinstein and Wang, 2005).

1.3. The Buffering Role of Parental Monitoring

Although there are many elements of parenting that could moderate both the selection and socialization pathways, in the present study we focus on the degree to which parental monitoring reduces these pathways to use during the transition from late childhood to early

adolescence. Consistent with ecological theory (Bronfenbrenner, 1977) and family interactional theory (Brook et al., 2006), we expect that parents who monitor child activities prior to adolescence will be in a better position to note changes in behavior that might relate to ATOD use during the transition to adolescence. Those parents should also be better positioned to structure peer relationships in a fashion that reduces the probability of associating with deviant friends after the transition to adolescence. For these reasons, effective monitoring by parents prior to and during adolescence should protect against both selection and socialization pathways.

However, empirical support for a buffering role of parental monitoring on the selection and socialization pathways is decidedly mixed. One longitudinal study showed that higher levels of parental monitoring reduced the socialization pathway (Barnes et al., 2006), whereas others do not find adult supervision to moderate either selection or socialization (e.g., Light et al. 2013). The inconsistency in prior tests of this potential buffering effect of parental monitoring is one of the limitations of the present literature. In the current study, we hypothesize that higher parent monitoring will reduce the magnitude of both the selection and socialization pathways.

Prior work has also called attention to the possibility that parental monitoring might be expressed differently and have different developmental outcomes across ethnic groups (Domenech Rodríguez et al., 2009). Empirical findings show that in terms of main effects monitoring is equally protective – or not protective - across ethnic groups (Kopak et al., 2011; Tragesser et al., 2007; Yabiku et al., 2010) though we found one exception (Voisine et al., 2008). Importantly, this previous cross-cultural work has not tested the potential buffering role of parent monitoring.

1.4. The Potential Confounding Role of Adolescent Characteristics

Additionally, there has been some concern that parental monitoring is conflated with the child's temperament and willingness to disclose information (Kerr and Stattin, 2000; Stattin and Kerr, 2000). That is, prior research linking parental monitoring to child behaviors like ATOD use has frequently measured the amount of knowledge parents have about their children rather than active parenting behaviors like “attention to and tracking of the child's whereabouts, activities, and adaptations” (Dishion and McMahon, 1998; *p*.61). Although some children disclose information to their parents as a result of previous parent efforts to create a good relationship with the children (Soenens et al., 2006), others may disclose information because they are dispositionally inclined to do so(and disinclined to engage in delinquent or rulebreaking behaviors). Stattin and Kerr (2000) describe these children as *conventional*, *highly sociable*, and *low in negative emotionality*. Accordingly, the solicitation and monitoring behaviors from parents may be conflated with the dispositional willingness of some children to disclose information (Stattin and Kerr, 2000). To account for this possibility, we account for these dimensions of temperament in the present study (Eaton et al, 2009).

1.5. Additional Covariates

In addition to child temperament, testing these associations among Mexican-origin children allows us to assess the role of acculturation (Fosados et al., 2007) and generational status (Edwards et al., 1995) implicated in other studies of ATOD use in this population. Although these variables are typically included as covariates (Voisine et al., 2008), in the current study we also consider their potential moderating effect on the hypothesized pathways (Smokowski et al., 2008). We also control for parent education (Wechsler and Nelson, 2008) and child gender (Johnstone et al., 1996). Finally, we account for parent ATOD use (Knight et al., 2013), given the potential effect of parental modeling on adolescent ATOD use.

2. Materials and Methods

2.1. Participants and Procedures

The sample comes from the *Proyecto de lasFamilias de California* (California Families Project) and consists of 674 Mexican-origin families with a typically functioning child attending the 5th grade (Wave 1). Children and their families were drawn at random from rosters of students in the school districts of Sacramento and Woodland, California. First-, second-, and third-generation children of Mexican origin were eligible for the study, and the focal child had to be living with his or her biological mother. Participants were recruited by telephone or, when they did not have a telephone, by a recruiter who went to their home. Of the eligible families, 73% agreed to participate, which is comparable to other community studies that attempt to recruit multiple family members (Capaldi and Patterson, 1987). One hundred and sixteen fathers (21%) refused to participate at the first assessment. There were no families in which the mother agreed to participate in the study but the child refused. 14% of the adolescents did not participate at the 7^{th} grade assessment. Attrition was unrelated to either ATOD use or intent to use ATOD.

The present study used two waves of data, with a two-year interval between waves. Demographic data are presented in Table 1. For example, at Wave 1, the mean age of the children (50% female) was 10.4 years (*SD* = 0.60). Trained research staff visited the families twice within a one-week period and interviewed the participants in their homes (in separate rooms) using laptop computers. All interviewers were bilingual, and most were of Mexican heritage. Interviews were conducted in Spanish or English based on participant preference. Incentives to participate included $200 for two-parent families (*n* = 548) and $125 for one-parent families (*n* = 126 single mother families).

The visits included video and audio recorded structured interaction tasks (i.e., mother-child and when applicable, father-child). The order of father and mother interaction tasks was randomly counter-balanced. To start each task, interviewers provided a brief explanation of the task, gave the task cards to a dyad member, and then left the room while the dyad(parent and target child) discussed issues raised by the task cards. The parent and child took turns reading and discussing the task cards, which included several questions specifically written to elicit discussions of parenting behaviors (e.g., monitoring). Responses to these questions provided information about monitoring and other parenting practices. Each dyad was given 20 min to complete this task. The project observers received several weeks of training on

rating family interactions, and rated the interactions using an adapted version of the Iowa Family Interaction Rating Scales (Melby and Conger, 2001). Different observers rated the target child and each parent. Before observing tapes, coders had to independently rate precoded interaction tasks and achieve at least 90% agreement with that standard (25% of the tasks were randomly selected to be rated by a second observer).

2.2. Measures

2.2.1. Intent to use ATOD—In fifth and seventh grade, the children completed a nine-item scale asking whether they intend to use substances in the next year (Gibbons et al., 2004). Four response options were given ranging from 1 = "definitely will not" to 4 = "definitely will." These nine items had acceptable reliability (5^{th} grade: α = .83; 7^{th} grade: α = .83), and were averaged to serve as the sole indicator for a single-indicator latent factor"intent to use ATOD" at each grade, with the residual variance of the scale score fixed to [σ * (1-α)] (Hayduk, 1987). Most of the adolescents had no intention of using alcohol (89.6% at 5^{th} grade, 87.7% at 7^{th} grade), cigarettes (92.0% at 5^{th} grade, 95.2% at 7^{th} grade) or street drugs (93.2% at 5^{th} grade, 95.8% at 7^{th} grade).

2.2.2. Association with deviant peers—In fifth and seventh grade, the children completed a 23-item scale adapted from Elliott et al. (1985) to report peer deviancy in the past three months. Four response options were given ranging from 1 = "none of them" to 4 = "most of them." Sample items include "How many of your friends used alcohol to get drunk," "How many of your friends hung out with a gang," and "How many of your friends used drugs or sniffed things to get high?" The 23 items had acceptable reliability (5^{th} grade: α = .82; 7^{th} grade: α = .83) and were averaged to serve as the sole indicator for the latent factor"deviant peers" at each grade.

2.2.3. ATOD use—In fifth and seventh grade, the children completed a 9-item scale adapted from Elliott et al. (1985), which asks about the number of times they had used or tried alcohol ("more than just a few sips"), cigarettes ("used or tried"), and street drugs("used or tried") in the past three months. Responses ranged from 1 = "never" to 5 = "every day." At 5^{th} grade, less than 1% of the sample had tried cigarettes, 3.4% had tried beer, and 0% had tried street drugs The items were averaged within-substance to create three scales: alcohol use (M = 1.01 at 5^{th} grade, 1.02 at 7^{th} grade), cigarette use (M = 1.00 at 5^{th} grade, 1.01 at 7^{th} grade), and street drug use (M = 1.00 at 5^{th} grade, 1.01 at 7^{th} grade). The nine items were also summed to create the index "ATOD use" at each grade.

2.2.4. Observed parental monitoring—During the fifth grade, trained observers rated both mothers and fathers (when present) on two scales: *Monitoring* and *Quality of Time* spent with the child. Responses ranged from 1= "very low" to 9= "very high." The *monitoring* variable was operationalized as the degree to which parents accurately track the behaviors, activities, and social involvements of the child, as well as parents' specific knowledge about the child's life and activities. Examples of high monitoring included statements during the interaction such as "When I asked your coach how you were doing in track, he said you've really improved. I can see that too" and "You haven't spent much time with your friend Beth lately. Are you getting along alright or are you just too busy with your

school activities?" *Quality time* was operationalized as the extent or quality of the parent's regular involvement with the child in settings that promote opportunities for conversation, companionship, and mutual enjoyment. Of particular interest was a sense of time 'well-spent' instead of superficial involvement. Examples of high quality time included statements such as "We really enjoy our trips to town together" and "I always look forward to our Saturday evenings together playing games and eating popcorn." We believe this combination of monitoring and quality time approximates what Stattin and Kerr (2000) describe as "active control and supervision."

Prompts written to elicit these parenting dimensions during the discussion task included "How do I find out about my child's schoolwork, friends, and other activities? How hard or easy is this?/" and "How often does my Mom come to my activities like sports, school plays, or band? Does she attend enough?" Interrater reliabilitywas r_{ICC} =.62. Thesefour scales (two each for mother and father) were significantly correlated (average r = .29, range: .17- .47) and used as indicators of a latent variable labeled "parental monitoring" in two-parent families (only the two mother scales were used as indicators in single-mother families, constrained to equality across single- and two-parent families without a significant loss in model fit, $\Delta\chi^2$= 5.13, p = .08). This constraint allows for comparability of the models across single-mother and two-parent families.

2.2.5. ParentATOD use—During the fifth grade assessment, both parents reported on their current use of alcohol, tobacco, and other drugs. Each of these three items was answered on a two-point scale (0= no, 1=yes). These items were averaged together across parents to create indices of parent tobacco, alcohol, and drug use.

2.2.6. Parent education—We averaged mother's total years of education with the father's total years of education (for two-parent families) or used the mother's total years of education (for single-mother families). The resulting scale ranged from 0 to 20 years (M = 10.3, SD = 3.4)

2.2.7. Child temperament—During the fifth grade assessment, mothers completed the *Early Adolescent Temperament Questionnaire—Revised* (*EATQ-R*; Ellis and Rothbart, 2001). To assess low sociability, we used the 4-item Shyness scale (α = .67), with a higher score reflecting greater behavioral inhibition to novelty and challenge, especially social challenge. Shyness is inversely related to sociability (Bruch et al., 1989). As a marker of conventionality and following Muris et al. (2007), Effortful Control (α = .79) was assessed by 16 *EATQ-R* items related to Activation Control (the capacity to perform an action when there is a strong tendency to avoid it), Attention (the capacity to focus attention as well as to shift attention when desired), and Inhibitory Control (the capacity to plan and to suppress inappropriate responses). Finally, Negative Affectivity (α = .74) was assessed by 13 items related to Fear (unpleasant affect related to anticipation of distress) and Frustration (negative affect related to interruption of ongoing tasks or goal blocking).

2.2.8. Generational status—Children who were born in Mexico were coded as 1, children born in the U.S. were coded as 0.

2.2.9. Acculturation—Children completed the ARMSA-II (Cuellar et al., 1995), which was used to create an overall acculturation score, by subtracting Mexican-orientation from Anglo-orientation.

2.3. Analyses

We used Mplus Version 6 (Muthén and Muthén, 2006) to estimate a series of structural equation models (SEMs) using full information maximum likelihood. We used the standard chi-square index and the root mean square error of approximation (RMSEA; Browne and Cudeck, 1993) to assess model fit. For clearer presentation, the figures illustrating the findings from the SEMs do not include results for the seven control variables (i.e., child sociability, effortful control, negative affectivity, parent ATOD use, child acculturation, generational status, parent education), but they were included in all analyses.

3. Results

3.1. Preliminary Analyses

Descriptive statistics are presented in Table 1. For example, child age ranged from 9.78 years to 12.7 years at 5^{th} grade, with an average of 10.4 years and a standard deviation of 0.60. Preliminary analyses showed no differences in hypothesized paths in the SEM based on participant gender or generational status; therefore, results are presented for the combined sample of boys and girls, and across generation status. Preliminary analyses also showed no difference in hypothesized paths across alcohol, tobacco, and street drugs, so results are presented on the combined ATOD scale. Association with deviant peers (r = .40), intent to use ATOD (r = .30), and ATOD use (r = .25) demonstrated stability from fifth to seventh grade. Association with deviant peers was related to the intention to use ATOD (r = .34 for fifth grade, r = .46 for seventh grade), and to ATOD use (r = .22 for fifth grade, r = .38 for seventh grade). Despite almost no use or intent to use ATOD in 5^{th} grade, adolescents who did entertain the idea of using ATOD over the next year were already more likely to be associating with deviant peers in 5^{th} grade. Correlations among study variables are available in online Supplementary Material[1].

3.2. Outcome 1: Intent to use ATOD

We first assessed parental monitoring as a moderator of both (a) the path from associating with deviant peers in fifth grade to intent to use ATOD in seventh grade (i.e., socialization), and (b) the path from intent to use ATODs in fifth grade to associating with deviant peers in seventh grade (i.e., selection). The fit of this model was good, $\chi^2(20) = 33.24$, p = .03, RMSEA = .031, [95% CI: .009 - .050]. Our next question was whether the moderation by parent monitoring was greater for either the selection or socialization pathway. However, the moderator effect on the socialization pathway was not significantly different in magnitude from the moderator effect on the selection pathway, $\chi^2(1) = 2.62$, p = .11, so they were constrained to equality. Figure 1 contains the standardized and unstandardized path coefficients from this model. Parental monitoring moderated both the pathway from intent to use ATOD in fifth grade to later deviant peers associations (β = -.04, *SE* = .02), as well as

[1]Supplementary material can be found by accessing the online version of this paper at http://dx.doi.org and by entering doi:…

the pathway from deviant peers in fifth grade to later intent to use ATOD (β = -.14, *SE* = .05).

To facilitate interpretation of these moderating effects, we calculated simple slopes using the regions of significance test (i.e., -1SD, +1SD from the mean; Preacher, Curran, and Bauer, 2006). Increased parental monitoring was associated with less socialization and less selection. If parents were at or above the 71st percentile on monitoring, the selection and socialization pathways were not significant for intent to use ATOD.

3.3. Outcome 2: Use of ATOD

We next ran the same moderation model replacing intent to use ATOD with actual ATOD use, $\chi^2(25) = 70.65$, $p < .001$, RMSEA = .052 [95% CI: .038 - .067]. The moderation of the socialization pathway was not significantly different in magnitude from the moderation of the selection pathway, $\chi^2(1) = 2.59$, $p = .11$, so they were constrained to equality. However, parental monitoring had a significantly stronger direct effect on change in ATOD use than on change in deviant peer associations, $\chi^2(1) = 59.43$, $p < .001$. Figure 2 contains the standardized and unstandardized coefficients from this model. Parental monitoring significantly moderated the pathway from deviant peers in fifth grade to later ATOD use (β = -.21, *SE* = .08) as well as the pathway from ATOD use in fifth grade to later associations with deviant peers (β = -.23, *SE* = .05). Increased parental monitoring was associated with less socialization and less selection. If parents were at or above the 60th percentile on monitoring, the selection and socialization pathways were not statistically significant for ATOD use.

The only covariate that predicted change over time in deviant peer associations was shyness. Shy adolescents were less likely to associate with deviant peers over time (β = -.08, *SE* = .04). Parent alcohol use predicted increases in ATOD use (β = -.12, *SE* = .04).

4. Discussion

4.1. Support for Hypotheses

Children and adolescents who associate with deviant peers are at increased risk for the early use of alcohol, tobacco, and other drugs. The *peer selection pathway* describes how children who use or intend to use ATOD select peers who will facilitate ATOD use. In contrast, the *peer socialization pathway* describes how children with deviant peers become more likely to use ATOD because of peer influence. In the current investigation, we found support for both of these pathway sover time among a sample of Mexican-origin children.

The results support the hypothesized buffering effect of parental monitoring. There are several possible reasons why parental monitoring moderated both pathways. First, a close parent-child relationship should reduce deviancy because the child identifies with the parent and internalizes the parent's conventional value system (Hirschi, 2002). Children who use or even intend to use ATOD and experience average levels of parental monitoring may be stymied in their attempts to gravitate toward deviant peers. That is, monitoring may work as it is intended; the adolescent's impulse to seek out peers who allow expression of the deviant behavior is redirected by vigilant parents, an interpretation consistent with both social

control theory as well as family interactional theory. Prior work has called attention to the possibility that parental monitoring might be expressed differently and have different developmental outcomes across ethnic groups (Domenech Rodríguez et al., 2009), yet empirical findings show that in terms of main effects monitoring is equally protective – or not protective - across ethnic groups (Kopak et al., 2011; Tragesser et al., 2007; Yabiku et al., 2010). This previous cross-cultural work has not tested the potential buffering role of parent monitoring. The present results extend this earlier work on main effects by demonstrating that parental monitoring *buffers* Mexican-origin children against both selection and socialization pathways to ATOD use.

4.2. Developmental Stage

An important feature of the research design was the initiation of the study in late childhood (age 10) prior to the onset of ATOD use for most children. This approach allowed us to evaluate the early onset of ATOD use which is developmentally important for several reasons. First, very few youth have initiated ATOD use before early adolescence (Johnston et al., 2012), so in contrast to studies that evaluated peer selection and socialization processes in later adolescence and young adulthood, the presence or absence of these pathways in early adolescence reflects the 'starting point' for what plays out as youth experience more pressures and opportunities to use ATODs in early and middle adolescence (Brown et al., 1986). Although 5th graders in this study who entertained the idea of using ATOD over the next year were already more likely to be associating with deviant peers, actual ATOD use was almost zero (0.6% had tried cigarettes, 3.4% had tried beer, and 0% had tried street drugs). Any peer selection that happened prior to that time was likely driven by similarity in other characteristics. Furthermore, the significant selection pathways over time suggest that the process – even if it began before 5th grade - was ongoing. Second, early adolescence is a particularly appropriate time to study an important developmental precursor to ATOD use (i.e., intent to use ATODs) as we did in this study. Third, early onset ATOD use is a strong predictor of later ATOD use, abuse, and dependence; thus, greater understanding of early onset provides important information for early interventions that may curtail involvement with ATODs before they become a significant personal or societal problem (Rehm et al., 2003).

4.3. Monitoring as a Protective Factor

The present study also addresses Kerr and Stattin's (2000) concern that the effect of parental monitoring is confounded by temperamental traits that increase communication with parents (leading to higher monitoring scores) and decrease rates of problem behaviors. By demonstrating that the main and interactive effects of parental monitoring hold after controlling for several relevant temperament dimensions, we bolster developmental theories arguing for a causal influence of monitoring on ATOD use. The generalizability of this role of parent monitoring is further bolstered by the fact that it is equivalent for males and females, for first-and later-generation adolescents, across three types of controlled substances.

4.4. Limitations

The present study has several limitations that should be noted. Although ethnic homogeneity provides greater power to examine intra ethnic differences, replication across other ethnic groups will increase confidence in the generalizability of our findings. The non-experimental design of the research does not allow for strong causal inference. Both parents and child ATOD use is based on self-reports, which are subject to response biases. The predictors and outcomes in these analyses are dynamic processes that cannot be fully represented with only two assessments. Consequently, these findings may not generalize to other periods of development.

4.5. Conclusions

Not withstanding these limitations, the results offer new support for the peer selection and socialization processes hypothesized to lead to ATOD use by Mexican-origin children. Especially important, we found that parental monitoring can disrupt the reciprocal associations between deviant peers and ATOD use during the transition from childhood to adolescence. These associations appear to generalize across acculturative status and generational status. If these findings replicate in other samples, they hold promise for informing more effective interventions designed to prevent early onset ATOD use.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Highlights

- We assessed 674 Mexican origin children across the transition to adolescence
- Youth who plan to use alcohol, tobacco or drugs (ATODs) select peers accordingly (i.e., selection)
- Youth who associate with deviant peers increase their ATOD use (i.e., socialization)
- Parent monitoring can remove these selection and socialization effects

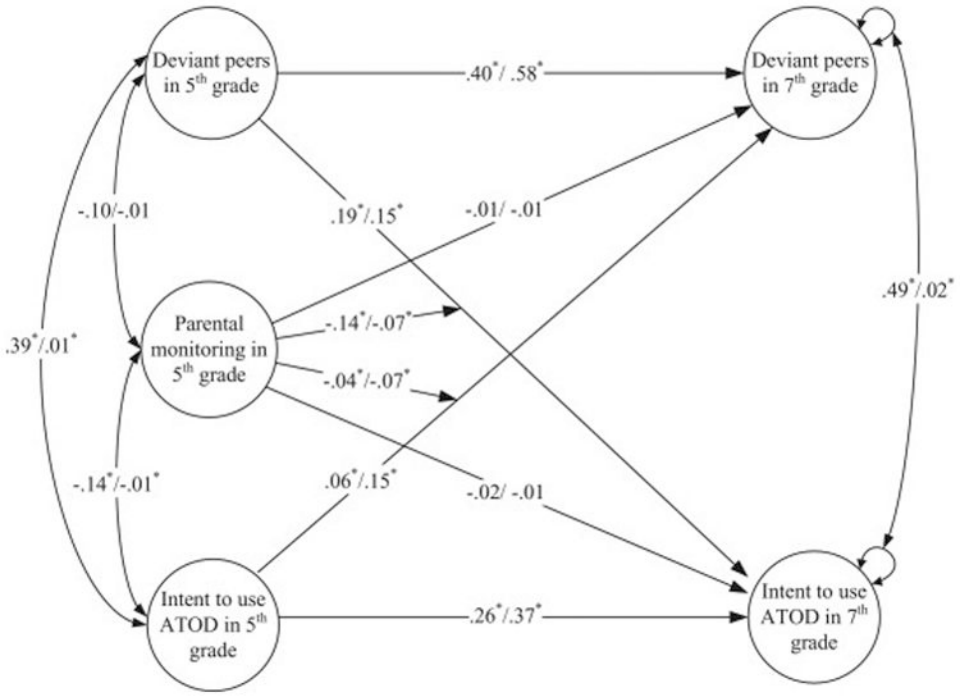

Figure 1.

Observed Monitoring as a Moderator of the Reciprocal Associations Between Deviant Peers and Intent to Use ATODs; $\chi^2(20) = 33.24$, $p = .03$, RMSEA = .031 [95% CI: .009 - .050]; *$p < .05$. Standardized coefficient/unstandardized coefficient.

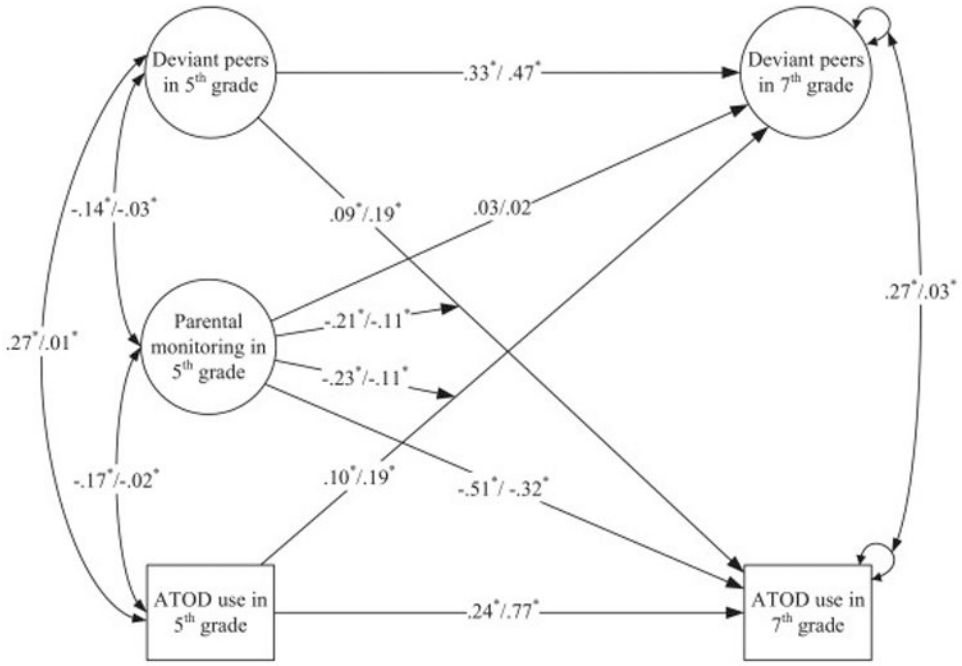

Figure 2.

Observed Monitoring as a Moderator of the Reciprocal Associations Between Deviant Peers and ATOD Use; $\chi^2(25) = 70.19$, $p = .001$, RMSEA = .037 [95% CI: .023 -.050]; *$p < .05$. Standardized coefficient/unstandardized coefficient.

Table 1

Descriptive Statistics

Variable	Min	Max	*M*	*SD*	Percent
Adolescent age	9.78	12.7	10.4	0.6	
Mother age	26	57	36.8	5.92	
Father age	20	65	39.1	6.4	
Mother education	0	18	9.4	3.65	
Father education	0	20	9.1	3.78	
Family income (in thousands)	< 5	> 95	30-35	21.3	
Mother born in Mexico					84
Father born in Mexico					88
Adolescent born in Mexico					29
Mother years in the U.S.	0	56	16.1	10.6	
Father years in the U.S.	1	60	19.4	9.8	
Adolescent acculturation	-14	15	3.67	4.69	
Mother interviewed in Spanish					78
Father interviewed in Spanish					81
Adolescent interviewed in Spanish					15
Adolescent is female					50
Intent to use ATOD (5th grade)	1	2.78	1.03	0.13	
Intent to use ATOD (7th grade)	1	2.89	1.06	0.2	
Deviant peers (5th grade)	1	3.96	1.13	0.22	
Deviant peers (7th grade)	1	3.91	1.18	0.31	
Adolescent ATOD use (5th grade)	1	1.9	1	0.06	
Adolescent ATOD use (7th grade)	1	2.6	1.02	0.11	
Mother monitoring	1	8	5.26	1.27	
Mother-child quality time	1	9	4.52	1.44	
Father monitoring	2	8	4.59	1.2	
Father-child quality time	1	9	4.52	1.36	
Mother ATOD use	0	1	0.1	0.17	
Father ATOD use	0	1	0.16	0.21	

Variable	Min	Max	*M*	*SD*	Percent
Shyness	1	4	2.41	0.77	
Effortful control	1.63	3.94	2.96	0.41	
Negative affectivity	1.31	4	2.57	0.48	

Note. ATOD = alcohol, tobacco, and other drugs.