CrossMark

ORIGINAL PAPER

Parent Training and Adolescent Social Functioning: A Brief Report

Lorraine C. Taylor · Kevin A. Leary ·
Alaina E. Boyle · Katelin E. Bigelow ·
Teague Henry · Melissa DeRosier

Abstract This brief report describes results from an efficacy test of *Adolescent ParentWays* program, an intervention developed for parents of adolescents ages 13–16 years who have symptoms of behavioral problems and social difficulties. Families were assigned to one of three groups. The in-person treatment group included parents who attended a 10 week, multiple session intervention program (n = 26), an online only treatment group (n = 29) that was given access to a web-based version of the program, or a wait-listed control group (n = 22). Pre- and post- testing of parents and their adolescent child was conducted. The *Adolescent ParentWays* intervention program was associated with several significant pre-post differences, including enhanced parent–adolescent relationship quality, increased parent knowledge and monitoring, and lower perceived stress for parents. Significant differences in the outcome variables were found for the in-person treatment group and for the on-line only versions of the program, versus a wait-listed control group. This demonstrates the effectiveness of the Adolescent ParentWays intervention program. The findings support the important role of parents in shaping adolescent behaviors and the positive impact of parenting training programs—both in-person traditional models and well as online versions—in promoting positive parent–adolescent relationships. The merits of using online parent training programs are discussed.

L. C. Taylor (✉) · K. A. Leary · A. E. Boyle ·
K. E. Bigelow · M. DeRosier
3C Institute, 1901 N. Harrison Ave Suite 200, Cary, NC 27513, USA
e-mail: lorrainectaylor@gmail.com

T. Henry
Department of Psychology, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599, USA

Introduction

Adolescence is typically considered a tumultuous developmental period during which youth undergo a variety of pivotal biological, emotional, social, and cognitive changes that impact adjustment and well-being (Brown 1990; DeRosier et al. 1994). The importance of peer relationships and social acceptance become paramount during this period. Changing social expectations and complex new social worlds present adolescents with a variety of challenges that can be difficult to navigate. Adolescents face increased risk for negative developmental outcomes such as depression (Boivin and Hymel 1997), suicide (Carney 2000), educational underachievement and school failure (Woodward and Fergusson 2000), internalizing and externalizing behavior problems (Burke et al. 2010; Galambos et al. 2003), drug use (Spooner 1999), and delinquency (Brendgen et al. 1998). These problematic outcomes are often linked to difficulties in social relationships with peers (Reitz et al. 2007).

Threats to adjustment and well-being during the adolescent period are serious and have recently been considered an important facet of adolescent health. The Healthy People 2020 (U.S. Department of Health and Human Services 2013) initiative recently added Adolescent Health Objectives as a specific focus area, drawing attention to the prevention of topics such as adolescent mental health, substance abuse, sexual behavior, and violence. Within the Healthy People 2020 framework for promoting adolescent health, the impact of social influences of peers is highlighted as both a source of risk as well as a potential mechanism for intervention. The impact of social relationships with peers

on adolescent development has been clearly established, but there remains a need to understand how social relationships can be used to facilitate resilience and success during the adolescent years.

Parents play a critical role in adolescent socialization (Taylor et al. 2004) and also serve as guides to help adolescents navigate difficult social challenges and manage their relationships with peers (Mounts 2011). Family systems theory (Cox and Paley 1997, 2003) underscores the impact of parents in shaping youth developmental outcomes. Individual differences in youth behavioral and social functioning are linked to individual differences in parenting practices and characteristics (Collins et al. 2000; Spera 2005). Normal adolescent development includes increased autonomy and independence from parents as adolescents become more self-sufficient and able to manage their own needs. Nevertheless, research shows that strong, positive bonds between adolescents and their parents predict pro-social outcomes for youth, fewer interactions with deviant peers, and greater youth social competence, and increased youth satisfaction with their peer relationships (Swanson et al. 2011; Updegraff et al. 2001). Finding ways to support and enhance positive parent–adolescent relationships is a critical protective strategy for increasing positive developmental outcomes for adolescents and buffering them against the negative impact of challenges in their social worlds.

The connection between parenting behaviors and adolescent experiences with peers has been well-established. The tripartite model of family-peer linkages describes how parenting practices and interaction styles with adolescents impacts adolescent's social success with their peers (Parke et al. 1994). Studies have suggested the importance of understanding these links from a person-oriented approach (Bergman and Magnusson 1997; Kan and McHale 2007), allowing for the identification of relationship dynamics within families that are associated with variability in outcomes. Emphasizing relationship dynamics between parents and adolescents and considering how these processes may impact adolescent relationships with their peers is an important strategy for identifying strategies that can be used to promote better outcomes for adolescents, particularly those who have established social difficulties.

Research suggests that parent training programs can be an effective treatment strategy for promoting positive adolescent outcomes (DeRosier and Gilliom 2007). It is particularly important to deliver parent training programs during the transition to adolescence (ages 10–14 years) because parental influences on their youth still remain strong during this developmental period (Burke et al. 2012; Hayes et al. 2004). A plethora of programs designed to teach parenting skills to promote positive youth development are available. For example, the Triple P-Positive Parenting Program (Nowak and Heinrichs 2008) has been shown to be effective in reducing youth problem behaviors through effective parent training. Triple P has extensive online parent resources, although the intervention itself consists of multiple in-person sessions with a trained group leader. Parenting Adolescents Wisely (Kacir and Gordon 1999) is an example of an interactive, computer-based training program for youth. It consists of multiple online sessions to be completed by parents and targets youth behavior problems and risk for substance abuse (Kacir and Gordon 1999). Both Triple P and Parenting Adolescents Wisely are popular, evidence-based programs, but are relatively expensive unless administered through community health providers or other professional settings. More options for evidence-based parent training programs that meet the real-world needs of families and offer affordable, online access are needed.

The value of in-person programs that include contact between parents and intervention staff has been noted. For example, the Community Preventive Services Task Force recommends person-to-person programs on the basis that such programs have been proven effective in reducing adolescent risk behaviors (CPSTF 2012). Features found to be particularly important in promoting positive program outcomes include interactive discussion opportunities between the parent participants and trained program staff, opportunities for parents to ask questions and receive feedback, and opportunities for parents to practice skills (CPSTF 2012). Despite the effectiveness of parent training programs in reducing problematic behaviors for adolescents (Burke et al. 2010), few such programs exist in online formats that provide increased usability and availability to parents.

Families may be challenged in meeting the demands of traditional in-person intervention programs for several reasons. They may lack adequate time and resources to participate in multiple weeks of sessions. The stigma associated with in-person group sessions may also prohibit some families from engaging in in-person parent training opportunities. In addition, the cost of providing in-person group parenting training may be prohibitive to various service providers who may be interested in making available evidence-based parent training programs for families. Because of these limitations, online parent trainings that are also evidence-based and approved by parents may be useful in conveying the many benefits of parent training programs without the implementation challenges associated with in-person group sessions.

The use of online technologies to deliver parent training is growing. Some quality online parent training programs have been developed that target parents of particularly high-risk children, including programs developed specifically to train foster or adoptive parents (Pacifici et al.
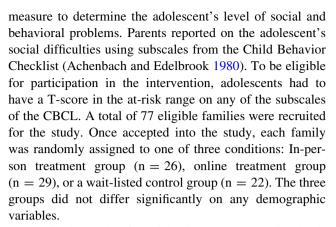
2006), for children whose parents are divorcing (Bowers et al. 2011; Schramm and McCaulley 2012), or for parents with children who are recovering from pediatric brain injury (Wade et al. 2006). Online parent training programs targeting parents of adolescents proffer several key advantages over traditional, in-person group sessions. For instance, online parenting programs allow parents the ability to engage and maintain involvement in the program content without fear of shame, judgment, or guilt, all of which can serve as barriers to participating in in-person interventions. Delivering parenting support via the internet is time efficient, cost-effective, and easily accessible to most families, as the majority of households (nearly 80 % in 2011) have access to internet (File 2013). Online programs may lack face-to-face interaction with group leaders, but the emphasis on self-directed learning, inclusion of text and video, and the use of quizzes or tests for parents are appealing features of online parent training programs (Bowers et al. 2011).

Demonstrating the impact of a new and innovative parent training program designed to help adolescents navigate social relationships with peers and family members is the primary aim of the present study. Testing the relative effectiveness of the program delivered using an in-person group setting versus an online format is a secondary aim. The present study focuses on the *Adolescent ParentWays* program, targeting parents of adolescents ages 13–16. Compared to a wait-listed control group of parents and adolescents, participation in the *Adolescent ParentWays* in-person and online treatment conditions was expected to positively impact parent–adolescent relationship quality, improve understanding of effective parenting strategies, increase parental monitoring of adolescents' behavior, and reduce stress in both parents and adolescents.

Method

Participants

Participating families were recruited via emails and fliers sent to counselors at local middle schools, community centers that provide programs for adolescents, health clinics, and mental health service providers. Print advertisements were placed in several local free publications as well. Parents of adolescents ages 13–16 were invited to participate in a social skills group designed to help parents more effectively work with youth who are experiencing social difficulties. Parents were told they would be considered to participate in the intervention, which included their target adolescent completing surveys at 2 time points during the intervention. Interested parents completed an online eligibility survey, which included a screening

measure to determine the adolescent's level of social and behavioral problems. Parents reported on the adolescent's social difficulties using subscales from the Child Behavior Checklist (Achenbach and Edelbrook 1980). To be eligible for participation in the intervention, adolescents had to have a T-score in the at-risk range on any of the subscales of the CBCL. A total of 77 eligible families were recruited for the study. Once accepted into the study, each family was randomly assigned to one of three conditions: In-person treatment group (n = 26), online treatment group (n = 29), or a wait-listed control group (n = 22). The three groups did not differ significantly on any demographic variables.

The final sample of participating parents consisted primarily of mothers of the target adolescent (91 %). Most of the parent participants were married (68 %) and had earned a college degree or graduate degree (70 %). Seventy-seven percent of the parents were White/European American, 14 % were Black/African American, 5 % were Asian, and 4 % were Hispanic/Latino. The sample of adolescents was 39 % female and 61 % male (see Table 1).

Procedure

After obtaining informed consent from participating parents and assent from adolescents, all parents and adolescents completed pre-assessments prior to the start of the intervention and post-assessments following the 10 week intervention period. Participants in all three conditions completed pre-assessments and post-assessments at the research center. Assessments did not differ based on

Table 1 Descriptive statistics

N = 77	Mean	SD	Range
Adolescent age (years)	14.01	1.10	12–16
Caregiver age (years)	47.26	6.24	35–64
Adolescent grade	8.79	1.45	6th–12th
Number of adults in home	1.87	0.61	1–4
Number of children in home	1.96	0.88	1.5
Number of siblings	1.05	0.92	0.4

	N	Percentage
Caregiver gender		
Male	5	7
Female	72	93
Ethnicity		
Asian/Native	4	5
Black/African American	11	14
Latino/a/Hispanic	3	4
White	59	77
Other	3	4

condition. At both time points, a trained research staff member met with each parent individually and provided an assessment packet of paper and pencil measures to complete independently. Adolescent participants met with a trained research staff member separately to complete their paper and pencil assessment packet. To alleviate potential issues with literacy, research staff members read all assessment questions aloud unless specifically asked not to. Each parent and adolescent participant was compensated for their time and effort.

Participants were randomly assigned to one of three treatment condition. For the participants selected to be in the *Adolescent ParentWays* in-person treatment condition, parents selected one (out of 4 possible) weekly group meeting day and time. These meetings occurred in the late afternoons or early evenings on a week night at the research center. The in-person parent groups met weekly for 10 consecutive weeks for approximately one hour per meeting. Three to five parents were included in each of the groups. Each in-person session was led by two trained group leaders, including at least one Masters or Ph.D. level psychologist with prior experience leading parenting groups. The curriculum developed for the *Adolescent ParentWays* intervention was structured and manualized such that detailed scripts and activities were used to instruct parents on adolescent social development and behavior and included video-based content, role plays, and other supplemental activities for the parent to share with the adolescent at home. The combination of didactic instruction and active practice is an effective strategy for parent training, as evidenced by versions of the S.S.GRIN program (DeRosier and Markus 2005), the program for younger children and their families that is the foundation for the current *Adolescent ParentWays* program. Group leaders for the in-person sessions completed weekly online fidelity ratings to track their adherence to the intervention protocol. Fidelity ratings showed that all group leaders adhered to intervention protocol and all planned activities were conducted during each group meeting in accordance with the curriculum implementation guidelines.

The in-person treatment condition featured weekly parent group meetings led by a trained group leader. Course content featured discussion topics, homework activities, role-plays, instructional content, and demonstration videos. The on-line only condition received the same materials delivered via computer. Online participants were presented with videos of an in-person group discussing the various topics, although watching the video discussions is quite different from participating in actual discussions. Nevertheless, the online participants were exposed to the same types of discussion group dynamics as demonstrated in the videos. Parent participants randomly assigned to the online treatment group received login

instructions for the secure, proprietary website that contained the *Adolescent ParentWays* curriculum. The online participants completed the sessions over the same time period that the in-person groups attended the treatment groups. On Monday of each week, the subsequent session was made available to online participants. Throughout that week, parents in the online condition would independently access and navigate the material included in that week's session. All past sessions remained available to access so that parents could return to previous weeks' curriculum. Participants in the wait-listed control condition received login instructions for the secure, proprietary website that contained the *Adolescent ParentWays* curriculum in its entirety after the 10 week intervention period had ended and all post-assessments were completed.

Measures

Demographics

At pre-assessment, parents completed a demographic questionnaire in which parent and adolescent age and race, and parental education, employment, and income data were collected.

Parent–adolescent relationship

Characteristics of parent–adolescent relationships were assessed using an adapted version of the *Parent-Adolescent Relationship Scale* (Hair et al. 2006). Parents and adolescents responded to this 21-item measure at both pre-assessment and post-assessment. This measure assesses the hostile/coercive and positive/supportive nature of familial relationships through participants' reports of their parent's or adolescent's behavior. For all items, participants were asked to report how often they engaged in certain behaviors in the past month (0 = *never*; 5 = *always*). Sample items assessing hostile/coercive parent–teen relationship behaviors include "criticize you or your ideas," "hit, push, or shove you," and "try to make you feel guilty." Example items from the positive/supportive subscale include "listen carefully to your point of view," "act loving and affectionate toward you," and "help you do something that was important to you." In the present study, Cronbach's alpha for the both subscales at each time point ranged from .88 to .90 for parents and from .87 to .91 for adolescents.

Parental monitoring

At both time points, parents and adolescents completed a 5-item scale assessing parental monitoring behavior, including parents' knowledge of their adolescents' friends and whereabouts. Sample items of this scale are "You

(your mother/father) want to know exactly where you are and what you are doing" and "You (your mother/father) know about who your friends are." Internal consistency (α) in the current sample was .78 and .82 at pre-assessment for parents and adolescents, respectively, and .76 for parents and .85 for adolescents, at post-assessment.

Parental stress

Parental stress was measured using the *Parent Stress Index* (PSI; Abidin 1995). The PSI is designed to identify dysfunctional parent–child systems and adolescents with emotional problems. This measure is widely used and has been validated with diverse populations (Cain and Combs-Orme 2005; Dekovic and Meeus 1997). The modified version of the PSI used in this study consists of 34 items and was administered to parents at pre-assessment and post-assessment. Parents responded to items on a four-point Likert scale (1 = strongly disagree; 4 = strongly agree). The items of the PSI assess three components of parental stress: personal distress, parent–teen dysfunctional interaction, and perceptions of the general difficulty of one's teen. Sample personal distress items include "I often have the feeling that I cannot handle things very well" and "Having a child has caused more problems than I expected in my relationships with my spouse." Reliability estimates (α) for the personal distress subscale were .88 and .92 at pre- and post-assessment, respectively. Parent–teen dysfunction items included "Most times I feel that my teen does not like me and does not want to be close to me" and "Sometimes my teen does things that bother me just to be mean." Reliability estimates (α) for this subscale were .87 and .86, respectively. Items assessing the parental perceptions of having a difficult teen include "My teen doesn't seem to learn as quickly as most teens" and "My teen gets easily upset over the smallest thing." In the present sample, reliability estimates for this subscale were .82 at pre-assessment and .88 at post-assessment.

Acquired knowledge

At both time points, parents completed an achieved learning questionnaire (ALQ) to assess their knowledge of material addressed through the intervention, including teen social skills, adolescent development, and parenting techniques. The ALQ consisted of 50 multiple-choice questions and 12 true or false questions and was used to determine how effectively parents learned pertinent information concerning interactions with their adolescent as a result of the intervention. Higher scores were indicative of knowledge of adolescent development and social skills.

Data analyses

Pre- and post-intervention testing was conducted. To test the efficacy of the intervention in improving parent and child outcomes, a repeated measures MANOVA was conducted with time point (pre-intervention, post-intervention) and treatment condition (in-person, online, control) serving as within- and between-subjects factors, respectively.

Results

Results indicated significant main effects of time for parental perceptions of their adolescents' difficulty [$F(2, 65) = 18.39$, $p < .001$, $\eta^2 = .22$], parent–adolescent relationship dysfunction [$F(2, 65) = 6.90$, $p = .01$, $\eta^2 = .10$], and hostility in the parent–child relationship [$F(2, 65) = 36.12$, $p < .001$, $\eta^2 = .36$]. However, a significant time by condition interaction was found for parental knowledge [$F(2, 65) = 40.17$, $p < .001$, $\eta^2 = .38$]. As can be seen in Table. 2, parents who took part in the in-person treatment group experienced significantly greater gains in knowledge about handling the behavioral difficulties of their adolescent than participants in the online or control conditions.

Although the size of our sample likely limited our ability to find significant omnibus effects of change over time as a function of condition for many outcomes, examination of pairwise comparisons revealed significant differences in change from pre- to post-intervention as a function of condition (see Table 2). Specifically, parent–child relationship dysfunction, adolescent behavioral difficulties, and relationship hostility decreased significantly from pre-intervention to post-intervention, whereas parental knowledge increased over time, for families who participated in the *Adolescent ParentWays* intervention (both in-person and online) relative to families in the control condition, providing evidence for the effectiveness of this intervention program.

Discussion

Based on the Parent Guide for Social Skills Group Intervention (SSGRIN-PG; DeRosier 2002), the present *Adolescent ParentWays* program focuses specifically on the social challenges that relate to development during middle and late adolescence. The *Adolescent ParentWays* program was developed for parents of youth experiencing social behavioral issues and focuses on (1) enhancing parent–adolescent relationship quality, (2) increasing parental knowledge about adolescent development and increasing parental monitoring of adolescents, and (3) reducing parent

Table 2 Pairwise comparisons testing change from pre- to post-intervention

Variable	Condition								
	In-person			Online			Control		
	Pre	Post	Δ	Pre	Post	Δ	Pre	Post	Δ
Parental monitoring	3.46 (.09)	3.55 (.10)	0.09	3.45 (.09)	3.63 (.09)	0.18	3.65 (.09)	3.56 (.10)	−0.09
Knowledge	38.59 (1.27)	46.09 (1.32)	7.50***	37.83 (1.22)	41.21 (1.26)	3.38**	35.00 (1.27)	36.91 (1.32)	1.91
Parental distress	2.10 (.12)	2.05 (.13)	−0.05	2.01 (.11)	1.87 (.12)	−0.14	2.10 (.12)	2.01 (.13)	−0.09
Parent − teen dysfunction	2.38 (.13)	2.14 (.13)	−0.24*	2.23 (.12)	2.06 (.12)	−0.17†	2.22 (.13)	2.21 (.13)	−0.01
Difficult teen	2.80 (.13)	2.34 (.14)	−0.46***	2.51 (.12)	2.29 (.13)	−0.22*	2.54 (.13)	2.45 (.14)	−0.09
Hostile relationship	1.49 (.14)	1.06 (.12)	−0.43***	1.29 (.13)	0.96 (.11)	−0.33**	1.32 (.14)	1.05 (.12)	−0.27**
Positive relationship	1.71 (.15)	1.97 (.16)	0.26*	1.92 (.14)	1.92 (.15)	0.00	1.77 (.15)	1.80 (.16)	0.03

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

and adolescent stress. The in-person, 10-week parent training program was associated with improvements in the overall parent–adolescent relationship. The online only condition was also associated with significant pre-post differences, compared to the wait-listed control group, demonstrating the efficacy of both treatment conditions of the *Adolescent ParentWays* intervention program. Increased parent knowledge about adolescent development, improved relationships with adolescents, and lower perceptions of their teens as being difficult were found for the in-person condition. Similar positive results were found for the online condition, although pre-post change coefficients were smaller in magnitude. Overall, both treatment conditions demonstrated significant pre-post change, compared to the wait listed control group, providing evidence for the effectiveness of the program.

The benefits of in-person group approaches to parent training have been underscored (CPSTF 2012). Our findings demonstrate the advantages that result from having multiple group sessions with other parents led by train group leaders. Parents reported lower levels of perceived stress during post-testing, indicating that the in-person parent training resulted in overall improvements in relationship dynamics and well-being for parents. Given adequate time and resources, in-person parent training experiences like *Adolescent ParentWays* may be a particularly effective method for boosting parent–adolescent relationship quality and enhancing the likelihood for adolescent social success.

Results from the *Adolescent ParentWays* intervention highlight the effectiveness of parent training in improving parenting behaviors, consistent with other work (Kacir and Gordon 1999). Despite the dearth of online, evidence-based programs, using this particular approach may be useful for reaching a broader segment of parents than what is typically found for in-person groups. Findings from the online condition show significant improvements in parent knowledge in overall parent–adolescent relationship quality, similar to the effect found for the in-person treatment condition and in contrast to the lack of differences found for the wait-listed control group. Although the magnitude of the pre-post change scores was smaller for the online relative to the in-person condition, the overall significant improvement found for participants in the online condition underscores the values of using technology based parent training programs. Quality online parent training programs can provide an effective and cost-efficient, alternative strategy for improving parent–adolescent relationships for families where attending multiple-week in-person groups is not feasible.

Additionally, the in-person and online conditions of the *Adolescent ParentWays* program were found to be effective in improving parent–adolescent relationships, demonstrating the effectiveness of both delivery methods for parent training programs. Having both in-person and online versions of the intervention program was a strength of this study and allowed for direct comparisons to be made for the different delivery methods, a strength of the present study. Given the increased intensity of participant involvement with program content found for the in-person condition, it is not surprising that this condition was associated with the most overall effects on participants. Demonstrating the effectiveness of the online version of the program, even if fewer overall effects were found relative to the in-person condition, is also an important strength of this study.

Some important limitations to this project should be noted. Although there were significant positive effects on the parent variables, no significant impacts were found for the adolescents who completed pre-post measures. Given

the relatively short time frame for the pre-post assessments, is it likely that parents were in the early stages of integrating their newfound knowledge and more positive perceptions into specific parenting practices with their adolescents. Perhaps another data collection time point after a longer period of time has elapsed would be helpful in capturing change in adolescent behaviors. Continued longitudinal assessment of program impact is needed.

As mentioned previously, participants in the online condition experience significant per-post change in targeted domains, although these differences were not as large as those for the in-person treatment. However, no information about online users engagement with the software was collected. Without such information, it is possible that differences between the online and in-person conditions may be attributable to differences in user engagement. Although convenient, online participants may be more easily distracted and less engaged in program content than in-person treatment participants. Assessment of patterns of use, progress monitoring, feedback on program details, and strategies for making the program more useful in home contexts should be undertaken in order to increase usability and effectiveness of the online program. Additional follow-up with online users will ensure that program features meet the needs of parents and address topics that are especially relevant.

Despite these limitations, the present study provides evidence for the positive impact of a high-quality parent training program on parent knowledge about adolescence, reduced perceptions of adolescent dysfunction, and overall improvements in quality of relationships with adolescents. Our findings support the impact of both in-person multiple-week traditional sessions as well as on-line only formats for delivery of the intervention program. These findings underscore the value that both in-person and online programs can offer in reaching parents struggling to effectively interact with adolescents with social and behavioral problems and sets the stage for additional research and program development on the use of online technologies for parent training. Online programs can provide a range of families with information and support for their parenting practices without the challenges that often plague traditional in-person interventions.

References

Abidin, R. R. (1995). *Parenting stress index, third edition: Professional manual*. Odessa, FL: Psychological Assessment Resources Inc.

Achenbach, T., & Edelbrock, C. (1980). Child behavior checklist: CBCL.-T. Achenbach, University of Vermont.

Bergman, L. R., & Magnusson, D. (1997). A person-oriented approach in research ondevelopmental psychopathology. *Development and Psychopathology, 9*, 291–319.

Boivin, M., & Hymel, S. (1997). Peer experiences and social self-perceptions: A sequential model. *Developmental Psychology, 33*, 135–145.

Bowers, J. R., Mitchell, E. T., Hardesty, J. L., & Hughes, R. (2011). A review of online divorce education programs. *Family Court Review, 49*, 776–787.

Brendgen, M., Vitaro, F., & Bukowski, W. M. (1998). Affiliation with delinquent friends: Contributions of parents, self-esteem, delinquent behavior, and rejection by peers. *Journal of Early Adolescence, 18*, 244–265.

Brown, B. (1990). Peer groups. In S. Feldman & G. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 171–196). Cambridge, MA: Harvard University Press.

Burke, K., Brennan, L., & Cann, W. (2012). Promoting protective factors for young adolescents: ABCD Parenting Young Adolescence Program randomized controlled trial. *Journal of Adolescence, 35*, 1315–1328.

Burke, K., Brennan, L., & Roney, S. (2010). A randomised controlled trial of the efficacy of the ABCD Parenting Young Adolescence Program: Rationale and methodology. *Child and Adolescent Psychiatry and Mental Health, 4*(22), 1–14.

Cain, D. S., & Combs-Orme, T. (2005). Family structure effects on parenting stress and practices in the African American family. *Journal of Sociology and Social Welfare, 32*, 19–40.

Carney, J. V. (2000). Bullied to death: Perceptions of peer abuse and suicidal behaviour during adolescence. *School Psychology International, 21*, 213–223.

Collins, W. A., Maccoby, E. E., Steinberg, L., Hetherington, E. M., & Bornstein, M. H. (2000). Contemporary research on parenting: The case for nature and nurture. *American Psychologist, 55*, 218–232.

Community Preventive Services Task Force. (2012). Improving adolescent health through interventions targeted to parents and other caregivers. *American Journal of Preventive Medicine, 42*, 327–328.

Cox, M. J., & Paley, B. (1997). Families as systems. *Annual Review of Psychology, 48*, 243–267.

Cox, M. J., & Paley, B. (2003). Understanding families as systems. *Current Directions in Psychological Science, 12*, 193–196.

Dekovic, M., & Meeus, W. (1997). Peer relations in adolescence—effects of parenting and adolescents self-concept. *Journal of Adolescence, 20*, 163–176.

DeRosier, M. E. (2002). *Group interventions and exercises for enhancing children's communication, cooperation, and confidence*. Sarasota, FL: Professional Resources Press.

DeRosier, M. E., & Gilliom, M. (2007). Effectiveness of a parent training program for improving children's social behavior. *Journal of Child and Family Studies, 16*, 660–670.

DeRosier, M. E., Kupersmidt, J. B., & Patterson, C. J. (1994). Children's academic and behavioral adjustment as a function of the chronicity and proximity of peer rejection. *Child Development, 65*(6), 1799–1813.

DeRosier, M. E., & Markus, S. R. (2005). Building friendships and combatting bullying: Effectiveness of S.S.GRIN at one year follow-up. *Journal of Clinical Child and Adolescent Psychology, 34*, 140–150.

File, T. (2013). Computer and internet use in the United States. Current Population Survey Reports, P20-568. U.S. Census Bureau,Washington, DC.

Galambos, N. L., Barker, E. T., & Almeida, D. M. (2003). Parents *do* matter: Trajectories of change in externalizing and internalizing problems in early adolescence. *Child Development, 74*, 578–594.

Hair, E. C., Moore, K. A., Garrett, S. B., Kinukawa, A., Lippman, L., & Michelson, E. (2006). The parent–adolescent relationship scale. In K. A. Moore & L. H. Lippman (Eds.), *What do children*

need to flourish?: Conceptualizing and measuring indicators of positive development (pp. 183–202). New York: Springer.

Hayes, L., Smart, D., Toumbourou, J. W., & Sanson, A. (2004). *Parenting influences on adolescent alcohol use* (pp. 1–104). Melbourne: Australian Institute of Family Studies.

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*, 1–22.

Kan, M. L., & McHale, S. M. (2007). Clusters and correlates of experiences with parents and peers in early adolescence. *Journal of Research on Adolescence, 17*, 565–586.

Mounts, N. S. (2011). Parental management of peer relationships and early adolescents' social skills. *Journal of Youth and Adolescence, 40*(4), 416–427.

Nowak, C., & Heinrichs, N. (2008). A comprehensive meta-analysis of Triple P—positive parenting program using hierarchical linear modeling: Effectiveness and moderating variables. *Clinical Child and Family Psychology Review, 11*, 114–144.

Pacifici, C., Delaney, R., White, L., Nelson, C., & Cummings, K. (2006). Web-based training for foster, adoptive, and kinship parents. *Children and Youth Services Review, 28*, 1329–1343.

Parke, R. D., Burks, V. M., Carson, J. L., Neville, B., & Boyum, L. A. (1994). Family-peer relationships: A tripartite model. In R. D. Parke & S. G. Kellam (Eds.), *Exploring family relationships with other social contexts* (pp. 115–145). Hillsdale, NJ: Lawrence Erlbaum Associates.

Reitz, E., Prinzie, P., Dekovic, M., & Buist, K. L. (2007). The role of peer contacts in the relationship between parental knowledge and adolescents' externalizing behaviors: A latent growth curve modeling approach. *Journal of Youth and Adolescence, 36*, 623–624.

Schramm, D. G., & McCaulley, G. (2012). Divorce education for parents: A comparison of online and in-person delivery methods. *Journal of Divorce and Remarriage, 53*, 602–617.

Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review, 17*, 125–146.

Spooner, C. (1999). Causes and correlates of adolescent drug abuse and implications for treatment. *Drug and Alcohol Review, 18*, 453–475.

Swanson, J., Valiente, C., Lemery-Chalfant, K., & O'Brien, T. C. (2011). Predicting early adolescents' academic achievement, social competence, and physical health from parenting, ego resilience, and engagement coping. *Journal of Early Adolescence, 31*, 548–576.

Taylor, L. C., Clayton, J. D., & Rowley, S. J. (2004). Academic socialization: Understanding parental influences on children's school-related development in the early years. *Review of General Psychology, 8*, 163–178.

Updegraff, K. A., McHale, S. M., Crouter, A. C., & Kupanoff, K. (2001). Parents' involvement in adolescents' peer relationships: A comparison of mothers' and fathers' roles. *Journal of Marriage and the Family, 63*, 655–668.

U.S. Department of Health and Human Services. (2013). Available at: https://www.healthypeople.gov/2020/topics-objectives/topic/Adolescent-Health.

Wade, S. L., Carey, J., & Wolfe, C. R. (2006). The efficacy of an online cognitive-behavioral family intervention in improving child behavior and social competence following pediatric brain injury. *Rehabilitation Psychology, 51*, 179–189.

Woodward, L. J., & Fergusson, D. M. (2000). Childhood peer relationship problems and later risks of educational underachievement and unemployment. *Journal of Child Psychology and Psychiatry, 41*, 191–201.