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### Abstract

This study evaluated the effectiveness of a parent-based intervention, the Parent Project, among 84 parents of at-risk youth. Results indicated improvements in child management, family involvement, parent-child affective quality, substance use rules communication, and parental self-efficacy at a 10-week follow-up.

**Keywords:** at-risk youth; alcohol; heavy drinking; parent-based intervention

Underage drinking represents a significant problem in the United States, with 70% of students reporting alcohol use by their senior year in high school (Johnston, O'Malley, Bachman, & Schulenberg, 2013a). National survey data indicate 81% of college students have tried alcohol at least once in their lifetime, with 70% reporting they have been drunk and 37% reporting binge drinking (Johnston, O'Malley, Bachman, & Schulenberg, 2013b). Excessive alcohol consumption also accounts for more than 4,600 deaths in persons under the age of 21 in the United States (Center for Disease Control, 2008). Researchers have also found that drinking increases the chance that adolescents will engage in risky behavior (Goldberg, Halpern-Felsehr, & Millstein, 2002; Halpern-Felsehr, & Cauffman, 2001) and delinquent behavior (Barnes, Welte, & Hoffman, 2002). Further, the relationship appears to be reciprocal; antisocial behavior is predictive of substance abuse among adolescents, with adolescents who show more signs of antisocial behavior at age 14 being more likely to use substances at age 17 (Adalbjarnardottir & Rafnsson, 2002). In longitudinal studies, researchers have also found that delinquent behaviors in adolescence are predictive of alcohol use disorders in adulthood (Harford & Muthen, 2000).

Parents play a key role in adolescent decisions to engage in substance misuse and antisocial and delinquent behaviors. A recent review of the literature on parenting factors associated with adolescent alcohol use indicated parental monitoring, parental involvement, and parent-teen communication are related to both delayed initiation of alcohol use as well as drinking levels across time (Ryan, Jorm, & Lubman, 2010). Similarly, results of a meta-analysis suggested that among parental factors related to adolescent delinquency, parental monitoring, psychological control, rejection, and hostility were the most significant predictors of delinquent behavior (Hoeve et al., 2009).

### Parenting Practices and At-Risk Behavior

Parental monitoring reflects the degree of involvement of parents with their child, including the parent's awareness of their child's activities and friends, as well as the degree to which parents set and enforce clear standards for their child (Kim & Neff, 2010). Researchers have found that parental monitoring and involvement are related to lower levels of adolescent alcohol use (Barnes, Hoffman, Welte, Farrell, & Dintcheff, 2006; Luthar & Goldstein, 2008; Simons-Morton & Chen, 2005; Simons-Morton, Haynie, Crump, Eitel, & Saylor, 2001; Vakalahi, 2002; Van Der Vorst, Engels, Meeus, Deković, & Vermulst, 2006), fewer episodes of heavy episodic (Dumas, Hausheer, Esp, in press; Guilamo-Ramos, Turrissi, Jaccard, Wood, & Gonzalez, 2004; Kim & Neff, 2010; Reifman, Barnes, Dintcheff, Farrell, & Uhteg, 1998) and fewer reported alcohol-related consequences (Arata, Stafford, & Tims, 2003). Researchers have also found that parental monitoring is associated with lower levels of adolescent antisocial behavior and delinquency (Barber, Stolz, & Olsen, 2005; Dekovic, Janssens, & Van As, 2003; Griffin, Bolvin, Scheier, Diaz, & Miller, 2000; Laird, Pettit, Dodge, & Bates, 2003; Stolz, Barber, & Olsen, 2005). Finally, in a longitudinal study examining the impact of parental monitoring on substance use and delinquency, findings indicated monitoring significantly impacted these adolescent problem behaviors (Barnes et al., 2006).

### Parent-Teen Communication and At-Risk Behavior

Parent-teen communication is considered to be a fundamental component of positive family functioning and is incorporated into most family-based interventions for teen drinking. Parent-teen communication is associated with lower levels of adolescent alcohol use (Ackard, Neumak-Sztainer, Story, & Perry, 2006; Dumas et al., in press; Hausheer, Dumas, Esp, & Cuffee, in press; Guilamo-Ramos et al., 2004; Simons-Morton, 2004; Smetana, Crean & Daddis, 2002). Although the emphasis of prevention programs is often on improving parent-teen alcohol-specific communication rather than general communication, parental listening in general and parental knowledge regarding daily events and expectations contribute to an overall protective effect regarding drinking initiation (Simons-Morton, 2004). Parent-teen communication, including arguing and negative interactions, is also related to antisocial behavior (Dekovic et al., 2003).

Parental disapproval of teen alcohol use has also been identified as one of the primary risk factors for the initiation of drinking in adolescence (Donovan, 2004). Parental disapproval of teen of alcohol use may be communicated directly or indirectly through the setting of limits or by the expression of values regarding alcohol use (Wood, Read, Mitchell, & Brand, 2004). Researchers indicate parental disapproval of drinking is associated with lower levels of alcohol use (Arata et al., 2003; Dumas et al., in press; Foley, Altman, Durrant, & Wolfson, 2004; Mares, Van Der Vorst, Engels, & Lichtwarck-Aschoff, 2011; Nash, McQueen, & Bray, 2005) and fewer alcohol-related consequences (Arata et al., 2003; Mares et al., 2011; Nash et al., 2005) among adolescents. Thus, communication of parental disapproval of adolescent substance abuse, both verbally and through rule-setting, is associated with a decrease in teen substance use.

### Parental Self-Efficacy

Parental self-efficacy (PSE) is derived from the construct of self-efficacy defined by Bandura (1977). According to Bandura (1977), self-efficacy is the belief in one's capabilities to impact and succeed in situations. In contrast, people who lack a sense of efficacy can exhibit behaviors of learned helplessness, where effort is perceived as being ineffectual. PSE involves a parent's beliefs in his/her ability to positively influence their child (Ardelt & Eccles, 2001). According to a review of the literature, PSE is related to parental competence and fewer behavioral problems in children, including conduct problems, delinquent behavior, and substance abuse (Jones & Prinz, 2005). Interventions designed to target PSE through parent management training also result in increased PSE and fewer child behavioral problems (Sofronoff & Farbotko, 2002). Boosting parents' self-efficacy in their ability to impact their teens' choices is an important strategy that may be used to reduce at-risk behavior.

### Family and Parent-Based Interventions

Family and parent-based programs are effective in reducing substance use and delinquency among adolescents. For example, according to a review of parent-based prevention programs for substance misuse among children under 18, parent programs are effective in preventing and reducing substance abuse (Petrie, Bunn, & Byrne, 2007). Additionally, family and parenting interventions are effective in reducing time spent in institutions and recidivism

among juvenile delinquents (Woolfenden, Williams, & Peat, 2002). Researcher also have found that the most effective parent-based programs for substance misuse emphasize active parental involvement and developing skills in social competence, self-regulation and parenting (Petrie et al., 2007). Results from a meta-analysis examining components associated with parent training demonstrate increasing positive parent-child interactions and emotional communication skills are among the components most associated with program effectiveness for child outcomes including internalizing behaviors, externalizing behaviors, and social skills (Wyatt, Valle, Filene, & Boyle, 2008). These reviews emphasize the importance of parent-based programs emphasizing development of skills, competence, involvement, and communication.

One parent-based program emphasizing these areas is The Parent Project ([www.parentproject.com](http://www.parentproject.com)). Among parent-based interventions designed to educate parents for high risk youth, the Parent Project is the largest court-mandated juvenile diversion program in the country. This program is a highly structured, 10-16 week parenting skills program created to help parents of youth engaging in destructive behavior including substance use, truancy, running away, and aggressive or antisocial behavior (Fry, Johnson, Melendez, & Morgan, 2003). The Parent Project combines multimedia instruction, small group practice, problem solving and collective learning experiences to facilitate lasting change. Topics covered include: influencing and motivating children, effectively communicating love, affection and expectations, dealing with emotional behavior, handling suicide threats and runaways, improving school performance, preventing gang involvement and drug use intervention.

The program's format includes meeting one night per week for 2 to 3 hours per night. The Parent Project activity-based curriculum allows parents to learn and practice behavior management techniques at home. In addition, the program offers parent support groups, and the program orientation focus is on behavior modification. During part one of the course, the curriculum focuses on helping parents address their teen's problem behaviors. After completing part one, parents continue in a structured parent group with trained facilitators. These topic-focused groups promote maximum effective use of group time while providing parents with practical and emotional support as they begin the difficult process of change. Parents are encouraged to build a network with other parents to continue meeting and offering support for one another after the class has been completed.

To date, however, only one study evaluated The Parent Project (Stolz, Vargas, Clifford, Gaedt, & Garcia, 2010). Stolz et al. examined the effectiveness of the Parent Project across 10 weeks in a volunteer sample of 107 parents and 71 youths from 13 sites. Results at 10-week follow-up indicated significant increases in parent and youth reports of parental support, parent reports of parental behavioral control, youth reports of mother's behavioral control, parent reports of higher levels of youth school achievement, and significant decreases in parent and youth reports of antisocial behavior. Although Soltz et al. (2010) provided preliminary evidence for the effectiveness of The Parent Project in changing parental and youth behaviors, the authors noted several limitations, including a 45% attrition rate among parents and 33% attrition rate among the youth participants.

### The Current Study

Because The Parent Project is so widely used as a parent-based intervention program for at-risk youth, it is important to add to the literature evaluating this program. The aim of this study was to examine the effectiveness of this program on parental behaviors and beliefs. Specifically, we sought to assess whether parents' completion of 10 weeks of the Parent Project program was associated with changes from baseline to post-test in (1) general child management, including monitoring, discipline and standard setting, (2) family involvement, (3) parent-child affective quality, (4) substance-abuse specific communication, and (5) parental self-efficacy regarding their adolescents' substance use. We hypothesized that completion of the program would be associated with improvement in each of these domains.

## **Methods**

### Participants and Procedures

Participants were parents enrolled in Parent Project classes in the Northwest. Of the original 114 potential participants, 84 (74%) completed both the pre-test and post-test. Participant (62.3% female) age ranged from 30 to 62 ( $M = 44.80$ ,  $SD = 8.36$ ). The majority of participants were Caucasian (89.7%), with 7.7% Hispanic, 1.3% American Indian, and 1.3% African-American. Participants were referred to the Parent Project by a friend (11.8%),

a relative (6.6%), Health & Welfare which offers programs for families and children in crisis (15.8%), Social Services (6.6%), Schools (7.9%), Mental Health Clinics (3.9%), Court (23.7%), or other referral source (19.7%). A series of paired t-tests and chi squares demonstrated that differences in program completion were not associated with demographic variables, with the exception of referral source. Participants that were referred by relatives, mental health providers, and court experienced no attrition, relative to an attrition rate of 44%-55% among participants referred by friends, health and welfare, social services and schools.

Participants were recruited by program facilitators from a local Drug Free Communities Coalition. Program facilitators were certified trainers, completing 40 hours of training provided by the Parent Project. Data were collected as part of routine program evaluation by the Coalition program staff. Participants completed a brief survey before beginning the course and again upon completion at 10 weeks. To ensure confidentiality, participants were given an ID number which was then used to match pre-test and post-test surveys. Secondary analysis of the database was approved by the University Institutional Review Board.

### Measures/Instrumentation

**Parenting practices.** Parenting practices were assessed using a 32-item survey assessing general child management, parent-child affective quality, substance use rules and communication, and involvement of children in family activities and decision making (Spoth, Redmond, & Shin, 1998). Indicators of these constructs were developed through the use of exploratory and confirmatory factor analyses (Spoth et al., 1998) and researchers have demonstrated both construct validity (Redmond, Spoth, Shin, & Lepper, 1999; Spoth et al., 1998) and predictive validity (Spoth, Neppel, Goldberg-Lillehoj, & Jung, 2006; Spoth & Redmond, 2002) of the measure. Cronbach's alphas for the scales ranged from .75 - .89 (Redmond et al., 1999). Specific information for each construct is provided below.

**General child management.** The General Child Management Scale consists of 13 items rated on a 5-point scale ranging from 0 = *never* to 4 = *always*. Select items are reverse coded so that a positive score reflects positive child management. Areas of child management included on the scale include parenting practices monitoring, consistent discipline, and standard setting. Examples of monitoring items are "In the course of a day, how often do you know where this child is" and "How often do you know when this child gets into trouble at school." Examples of consistent discipline items are "Once a discipline has been decided, how often can he or she get out of it" and "When you discipline this child, how often does the kind of discipline you use depend on your mood." Example of standard setting items are "How often do you give reasons to your child for your decisions" and "When her or she doesn't know why you make certain rules, how often do you explain the reasons." Cronbach's alpha for this sample was .77.

**Family involvement.** The Family Involvement Scale consists of 10 items rated on a 5-point scale ranging from 0 = *strongly disagree* to 4 = *strongly agree*. Example items include "I find ways to keep my child involved in fun activities with our family," "I have discussed my child's dreams and goals with him/her on several occasions," and "I let my child know I care about him/her when setting limits and consequences." Cronbach's alpha for this sample was .86.

**Negative parental-child affective quality.** The Negative Parent-Child Affective Quality Scale consists of 4 items rated on a 7-point scale ranging from 0 = *always* to 9 = *never*. Select items are reverse coded so that a lower scores reflect negative affective quality. Items include "How often did you get angry at your child," "How often do you shout or yell at this child because you were mad at him/her," and "How often do you act loving and affectionate toward him/her," and "How often to you let this child know you really care about him/her." The Cronbach's alpha for this sample was .63. Due to the low alpha level, we deleted the item "How often do you shout or yell at this child because you were mad at him/her," resulting in a 3 item scale with a Cronbach's alpha of .83.

**Substance use rules communication.** The Substance Use Rules Communication Scale consists of 3 items rated on a 5-point scale ranging from 0 = *strongly disagree* to 4 = *strongly agree* ( $\alpha = .77$ ). Items included "I have clear and specific rules about my child's association with peers who use alcohol, tobacco, or other drugs," "I have explained my rules concerning alcohol, tobacco, or other drugs to my child," and "I have explained the consequences of not following my rules concerning alcohol, tobacco, or other drugs to my child." Cronbach's alpha for this sample was .77.



**Parental self-efficacy.** Parental self-efficacy was assessed using a 3 item scale created for this study to assess changes in attitudes about parenting abilities regarding teen substance use. Items are rated on a 5-point scale ranging from 0 = *strongly agree* to 4 = *strongly disagree* ( $\alpha = .93$ ). Items were “As a parent there is little or nothing I can do to keep my child from smoking cigarettes,” “As a parent there is little or nothing I can do to keep my children from drinking alcohol,” and “As a parent there is little or nothing I can do to keep my child from smoking marijuana.” Cronbach’s alpha for this sample was .93.

## Results

Means and standard deviations for pretest and posttest scores are presented in Table 1. A repeated measures multivariate analyses of variance (MANOVA) was conducted to examine the change in parenting behaviors and attitudes regarding adolescent substance use. Results of the repeated measures MANOVA demonstrated a significant main effect for Time, *Wilks’ Lambda* = .35,  $F(5, 76) = 28.92, p < .001, \eta^2 = .66$ . According to Cohen’s (1998) criteria, this effect size is considered large. The pooled within-group correlations among dependent variables are provided in Table 2. Follow-up paired sample t-tests are reported below. Given that five analyses were run, a Bonferroni adjustment was made for follow-up analyses, and alpha was set at .01.

**Parenting practices.** Results indicated parents reported significant changes in general child management,  $t(83) = -10.96, p < .001$ , Cohen’s  $d = -1.20$ , family involvement,  $t(82) = -7.97, p < .001$ , Cohen’s  $d = -.89$ , negative parent-child affective quality,  $t(80) = -3.78, p < .001$ , Cohen’s  $d = -.41$ , and substance use rules communication,  $t(82) = -7.32, p < .001$ , Cohen’s  $d = -.87$ . According to Cohen’s (1998) criteria, the effect sizes for child management, family involvement, and communication are considered large and the effect size for negative parent-child affective quality is considered medium. Parents reported a significant increase in general child management, family involvement, and communication about rules regarding substance use and a significant decrease in negative parent-child affective quality.

**Parental self-efficacy.** Results indicated parents reported a significant change in beliefs about their ability to impact their teen’s substance use,  $t(80) = -5.50, p < .001$ , Cohen’s  $d = -.63$ . According to Cohen’s (1998) criteria, the effect sizes is medium. Parents reported a significant increase in beliefs about their ability to impact their teen’s substance use.

## Discussion

The aim of this study was to evaluate the effectiveness of a parent-based intervention, the Parent Project, on general child management, family involvement, negative parent-child affective quality, substance use rules communication, and parental self-efficacy in the ability to impact adolescent substance use. Although the Parent Project is the largest court-mandated juvenile diversion program in the country, only one study to date had examined its effectiveness (Stolz et al., 2010). Thus, the current study extends the literature by adding to the limited research in this area.

Findings from the current study confirmed our hypothesis that parents would report significant changes in parenting practices and parental self-efficacy. Specifically, from baseline to follow-up assessment parents reported higher levels of general child management, family involvement, substance use specific communication, and parental self-efficacy and lower levels of negative parent-child affective quality. The largest effect sizes were observed in the area of general child management, family involvement, and substance use rules communication. These areas might have been particularly influenced by the program because the Parent Project emphasizes acquiring behavioral management skills, including parental monitoring and discipline, improving parental involvement and support, and substance use rules communication. In contrast, although still in the medium range, the smallest effect size was associated with negative child-parent affective quality, suggesting changing negative communication may be more difficult than improving positive parenting behavior.

The results of this study are consistent with prior research on the effectiveness of the Parent Project (Stolz et al., 2010). Similar to the current study, Stolz et al. examined the effectiveness of the Parent Project across 10 weeks among a sample of volunteers. The authors reported a significant increase in positive parenting variables, including parental support and parental monitoring, and youth behaviors, including improved school achievement and a decrease in antisocial behavior. Findings from this study replicate results related to positive changes in parenting

practices and extend those findings by demonstrating significant improvement in alcohol-specific communication, as well as parental self-efficacy. Findings from the current study are also consistent with research supporting the general effectiveness of parent interventions in changing parenting behaviors and attitudes, including increased parental self-efficacy (Sofronoff & Farbotko, 2002).

### Limitations and Directions for Future Research

The scope of the current study did not include attention to changes in adolescent behaviors or perceptions of the quality of parent-child relationships. However, our results indicated that the Parent Project is effective in changing parental behaviors and attitudes that have been linked by other researchers to changes in adolescent substance use and antisocial behavior. Specifically, in prior research, increased parental monitoring and involvement were strongly associated with reductions in adolescent alcohol use (Barnes et al., 2006; Luthar & Goldstein, 2008; Simons-Morton & Chen, 2005; Simons-Morton et al., 2001; Vakalahi, 2002; Van Der Vorst et al., 2006) and antisocial behavior and delinquency (Barber et al., 2005; Barnes et al., 2006; Dekovic et al., 2003; Griffin et al., 2000; Laird et al., 2003; Stolz et al., 2005); less negative communication and more communication regarding substance abuse were associated with lower levels of adolescent alcohol use (Ackard et al., 2006; Dumas et al., in press; Guilamo-Ramos et al., 2004; Simons-Morton, 2004; Smetana et al., 2002) and antisocial behavior (Dekovic et al., 2003); and, finally, increased parenting self-efficacy has been related to fewer behavioral problems among adolescents (Jones & Prinz, 2005). Future research should examine the Parent Project in association with changes in adolescent behavior through both parent and adolescent reports.

Another limitation pertained to the homogeneity of the sample. The participants in this study were primarily Caucasian, thus limiting the generalizability of the results. Future research should examine intervention effectiveness with more diverse samples to assess whether or not findings generalize to other groups of parents. Moreover, the duration between baseline and follow-up measures in this study was fairly short. Although this timeframe (10 weeks) was consistent with prior research on the Parent Project (Stolz et al., 2010), longer follow-up periods would shed light on the maintenance of behavioral and cognitive changes beyond the program. Third, there was no control or comparison group in this study. Thus, it is not clear if changes demonstrated in parenting behavior and attitudes were related to the Parent Project or unmeasured variables. Consistent with the Hawthorne effect, it is possible that participants changed their behavior simply because they were being evaluated. Additionally, the parental self-efficacy scale used in this study was created to measure outcomes for this specific project. Future research using a randomized controlled design and a self-efficacy scale with established psychometric properties would add to the literature examining the effectiveness of the Parent Project. Finally, because some of the dependent variables were correlated, these variables may be measuring overlapping aspects of the same behavior (Tabachnick & Fidell, 2007). Thus, caution should be used when concluding that the Parent Project significantly affected each individual parenting construct rather than parenting as a whole.

### Counseling Implications

The Parent Project was designed to help parents of youth engaging in behaviors including substance use, truancy, running away, and aggressive behavior. Engaging parents in the treatment is crucial, as researchers have found parents do have an impact on their adolescents' behavior and that parent-based interventions emphasizing parental involvement, communication, skills, and competence are the most effective in changing adolescent behavior (Petrie et al., 2007; Wyatt et al., 2008). This study added to the literature by indicating that parent-based interventions are effective in changing such parental behaviors and beliefs. Thus, we reached preliminary support for the Parent Project as a means for initiating new behaviors and beliefs among parents of at-risk youth.

Treatment outcome research indicates that the involvement of families during the active treatment process leads to better client outcomes (Winters, Botzet, & Fahnhorst, 2011). While the majority of counselors are aware of the importance of family involvement in adolescent therapy and wellness, many do not incorporate family members into therapy due to issues of confidentiality and autonomy. Results of this study provide further evidence for the benefits of including parents in the treatment of at-risk adolescents. Referring parents to program such as the Parent Project is one way to engage parents in the treatment process and to provide parents the necessary skills needed to work with their at-risk teens. Following the Parent Project model, counselors may also facilitate parent support groups focusing on empowering parents to implement practices that promote healthy adolescent decision making.

Counselors can also educate parents about the importance of parental monitoring and involvement in their adolescents' daily lives, teach behavior management techniques to help parents acquire skills to address youth high risk behavior, and work with families to improve parent-teen communication. These strategies will improve parenting skills and promote parental self-efficacy as parents gain confidence in their ability to work with their teens who are engaging in substance use or other destructive behaviors. As described by Kumpfer, Molgaard, and Spoth (1996), The Strengthening Families Program (SFP) is an evidence-based intervention designed to prevent adolescent substance abuse through strengthening monitoring, effective discipline, and communication skills. SFP is a multicomponent, 14 session family-skills intervention consisting of parent, child, and family training courses. During weekly groups, parents and adolescents are seen separately in the first hour and then families are brought together to practice skills. Homework is also assigned to facilitate generalizability of the skills. Manuals are available for adolescents 10-14 years old and 12-16 years old. Reviews of the literature indicate SFP is among the few programs with the most promising evidence for reducing alcohol use among adolescents (Spoth, Greenberg, & Turrisi, 2008).

Computer-based programs are also available for high-risk families. For example, SFP is also available as a 10 session DVD course. Parenting Wisely (Kacir & Gordon, 1999; Lagges & Gordon, 1999) is another computer-based program designed to improve parent-child communication and parental disciplinary skills. This interactive computer program is delivered through nine 2-3 hour lessons. Researchers have found that Parenting Wisely is effective in improving child and adolescent problem behavior (Gordon & Stanar, 2003). Computer-based programs such as SFP and Parenting Wisely can be used as a stand-alone program or in conjunction with other counseling interventions. For example, counselors could assign a lesson or module as "homework" and then discuss these lessons or modules in subsequent sessions.

### Conclusion

The aim of this study was to examine the effectiveness of the Parent Project in changing parental behaviors and beliefs. Findings indicate parents reported improved levels of general child management, family involvement, parent-child affective quality, substance use rules communication, and parental self-efficacy at the end of the program, compared to baseline measures. This study adds to the empirical support for the Parent Project, a program available in multiple states and a valuable resource for counselors working with at-risk youth.

### References

- Ackard, D. M., Neumark-Sztainer, D., Story, M., & Perry, C. (2006). Parent-child connectedness and behavioral and emotional health among adolescents. *American Journal of Preventive Medicine, 30*, 59–66. doi:10.1016/j.amepre.2005.09.013
- Adalbjarnardottir, S., & Rafnsson, F. D. (2002). Adolescent antisocial behaviour and substance use: Longitudinal analyses. *Addictive Behaviors, 27*, 227–40. doi: 10.1016/S0306-4603(00)00179-9
- Arata, C. M., Stafford, J., & Tims, M. S. (2003). High school drinking and its consequences. *Adolescence, 38*, 567–579.
- Ardelt, M., & Eccles, J. S. (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family Issues, 22*(8), 944–972. doi: 10.1177/019251301022008001
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215.
- Barber, B. K., Stolz, H. E., & Olsen, J. A. (2005). Parental support, psychological control, and behavioral control: Assessing relevance across time, culture, and method. *Monographs of the Society for Research in Child Development, 70*, 1–137.
- Barnes, G. M., Welte, J. W., & Hoffman, J. H. (2002). Relationship of alcohol use to delinquency and illicit drug use in adolescents: Gender, age, and racial/ethnic differences. *Journal of Drug Issues, 32*, 153–178. doi: 10.1177/002204260203200107
- Barnes, G. M., Hoffman, J. H., Welte, J. W., Farrell, M. P., & Dintcheff, B. A. (2006). Effects of parental monitoring and peer deviance on substance use and delinquency. *Journal of Marriage and the Family, 68*, 1084–1104. doi:10.1111/j.1741-3737.2006.00315.x
- Centers for Disease Control and Prevention (2008). Alcohol-Related Disease Impact (ARDI). Atlanta, GA: CDC.
- Cohen, J (1988) Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.



- Deković, M., Janssens, J. M., & Van As, N. M. (2003). Family predictors of antisocial behavior in adolescence. *Family Process, 42*(2), 223-35. doi: 10.1111/j.1545-5300.2003.42203.x
- Donovan, J. E. (2004). Adolescent alcohol initiation: A review of psychosocial risk factors. *Journal of Adolescent Health, 35*, 529-529. doi: 10.1016/j.jadohealth.2004.02.003
- Doumas, D. M., Hausheer, R., & Esp, S. (in press). Heavy episodic drinking and alcohol-related consequences: Sex-specific differences in parental influences among 9<sup>th</sup> grade students. *Journal of Child and Adolescent Substance Abuse*.
- Foley, K. L., Altman, D., Durrant, R. H., & Wolfson, M. (2004). Adult's approval and adolescents' alcohol use. *Journal of Adolescent Health, 35*, 345 e17-345 e26. doi: 10.1016/j.jadohealth.2003.12.001
- Fry, R., Johnson, M. S., Melendez, P., & Morgan, R. (2003). *Parent project: Changing destructive adolescent behavior* (8th ed.). CA: Parent Project, Inc.
- Goldberg, J. H., Halpern-Felsher, B. L., & Millstein, S.G. (2002). Beyond invulnerability: The importance of benefits in adolescents' decision to drink alcohol. *Health Psychology, 21*, 477-484. doi: 10.1037/0278-6133.21.5.477
- Gordon, D. A., & Stanar, C. R. (2003). Lessons learned from the dissemination of parenting wisely, a parent training CD-ROM. *Cognitive and Behavioral Practice, 10*, 312-323. doi: 10.1016/S1077-7229(03)80049-4
- Griffin, K. W., Botvin, G. J., Scheier, L. M., Diaz, T., & Miller, N. L. (2000). Parenting practices as predictors of substance use, delinquency, and aggression among urban minority youth: Moderating effects of family structure and gender. *Psychology of Addictive Behavior, 14*, 174-184. doi: 10.1037/0893-164X.14.2.174
- Guilamo-Ramos, V., Turrissi, R., Jaccard, J., Wood, E., & Gonzalez, B. (2004). Progression from light experimentation to heavy episodic drinking in early and middle adolescence. *Journal of Studies on Alcohol, 65*, 494-500.
- Halpern-Felsher, B. L., & Cauffman, E. (2001). Costs and benefits of a decision: Decision-making competence in adolescents and adults. *Journal of Applied Developmental Psychology, 22*(3), 257-273. doi: 10.1016/S0193-3973(01)00083-1
- Harford T. C., & Muthén B. O. (2000). Adolescent and young adult antisocial behavior and adult alcohol disorders: A fourteen-year prospective follow-up in a national survey. *Journal of Studies on Alcohol, 61*, 524-528.
- Hausheer, R., Doumas, D. M., Esp, S., & Cuffee, C. (in press). Parental predictors of adolescent alcohol use and alcohol-related consequences. *Journal of Addictions and Offender Counseling*.
- Hoeve, M., Dubas, J. S., Eichelsheim, V. I., van, L. P. H., Smeenk, W., & Gerris, J. R. M. (2009). The Relationship between parenting and delinquency: A Meta-analysis. *Journal of Abnormal Child Psychology, 37*, 749-775. doi 10.1007/s10802-009-9310-8
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2013a). *Monitoring the future national results on adolescent drug use: Overview of key findings, 2012*. Ann Arbor: Institute for Social Research, The University of Michigan.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2013b). *Monitoring the Future national survey results on drug use, 1975-2012. Volume II: College students and adults ages 19-50*. Ann Arbor: Institute for Social Research, The University of Michigan.
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review, 25*, 341-363. doi: 10.1016/j.cpr.2004.12.004
- Kacir, C., & Gordon, D. (1999). Parenting Adolescents Wisely: The effectiveness of an interactive videodisk parent training program in Appalachia. *Child and Family Behavior Therapy, 21*(2), 227-251. doi: 10.1300/J019v21n04\_01
- Kim, Y. M., & Neff, J. A. (2010). Direct and indirect effects of parental influence upon adolescent alcohol use: A structural equation modeling analysis. *Journal of Child & Adolescent Substance Abuse, 19*, 244-260. doi:10.1080/1067828X.2010.488963
- Kumpfer, K. L., Molgaard, V., & Spoth, R. (1996). The Strengthening Families Program for the prevention of delinquency and drug use. In R. D. Peters & R.J. McMahon (Eds.), *Preventing childhood disorders, substance abuse, and delinquency* (pp. 241-267). Thousand Oaks, CA: Sage Publications, Inc.
- Lagges, A., & Gordon, D. (1999). Use of an interactive laserdisc parent training program with teenage parents. *Child and Family Behavior Therapy, 21*(2), 19-37. doi: 10.1300/J019v21n01\_02
- Laird, R. D., Pettit, G. S., Dodge, K. A., & Bates, J. E. (2003). Change in parents' monitoring knowledge: Links with parenting, relationship quality, adolescent beliefs, and antisocial behavior. *Social Development, 12*, 401-419. doi: 10.1111/1467-9507.00240

- Luthar, S. S., & Goldstein, A. S. (2008). Substance use and related behaviors among suburban late adolescents: The importance of perceived parent containment. *Development and Psychopathology, 20*, 591–614. doi:10.1017/S0954579408000291
- Mares, S. H. W., Van Der Vorst, H., Engels, R. C. M. E., & Lichtwarck-Aschoff, A. (2011). Parental alcohol use, alcohol-related problems, and alcohol-specific attitudes, alcohol-specific communication, and adolescent excessive alcohol use and alcohol-related problems: An indirect path model. *Addiction Behaviors, 36*, 209–216. doi:10.1016/j.addbeh.2010.10.013
- Nash, S. G., McQueen, A., & Bray, G. H. (2005). Pathways to adolescent alcohol use: Family environment, peer influence, and parental expectations. *Journal of Adolescent Health, 37*, 19–28. doi:10.1016/j.jadohealth.2004.06.004
- Petrie, J., Bunn, F., & Byrne, G. (2007). Parenting programmes for preventing tobacco, alcohol or drugs misuse in children less than 18: A systematic review. *Health Education Research, 22*(2), 177–191. doi: 10.1093/her/cyl061
- Redmond, C., Spoth, R., Shin, C., & Lepper, H. (1999). Modeling long-term parent outcomes of two universal family-focused preventive interventions: One year follow-up results. *Journal of Consulting and Clinical Psychology, 67*, 975–984. doi: 10.1037/0022-006X.67.6.975
- Reifman, A., Barnes, G. M., Dintcheff, B. A., Farrell, M. P., & Uhteg, L. (1998). Parental and peer influences on the onset of heavier drinking among adolescents. *Journal of Studies on Alcohol and Drugs, 59*, 311–317.
- Ryan, S. M., Jorm, A. F., & Lubman, D. I. (2010). Parenting factors associated with reduced adolescent alcohol use: A systematic review of longitudinal studies. *Australian and New Zealand Journal of Psychiatry, 44*, 774–783. doi: 10.1080/00048674.2010.501759
- Simons-Morton, B. (2004). Prospective association of peer influence, school engagement, drinking expectancies, and parent expectations with drinking initiation among sixth graders. *Addictive Behavior, 29*, 299–300. doi: 10.1016/j.addbeh.2003.08.005
- Simons-Morton, B., & Chen, R. (2005). Latent growth curve analysis of parent influences on drinking progression among early adolescents. *Journal of Studies on Alcohol and Drugs, 66*, 5–13.
- Simons-Morton, B., Haynie, D. L., Crump, A. D., Eitel, P., & Saylor, K. E. (2001). Peer and parent influences on smoking and drinking among early adolescents. *Health Education and Behavior, 28*, 95–107. doi:10.1177/109019810102800109
- Smetana, J. G., Crean, H. F., & Daddis, C. (2002). Family processes and problem behaviors in middle-class African American adolescents. *Journal of Research on Adolescents, 12*, 275–304. doi:10.1111/1532-7795.00034
- Sofronoff, K., & Farbotko, M. (2002). The effectiveness of parent management training to increase self-efficacy in parents of children with Asperger syndrome. *Autism, 6*, 271–286. doi: 10.1177/1362361302006003005
- Spoth, R., Greenberg, M., & Turrise, R. (2008). Preventive interventions addressing underage drinking: State of the evidence and steps toward public health impact. *Pediatrics, 121*, 311–336. doi: 10.1542/peds.2007-2243E
- Spoth, R., Neppel, T., Goldberg-Lillehoj, C., & Jung, T. (2006). Gender-related quality of parent-child interactions and early adolescent problem behaviors: Exploratory study with Midwestern samples. *Journal of Family Issues, 27*, 826–849. doi: 10.1177/0192513X05285614
- Spoth, R. L., & Redmond, C. (2002). Project family prevention trials based in community-university partnerships: Toward scaled-up preventive interventions. *Prevention Science, 3*, 203–221. doi: 10.1023/A:1019946617140
- Spoth, R., Redmond, C., & Shin, C. (1998). Direct and indirect latent-variable parenting outcomes of two universal family-focused preventive interventions: Extending a public health-oriented research base. *Journal of Consulting and Clinical Psychology, 66*, 385–399. doi: 10.1037/0022-006X.66.2.385
- Stolz, H. E., Barber, B. K., & Olsen, J. A. (2005). Toward disentangling fathering and mothering: An assessment of relative importance. *Journal of Marriage and Family, 67*, 1076–1092. doi: 10.1111/j.1741-3737.2005.00195.x
- Stolz, H. E., Vargas, L., Clifford, L. M., Gaedt, H. A., & Garcia, C. F. (2010). Evaluating “Parent Project:” A multi-site inquiry. *Family Science Review, 15*(1), 1–12.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.
- Vakalahi, H. (2002). Family-based predictors of adolescent substance abuse. *Journal of Child and Adolescent Substance Abuse, 11*(3), 1–15. doi:10.1300/J029v11n03\_01
- Van der Vorst, H., Engels, R. C. M. E., Meeus, W., Dekovic, M., & Vermulst, A. (2006). Parental attachment, parent control and early development of alcohol use: A longitudinal study. *Psychology of Addictive Behaviors, 20*(2), 107–116. doi:10.1037/0893-164X.20.2.107

- Winters, K.C., Botzet, A. M., & Fahnhorst, T. (2011). Advances in adolescent substance abuse treatment. *Current Psychiatry Reports, 13*, 416-21. doi 10.1007/s11920-011-0214-2
- Wood, M. D., Read, J. P., Mitchell, R. E., & Brand, N. H. (2004). Do parents still matter? Parents and peer influences on alcohol involvement among recent high school graduates. *Psychology of Addictive Behaviors 18*(1), 19-30. doi:10.1037/0893-164X.18.1.19
- Woolfenden, S., Williams, K., & Peat, J. (2002). Family and parenting interventions for conduct disorder and delinquency: A meta-analysis of randomised controlled trials. *Archives of Disease In Childhood, 86*(4), 251-256. doi:10.1136/adc.86.4.251
- Wyatt, K. J., Valle, L., Filene, J., & Boyle, C. (2008). A Meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology, 36*, 567-589. doi: 10.1007/s10802-007-9201-9

Table 1

*Means and Standard Deviations at Baseline and Follow-Up*

Measure	Baseline		Follow-Up	
	Mean	SD	Mean	SD
General Child Management	30.37	5.99	38.08	5.65
Family Involvement	24.65	5.84	29.51	4.73
Negative Affective Quality*	8.44	4.38	10.10	3.63
Substance Use Rules Communication	9.41	2.49	10.99	1.67
Parental Self-Efficacy	7.88	3.58	9.86	2.58

\* Lower mean associated with high levels of negative affective quality

Table 2

*Pooled Within-Group Correlations*

Measure	1	2	3	4	5
1. General Child Management	—				
2. Family Involvement	.66	—			
3. Negative Affective Quality	.01	.13	—		
4. Substance Use Rules Communication	.52	.56	-.10	—	
5. Parental Self-Efficacy	.43	.37	-.05	.31	—