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Original article

Concurrent and Prospective Associations Between Substance-Specific Parenting Practices and Child Cigarette, Alcohol, and Marijuana Use

Jennifer A. Bailey, Ph.D. *, Marina Epstein, Ph.D., Christine M. Steeger, Ph.D., and Karl G. Hill, Ph.D.

Social Development Research Group, University of Washington, Seattle, Washington

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A B S T R A C T

Purpose: The current study aimed to understand whether substance-specific parenting practices predicted the probability of child alcohol, cigarette, or marijuana use beyond known family factors like family management and parental substance use and norms.
Methods: Data were drawn from the Intergenerational Project, which used an accelerated longitudinal design and included 383 families surveyed seven times between 2002 and 2011. Analyses included 224 families with children ages 10–18 years (49% female). Multilevel models tested both concurrent and lagged (predictors at time t – 1, outcomes at time t) associations between child past year use of alcohol, cigarettes, and marijuana and time-varying measures of substance-specific parenting practices, including permitting child use of alcohol or cigarettes; family rules about alcohol, cigarette, and drug use; and child involvement in family member alcohol or cigarette use (getting, opening, or pouring alcoholic drinks; getting or lighting cigarettes for family members). Demographic controls were included.
Results: Child involvement in family member substance use predicted an increased probability of child substance use both concurrently and 1 year later, even when controlling parent substance use, pro-substance norms, and family management. Family rules about substance use and parent provision of alcohol or cigarettes were not consistently related to child alcohol, cigarette, or marijuana use.
Conclusions: Family-based preventive interventions to reduce youth substance use should continue to focus on family management and include messaging discouraging parents from allowing children to get, open, or pour drinks or get or light cigarettes for family members.

IMPLICATIONS AND CONTRIBUTION

Results suggest that public health messaging urging parents not to allow their children to get, open, or pour alcoholic drinks or get or light cigarettes for family members may be helpful in reducing teen substance use.

Prevention of youth alcohol, cigarette, and marijuana use is an important public health priority because early-onset, regular, or heavy use of these substances in adolescence increases risk of abuse or dependence and a wide range of other negative social, economic, legal, and health outcomes [1–4]. Prior research has shown that parent substance use, parental norms favoring substance use, and parenting practices like good family management (monitoring, consistent moderate discipline) predict youth substance use [5–8]. In addition to general parenting practices like family management, parents also engage in substance-specific

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* Address correspondence to: Jennifer A. Bailey, Ph.D., Social Development Research Group, University of Washington, 9725 3rd Avenue NE, Suite 401, Seattle, WA 98115.
E-mail address: jabailey@uw.edu (J.A. Bailey).

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parenting practices, including establishing family rules about substance use, providing substances or permitting youth to use them, and involving youth in family member substance use (getting, opening, or pouring alcoholic drinks; getting or lighting cigarettes). The role of these substance-specific parenting practices in youth substance use remains understudied, and their contribution to risk for youth substance use beyond general parenting practices is unclear. The current study aimed to understand whether parent-permitted use of alcohol or cigarettes; family rules about alcohol, cigarette, and drug use; and child involvement in family member alcohol or cigarette use predict child alcohol, cigarette, or marijuana use over and above family management and parent substance use and norms.

Substance-specific parenting practices

External constraints (laws, policies, rules) can be effective at reducing youth substance use [7,9,10]. Family rules, in particular, are an important source of constraint on youth behavior [9], and many families establish rules around substance use [11]. In a probability sample of U.S. families, 75% and 65% of parents reported discussing rules about alcohol and cigarette use, respectively, with their teen [11]. Evidence regarding whether family rules about alcohol reduce teen drinking is mixed, however, with studies showing negative, positive, and no associations [11–13]. Studies of smoking have been more consistent in showing that family rules restricting smoking predict a lower likelihood and reduced frequency of youth smoking [14–16], although some have failed to find prospective associations between family rules and teen smoking (e.g., 11). One potential source of inconsistency in studies of family rules about substance use is that the time ordering of youth use and establishment of family rules may differ in different families. Some families may institute rules proactively to prevent use (producing a negative association) and some may institute rules reactively once use has occurred (producing a positive association). This problem is amplified because many prior studies of family rules about substance use were cross-sectional or had short longitudinal follow-up periods. We did not find studies of the association between family rules about drug use and child marijuana use, and identify this as a significant gap in the literature.

In addition to constraining their children's behavior, parents provide opportunities for their children to engage in prosocial behaviors, like helping with chores, playing games, and eating meals together, which provide a basis for shaping desired behavior through rewards and increased bonding [9]. Parents also may provide opportunities for antisocial behavior, such as allowing underage children to use substances [17]. For example, some parents and policy makers believe that teaching children to drink at home may promote more responsible drinking [18,19]. Yet the literature on parent provision of alcohol to youth suggests that allowing underage drinking at home is associated with more problematic youth drinking. Longitudinal studies have consistently linked parent provision of alcohol to earlier initiation, higher levels of alcohol use, more drunkenness and binge drinking, and greater increases in use over time among youth [13,20–21, but see 22] even when prior youth alcohol use is controlled [23]. We found no studies of parent provision of cigarettes to youth.

Another way parents and family members may provide antisocial opportunities to youth is by including children in family member substance use. For example, asking or allowing children to get, open, or pour alcoholic drinks for family members is a common practice. In one study, 33% of parents reported that their fifth-grade child had been involved in family member drinking [24]. Yet very few studies have investigated links between child substance use and child involvement in family member substance use. In one longitudinal study, child involvement in parent drinking predicted child past year alcohol use and drunkenness [21]. A second longitudinal study of alcohol use found that child involvement in family member drinking predicted child alcohol use, even when controlling family management, parent drinking, and parent alcohol norms [24]. A study of child involvement in family member smoking found a bivariate association with onset of child daily smoking that did not remain significant when parent smoking, family management, and family bonding were controlled [8].

Family management

The social development model [9] and other theories focused on social learning and social control have identified family management as a key predictor of child substance use. Good family management practices include frequent parental monitoring; moderate, consistent discipline; clear rules and expectations; and praise for good behavior [9]. Family management is a key target in multiple tested effective youth substance use prevention programs [25], and has been linked repeatedly to a lower probability of teen alcohol use, delayed onset, and lower levels of use among teens who drink [13,23,24,26]. Studies also have linked good family management to a lower probability of teen smoking [6,8] and marijuana use [26]. Given the importance of family management in predicting youth substance use, it is important to test whether substance-specific parenting practices contribute uniquely to youth substance use when family management is modeled.

Other family factors

A large body of research links parent substance use and norms to child substance use. Studies have demonstrated parent-child congruence in a general tendency to use substances [27,28], as well as in the use of specific substances, including alcohol [4,29], cigarettes [5,30], and marijuana [5]. Several studies have shown links between parent substance-related norms and child substance use [31,32]; however, studies in this area have often relied on children's perceptions of parent norms as opposed to parent reports of their own norms. To examine the unique relationship between substance-specific parenting practices and child substance use, this study included measures of parent binge drinking and cigarette and marijuana use, as well as measures of parents' norms about alcohol, cigarettes, and marijuana.

Time ordering of parenting practices and child substance use

This study used longitudinal data to test whether youth substance use was predicted by family rules about alcohol, cigarette, and drug use; parent provision of alcohol and cigarettes; or child involvement in family member alcohol or cigarette use. Correct time ordering of predictors and outcomes is important to understand associations between parenting practices and child substance use, particularly for family rules about substance use. Further, it is important to consider the timescale of the processes under study [33]. For example, child involvement in family member smoking could have both immediate effects on child smoking if the child takes a cigarette for her/himself while fetching one for a family member and long-term effects on child

Table 1
Sample demographics (full sample)

	Mean or proportion	Range
Child female	49%	—
Child age at wave 1	9	1–13
Child age at wave 7	16	1–22
SSDP parent age at wave 1	27	26–30
SSDP parent age at wave 7	36	35–39
SSDP parent age at child birth	24.2	15–36
1+ parent with 4-year degree	33%	—
Family public assistance receipt	42% cumulative	23%–30% in waves 1–7
Second caregiver is parent/parent figure	88% cumulative	71%–89% in waves 1–7

smoking if the child becomes desensitized over time to handling tobacco products. This study tests both short- and long-term relationships between substance-specific parenting practices and child substance use by testing concurrent models, in which parenting practices and child substance use are measured at the same time, and lagged models, in which parenting practices are measured 1 year before child substance use.

Methods

Participants and Procedures

Data were drawn from the Seattle Social Development Project (SSDP) and The Intergenerational Project (TIP). TIP families (n = 383) were identified from among participants in SSDP, an ongoing, longitudinal study (see 34, 35 for details). TIP began in 2002, and included SSDP participants who became parents, the oldest biological child with whom they had regular contact, and a second caregiver when present. TIP used an accelerated longitudinal design; rolling enrollment added new families to the sample as SSDP participants had their first child. Data collections were tied to the child's birthday. Table 1 displays sample demographic data.

The current analyses used seven waves of data collected between 2002 and 2011. Across waves, recruitment averaged 82% and retention averaged 90%. SSDP mothers and married SSDP parents were more likely to be eligible (i.e., have regular, face-to-face contact with the child) than SSDP fathers and unmarried SSDP parents. Families with Asian American parents or parents who received free or reduced-price lunch in grades 5–7 were slightly less likely to be recruited. Retention was not consistently related to SSDP parent cigarette use, marijuana use, or binge drinking at baseline; free lunch eligibility in childhood; gender; marital status; or receipt of public assistance. The University of Washington Institutional Review Board approved procedures for SSDP and TIP. Parents and children ages 18+ gave informed consent. Parents gave permission for children under age 18, and children assented. Most of the "children" were adolescents; however, we use the term "child" to denote that they are the offspring of the parent(s) in the study.

Measures

Child substance use. Past year alcohol, cigarette, and marijuana use were reported by children at each wave. Cigarette and alcohol use were assessed beginning at age 6, and marijuana use was assessed beginning at age 10. Each of these three indicators of substance use was coded 0 (*no past year use*) or 1 (*any past year use*).

Parenting practices. The current paper focuses on parent influences on child substance use. Although most second caregivers were parents or parent figures (biological, step-, adoptive, or foster parent; live-in partner of parent), some were not (e.g., grandmothers). When the second caregiver was a parent or parent figure, SSDP parent and second caregiver practices were combined as described below. Otherwise, the sole parent figure's parenting practices were included in analyses.

Substance-specific parenting practices. At each wave, SSDP parents and second caregivers reported whether the family had "clear rules and expectations" for their children about, respectively, drinking alcohol, smoking cigarettes, and using drugs (1, *NO!*; 2, *no*; 3, *yes*; 4, *YES!*). Parents and children each responded to two items assessing, respectively, child involvement in family member alcohol (getting, pouring, or opening a drink) or cigarette use (getting or lighting a cigarette); if either parent or the child reported child involvement, then involvement was coded as 1 (otherwise 0). Child use of alcohol and cigarettes (separately) with parent or second caregiver permission was reported by parents. If either parent reported permitting the child to use, child use with permission was coded as 1 (otherwise 0). Measures of marijuana-specific parenting practices were not available; clear rules and expectations about "drugs" (including marijuana), parent provision of alcohol or cigarettes, and child involvement in family smoking were used as proxies for marijuana-specific practices.

Family management items captured child reports of clear family rules, parent monitoring, and praise for good behavior at each wave. When two parents were present, items were averaged across parents. Responses were on a 4-point Likert scale (1, *NO!*; 2, *no*; 3, *yes*; 4, *YES!*). Continuous scale scores used in analyses averaged items at each wave (mean $\alpha = .65$). Higher scores indicated better management.

Parent substance use. At each wave, SSDP parents and second caregivers reported their own frequency of past month binge drinking (five or more drinks in a 2-hour period), cigarette use, and marijuana use. Frequency variables were dichotomized to indicate any past month use of each substance. When two parents were present, parent use was scored as 1 if either reported use (otherwise 0). Otherwise, the sole parent figure's report determined past month use.

Parent pro-substance norms. Parents answered a series of questions about whether it is "OK for adults" to drink alcohol, get drunk, smoke cigarettes, and use marijuana; responses were on a 4-point Likert scale (1, *NO!*; 2, *no*; 3, *yes*; 4, *YES!*). Multiple items assessed alcohol norms; items were averaged across parents when two parents were present, then these combined items were averaged. Single items assessed norms about cigarettes and marijuana; these were averaged across parents when two parents were participating. Higher scores indicated more pro-use norms.

Control variables. Controls included child age (the "time" variable for repeated measures), child sex, SSDP parent race/ethnicity and age when the child was born, and highest level of parent education (either parent). The child's primary caregiver reported on family receipt of public assistance at each wave (1, *yes*; 0, *no*).

Table 2
Prevalence and means of key study variables

Variable	Cumulative %	Range across waves 1–7
Child past year substance use		
Alcohol	26%	0%–14%
Cigarettes	16%	0%–9%
Marijuana	24%	0%–14%
Substance-specific parenting practices		
Family rules about alcohol	—	M = 3.5–3.7
Family rules about cigarettes	—	M = 3.5–3.8
Family rules about drugs	—	M = 3.6–3.9
Child alcohol use with permission	12%	3%–9%
Child cigarette use with permission	2%	.4%–1.4%
Child involvement in family alcohol use	34%	10%–25%
Child involvement in family cigarette use	21%	5%–17%
Family management	—	M = 3.4–3.8
Parent substance use (past month)		
Binge drinking	36%	13%–19%
Cigarette use	48%	29%–46%
Marijuana use	29%	14%–21%
Parent substance use norms		
Pro-alcohol norms	—	M = 2.0–2.9
Pro-cigarette norms	—	M = 1.9–2.8
Pro-marijuana norms	—	M = 1.8–3.1

Analysis

Multilevel modeling with a Bernoulli link function in HLM 6.0 software was used to model repeated measures and dichotomous outcome variables. Because children were born in different years, we tested for potential birth cohort differences [36]. Testing revealed no evidence of child birth cohort effects; cohorts were combined for analysis. One series of three, fixed-effects models predicted, respectively, child past year alcohol, cigarette, and marijuana use from concurrently measured predictors. A second series of fixed-effects models included predictors measured 1 year before outcomes to establish hypothesized causal ordering among predictors and outcomes. Where predictors were measured repeatedly (e.g., parent substance use, parenting practices), they were modeled as time-varying; otherwise they were modeled as time-fixed (e.g., child sex, parent race/ethnicity). Few parents reported allowing their child to use cigarettes (Table 2). Analyses of child alcohol use included a measure of child alcohol use with permission; analyses of child cigarette and marijuana use included a combined measure of child cigarette or alcohol use with permission. Virtually no child substance use was reported before age 10. Sample sizes for children ages 19–22 were small. Therefore, analyses presented here included children ages 10–18 years (M = 13, N = 224).

Results

Table 2 shows the prevalence of key study variables. More children reported any alcohol or marijuana use than cigarette use over the seven waves of data collection. Most parents reported that their family had rules about substance use. Child involvement in family alcohol and cigarette use were common, but child use of either drug with parent permission was rare. Intercorrelations among general and substance-specific parenting practices were small or nonsignificant (not shown).

Table 3 shows results of models predicting child past year alcohol, cigarette, and marijuana use from concurrently measured parenting practices. Family rules about substance use were unrelated to the child substance use outcomes. Child use of alcohol or cigarettes with parent permission uniquely predicted child cigarette use (odds ratio [OR] = 7.14), but not marijuana use; parent provision of alcohol did not predict child alcohol use. Child involvement in family alcohol use predicted greater odds of child alcohol use (OR = 4.29), and child involvement in family smoking predicted greater odds of child cigarette (OR = 7.16) and marijuana use (OR = 7.64). Better family management predicted a lower likelihood of child past year alcohol use (OR = .27), and just missed significance for child cigarette (OR = .42, $p = .07$) and marijuana use (OR = .45, $p = .05$). None of the parent substance use measures predicted child substance use when parenting practices, norms, and controls were included in models.

In lagged models (Table 4), neither family rules about substance use nor parent provision of alcohol or cigarettes predicted child substance use 1 year later. Child involvement in family alcohol use predicted a higher probability of child alcohol use 1 year later (OR = 2.84). Child involvement in family smoking predicted child smoking 1 year later (OR = 4.21), and was marginally related to child marijuana use 1 year later (OR = 2.86, $p = .10$). Good family management predicted lower odds of child cigarette use 1 year later (OR = .14), but not the probability of child alcohol or marijuana use. Parent smoking predicted a higher probability of child cigarette use the following year (OR = 1.70). More positive parent norms about alcohol predicted higher odds of child alcohol use 1 year later (OR = 1.73).

Discussion

This study investigated the association between substance-specific parenting practices and child use of alcohol, cigarettes, and marijuana in a prospective, longitudinal study. Models tested the predictive power of both concurrent parenting practices and practices measured 1 year before child substance use outcomes. The main finding was that child involvement in family member substance use (getting, opening, or pouring alcoholic drinks; getting or lighting cigarettes) predicted an increased probability of child substance use both concurrently and 1 year later, even when controlling parent substance use, pro-substance norms, and family management. Family rules about substance use and parent provision of alcohol or cigarettes were not consistently related to child alcohol, cigarette, or marijuana use.

The present findings linking child involvement in family member substance use and child substance use were robust, with significant associations observed in five of the six models tested and a marginal association in the sixth. Findings are in line with the small body of work showing that child involvement in family alcohol use predicts an increased risk of child alcohol use [21,24]. This practice was common in our community sample: 34% of families reported that children had gotten or opened alcoholic drinks; 21% reported that children had gotten or lit cigarettes for family members. Findings suggest that this practice may be a potential target for family-based interventions aiming to reduce youth substance use.

Family rules about alcohol, cigarette, and drug use were not related to child use in the current study, either when measured concurrently or in the year before child substance use. We found neither a negative association, consistent with preventive establishment of rules, nor a positive association, consistent with reactive establishment of rules. This finding is in line with a recent review [13] concluding that there is no link between family rules

Table 3
Results of multilevel models predicting child past year substance use from concurrently measured predictors (robust standard errors, N = 224)

Fixed effect	Child alcohol use			Child cigarette use			Child marijuana use		
	Coefficient	SE	*p*-Value	Coefficient	SE	*p*-Value	Coefficient	SE	*p*-Value
Intercept	**6.965**	3.14	.028	–.211	4.22	.961	–1.294	4.03	.749
Parent age at child birth	**–.401**	.13	.004	–.155	.16	.342	–.071	.15	.645
Parent education	.007	.19	.971	.029	.29	.921	.122	.20	.546
Child female	*.924*	.50	.066	**1.655**	.68	.017	.983	.60	.108
Parent African American	**–1.388**	.50	.006	–.648	.61	.293	**–1.416**	.72	.053
Parent Native American	–.460	.78	.557	–.664	.97	.494	.262	.91	.774
Parent Asian American	–.842	.59	.161	–1.352	1.02	.187	–.912	1.37	.506
Child age (time)	.822	.95	.388	–1.812	1.27	.156	2.627	1.72	.127
Parent age at child birth	–.044	.05	.398	**.180**	.07	.015	–.068	.08	.425
Parent education	.008	.11	.946	**–.456**	.11	.000	–.063	.13	.639
Child female	.187	.24	.449	–.261	.29	.372	**–.667**	.30	.030
Parent African American	.413	.25	.101	.099	.23	.669	*.778*	.40	.056
Parent Native American	–.570	.37	.127	–.313	.52	.554	–.252	.42	.552
Parent Asian American	*.572*	.34	.099	**–.612**	.28	.030	.681	.83	.415
Child age^2 (time^2)	*–.170*	.08	.056	**–.188**	.08	.019	**–.378**	.10	.001
Family welfare receipt	–.415	.45	.365	–.795	.51	.123	**–1.031**	.45	.024
Family management	**–1.306**	.37	.001	*–.863*	.47	.069	*–.796*	.41	.054
Parent binge drinking	–.515	.38	.181						
Parent alcohol norms	.174	.25	.489						
Family rules about alc	.396	.28	.163						
Child involved in family alc use	**1.456**	.40	.001						
Child alc use with permission	.224	.60	.713						
Parent cigarette use				.124	.23	.603			
Parent cigarette norms				.189	.27	.482			
Family rules about smoking				.219	.33	.512			
Child involved in family cig use				**1.969**	.75	.009	**2.034**	.50	.000
Child alc or cig use with permission				**1.966**	.69	.005	.307	.58	.597
Parent marijuana use							–.019	.04	.683
Parent marijuana norms							.253	.26	.348
Family rules about drugs							.438	.37	.243

Bold values indicate statistical significance ($p < .05$); italics indicate marginal significance ($p < .10$).
Alc = alcohol; cig = cigarette.

about alcohol use and youth drinking. It conflicts with the more limited literature showing that rules about cigarette use may predict less teen smoking [14,15]. These prior studies on smoking rules were cross sectional, however, and included limited measures—if any—of confounds like those included here. The one study we found that included measures of general parenting practices found no link between household smoking rules and child intention to smoke or smoking behavior [37].

Parent provision of substances was rare in this sample, with 12% of parents reporting allowing their child to drink alcohol and 2% of parents allowing their child to use cigarettes. These prevalences are in line with those from Project Northland Chicago, where about 10% of children and 6% of parents reported parent provision of alcohol to the child [21], but are much lower than the prevalence of parent-supervised drinking reported by McMorris and colleagues [23] in a statewide sample of Washington State eighth graders (35%). Parent provision of alcohol or cigarettes was not consistently related to child use across the six models tested; only one significant association with concurrent child cigarette use was observed. This finding is in contrast to prior longitudinal studies [21,23,38], suggesting that parental provision of alcohol increases risk of youth drinking. Prior studies, however, have not simultaneously included controls for other substance-related parenting practices, family management, and parent current substance use. Additional longitudinal studies with good controls for potential confounds like other substance-specific and general parenting practices are needed.

Limitations and strengths

Several limitations should be kept in mind when interpreting the current findings. First, measures of marijuana-specific parenting were not available. Second, the lack of significant findings about measures of family rules predicting substance use may have been affected by the high means observed for these variables, which may indicate ceiling effects. Further, details about the specific content of family rules were not available. Third, few parents reported allowing their child to use either alcohol or cigarettes with permission, and these low prevalences may have reduced power to detect associations with child substance use. These limitations are balanced by important strengths, which include the use of prospective, longitudinal data from both parents and children, including parent and child self-reports of substance use; inclusion of known family predictors of youth substance use as covariates; and consideration of both lagged and concurrent effects of predictors.

Future research should aim to understand the prevalence of child involvement in family member substance use more generally and explore why this parenting practice predicts child substance use. Possible mechanisms include desensitization of children to handling substances, implied parental approval of substance use, and increased child access to substances. Existing prevention programming often focuses on family management and rule setting around substance use. The present findings support the utility of additional components aimed at reducing

Table 4
Results of multilevel models predicting child past year substance use from predictors measured 1 year prior (robust standard errors, N = 185)

Fixed effect	Child alcohol use			Child cigarette use			Child marijuana use		
	Coefficient	SE	*p*-Value	Coefficient	SE	*p*-Value	Coefficient	SE	*p*-Value
Intercept	2.458	2.94	.405	8.530	5.87	.148	–2.375	3.83	.536
Parent age at child birth	**–.264**	.12	.034	**–.507**	.24	.037	–.135	.14	.340
Parent education	.134	.18	.470	–.473	.31	.133	.119	.23	.610
Child female	.782	.51	.130	**2.789**	.83	.001	.884	.70	.212
Parent African American	**–1.693**	.72	.020	**–1.715**	.82	.038	–1.718	1.07	.112
Parent Native American	1.046	.73	.157	.835	1.06	.434	.227	1.05	.830
Parent Asian American	–.180	.69	.797	–1.179	2.15	.584	.023	.79	.977
Child age (time)	.279	1.10	.800	1.251	1.75	.477	1.397	1.57	.376
Parent age at child birth	.039	.06	.550	.013	.09	.892	–.003	.07	.970
Parent education	*–.149*	.08	.086	–.080	.12	.530	–.032	.10	.761
Child female	**–.454**	.22	.043	**–.810**	.38	.034	**–.735**	.31	.021
Parent African American	.458	.31	.151	*.818*	.48	.095	.580	.52	.275
Parent Native American	–.245	.30	.420	–.916	.57	.109	–.178	.42	.677
Parent Asian American	.108	.28	.706	.482	.97	.622	–.232	.44	.605
Child age^2 (time^2)	**–.152**	.05	.004	**–.357**	.10	.001	**–.220**	.08	.010
Family welfare receipt	.075	.41	.858	–.652	.51	.207	–.005	.47	.992
Family management	–.422	.36	.253	**–1.987**	.59	.001	–.373	.41	.364
Parent binge drinking	.023	.15	.887						
Parent alcohol norms	**.532**	.23	.025						
Family rules about alc	.041	.36	.909						
Child involved in family alc use	**1.042**	.41	.012						
Child alc use with permission	.573	.56	.312						
Parent cigarette use				**.506**	.24	.038			
Parent cigarette norms				–.128	.28	.651			
Family rules about smoking				.645	.47	.173			
Child involved in family cig use				**1.438**	.53	.008	*1.051*	.63	.097
Child alc or cig use with permission				1.080	.73	.144	.783	.69	.262
Parent marijuana use							.003	.03	.939
Parent marijuana norms							.327	.20	.101
Family rules about drugs							.650	.46	.159

Bold values indicate statistical significance ($p < .05$); italics indicate marginal significance ($p < .10$).
Alc = alcohol; cig = cigarette.

child involvement in family member alcohol and cigarette use. Public health messaging urging parents not to involve their children in family member alcohol or cigarette use also may be helpful in reducing youth substance use.

As more states legalize nonmedical marijuana use for adults, more parents may use marijuana. Research on marijuana-specific parenting practices, their association with child marijuana use, and whether they are influenced by marijuana legalization is urgently needed. In particular, it is important to understand whether children are involved in family member use of marijuana, and, if so, whether this practice is related to child use of marijuana or other substances.

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