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REVIEW

# Family support programs and adolescent mental health: review of evidence

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Department of Psychology, University of New Orleans, New Orleans, LA, USA Abstract: Family support programs aim to improve parent wellbeing and parenting as well as adolescent mental and behavioral health by addressing the needs of parents of adolescents experiencing or at risk for mental health problems. Family support programs can be part of the treatment for adolescents diagnosed with mental or behavioral health problems, or family support programs can be delivered as prevention programs designed to prevent the onset or escalation of mental or behavioral health problems. This review discusses the rationale for family support programs and describes the range of services provided by family support programs. The primary focus of the review is on evaluating the effectiveness of family support programs as treatments or prevention efforts delivered by clinicians or peers. Two main themes emerged from the review. First, family support programs that included more forms of support evidenced higher levels of effectiveness than family support programs that provided fewer forms of support. Discussion of this theme focuses on individual differences in client needs and program adaptions that may facilitate meeting diverse needs. Second, family support prevention programs appear to be most effective when serving individuals more in need of mental and behavioral health services. Discussion of this theme focuses on the intensity versus breadth of the services provided in prevention programs. More rigorous evaluations of family support programs are needed, especially for peer-delivered family support treatments.

Keywords: intervention, parent, mental and behavioral health

### Introduction

Many prevention and treatment approaches that have demonstrated effectiveness in promoting adolescent mental and behavioral health are family-centered.<sup>1</sup> The effectiveness of family-centered programs suggests the importance of family factors in contributing to and protecting against adolescent behavioral and emotional problems. Family-centered inventions are often implemented as support programs, and family support programs will be the focus of this review. Family support programs aim to improve parent wellbeing, parenting, and adolescent mental and behavioral health by addressing the needs of parents of adolescents with mental health problems<sup>2</sup> or at risk for mental health problems.

In this review, we first discuss the rationale for providing family support programs in adolescent mental health. Next, we provide an overview of the common components of family support programs in adolescent mental health and then discuss the modes through which family support programs are delivered. Evidence of the effectiveness of family support treatment and prevention programs is reviewed for several different typologies based on components and delivery method. This review aims to

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complement the more detailed descriptions and reviews of specific programs that are available elsewhere.<sup>2,3</sup>

# Importance of and rationale for family support programs

Approximately 20% of adolescents aged 12–17 have mental health problems.<sup>4</sup> Adolescents with mental health problems are more likely than other adolescents to engage in risky behaviors and to experience other negative consequences.<sup>5</sup> Adolescent mental health problems also negatively affect adolescents' families.<sup>4,6–9</sup>

According to ecological theories,<sup>10</sup> individual development occurs within the context of multiple progressively larger socialization spheres. The central sphere of influence is the everyday environment the person encounters – particularly the family. Broader systems of social institutions – which can include health services and family support programs – can affect the development and mental and behavioral health of the individual and the family. Family support programs can provide parents with the resources and support to effectively interact with their adolescents and perform their parenting responsibilities.<sup>10</sup>

Although poor family function is not required for adolescents to experience mental health problems, and adolescent mental health problems do not inevitably lead to family dysfunction, poor family functioning is robustly linked to poor adolescent mental health. Adolescents' mental health problems place a burden on families and can be a source of family distress.<sup>4,6-9</sup> Higher levels of parental psychopathology, higher levels of parental stress, poor parenting practices, higher levels of parent-adolescent conflict, and lower levels of perceived family support are linked with higher levels of adolescent emotional, social, and behavioral problems.<sup>7,8,11–15</sup> The link between family functioning and adolescent mental health is likely bidirectional and transactional. In any given family, poor family functioning may initially be a contributor to or consequence of poor adolescent mental health. However, over time, the two are likely to become linked through numerous transactions such that worsening mental health problems undermine family functioning and worsening family functioning exacerbates adolescent mental health problems. Regardless of whether family distress is a contributor to or consequence of adolescent mental health problems, family support programs have the potential to improve adolescent mental health by reducing family distress.

In line with ecological theories, family support programs acknowledge the impact of the family on the development of adolescents with mental and behavioral health problems and recognize that families need support. The goals of family support programs are to reduce both the adolescents' mental health problems and the adverse consequences of adolescents' mental health problems experienced by families. As such, impacts on parents and adolescents both provide evidence of the effectiveness of family support programs.

# Characteristics of family support programs

Family support programs differ in program delivery method, in whether the program seeks to function as a prevention or treatment program, and in program characteristics. Family support programs may be delivered by either professionals, parent peers, or by a professional/peer team.<sup>2</sup> Clinician-led models are typically delivered by master's or doctoral-level clinicians and psychologists,<sup>2</sup> but they may also be delivered by school personnel such as teachers.<sup>3</sup> Peer-led programs are provided by parents or veteran parents to parents or caregivers.<sup>2</sup> Team-led models include a parent peer and a professional/clinician.

Prevention programs aim to reduce the likelihood of new cases of a disorder by altering underlying mechanisms implicated in the development and maintenance of the disorder. Prevention is distinct from – but complementary to – treatment in their common goal of reducing the burden of mental and behavioral health problems.<sup>16</sup> Treatment occurs when an individual who suffers from a disorder receives services in order to experience relief from the disorder.<sup>16</sup> Prevention services are offered to individuals who do not meet criteria for a disorder, but the goal is to reduce the likelihood of developing a disorder in the future. Given that treatment and prevention programs may differ in the populations they serve and in specific program goals and methods, evidence of the effectiveness of treatment and prevention programs will be reviewed separately.

Many family support programs share common components, which have been aggregated and organized into five major categories: instructional, informational, advocacy, emotional, and instrumental supports.<sup>2</sup> These components distinguish family support programs from other family-centered services.<sup>17</sup> Instructional support includes teaching parents skills to effectively manage their adolescent's behavior, engage in self-care practices including effective coping strategies, and effectively communicate with their family.<sup>2</sup> Instructional support is designed to develop parents' skills for effective family management and for attending to personal wellbeing. Informational support includes the provision of information about mental health problems, intervention options, and adolescent development.<sup>2</sup> The goal of informational support is to increase understanding of mental health problems to set the stage for treatment and better management of behavioral and mental health problems. Advocacy supportive services typically aim to empower parents by providing information about parental rights and resources and training parents in areas such as assertiveness, communication, goal setting, and record keeping, which can help parents advocate for their adolescent's services.<sup>2</sup> Emotional support typically is provided via the opportunity to discuss issues, share experiences and insight in a group format. Some clinician-led family support programs provide the opportunity to discuss issues one-on-one with a clinician.<sup>18</sup> Regardless of delivery format, the goal of emotional support is to enhance social connection and support, and to decrease feelings of isolation and helplessness. Instrumental support services incorporate broader supportive networks by linking families to concrete community-based resources such as childcare services, transportation services, and social services agencies.<sup>2</sup> Encouraging families to utilize the natural resources of their communities is beneficial for maintenance of positive gains made while receiving family support services.

#### **Review criteria**

This review updates and synthesizes prior reviews,<sup>2,3</sup> but concentrates on family support prevention and intervention programs delivered or evaluated with a focus on adolescence. Family support program evaluations with published outcome data relevant to mental and behavioral health and functioning were identified from previous reviews and by a literature search of studies published from 2009 to 2014 that cited previous reviews. We identified one new family support intervention<sup>19</sup> and updated the findings for several programs with studies published since the earlier reviews.<sup>20–23</sup>

# Effectiveness of family support treatment programs

Many family support programs combine one or more of the five components, but the particular combination of components varies as a function of how the support program is delivered. Most family support treatment programs are clinician-led. For this review, clinician-led programs were divided into three groups that differ in program components. Among clinician-led programs, the combination of instructional and informational support is most common with a second group of programs adding advocacy to instructional and informational support. The final group of clinician-led programs combines emotional support with either instructional or informational support. Clinician-led interventions that did not include one of the most commonly identified groupings of program components (eg, clinician-led programs with only one form of support, or with all forms of support) were excluded from this review. There were too few peer-led or team-led programs to further divide those delivery categories based on components. The sections that follow summarize the evidence of effectiveness of family support treatments for clinician-led, peer-led, and team-led delivery methods.

### Clinician-led with combined instructional and informational support

The clinician-led family support programs included in this review are described in Table 1. The majority of clinician-led programs combined instructional and informational support. Caregiver outcomes included improvements in<sup>24,25</sup> as well as null<sup>26</sup> and non-superior effects on<sup>25</sup> mental health and stress. Beneficial findings included improved parental self-esteem, more positive cognitions regarding the child,<sup>24</sup> and increased participation in<sup>27</sup> and satisfaction with the treatments.<sup>24,28</sup>

Regarding child outcomes, family support programs that combined instructional and informational components yielded benefits such as reductions in various symptoms of anxiety disorders at post-treatment and follow-ups.<sup>26,28</sup> Two studies showed non-superior (ie, equivalent) effects on behavioral problems relative to non-family support comparison<sup>29</sup> and control<sup>25</sup> conditions. One study found that family support alone is as effective as combined family support and medication and medication alone conditions for ameliorating child internalizing problems.<sup>30</sup> Additionally, family support programs with instructional and informational components were associated with superior effects on reducing child anxiety disorder diagnoses among children of parents with anxiety disorders.<sup>29,31</sup>

In sum, clinician-led programs that combined instructional and informational support yielded mixed results. Outcomes included some benefits on caregiver mental health and child internalizing problems, as well as some null and non-superior effects relative to comparison and control conditions. Evidence suggested that children at higher risk for anxiety – due to having parents with anxiety disorders – may especially benefit from family support programs with instructional/informational components.<sup>29,31</sup>

# Clinician-led with combined instructional, informational, and advocacy support

Clinician-led programs that combined instructional, informational, and advocacy support were the second most

Program, source	Sample demographics	Design	Relevant findings
Informational and instructional support Individual or group cognitive behavioral family therapy (CBFT) <sup>26</sup>	n=77. Youth were primarily female; average age 12 years	RCT. Pre-/post-treatment, 3- and 6-month follow-ups	No significant effects on caregiver depression and stress. Reduced child obsessive-compulsive disorder symptoms
Child behavior therapy + parent anxiety management <sup>31</sup>	n=67. Youth were primarily male; average age 9 (range 7–14)	RCT. Pre-/post-treatment, 12-month follow-up	and severity Parent anxiety management component enhanced short- term efficacy of child behavior therapy for reducing
Maternal Stress Coping Group <sup>24</sup>	n=62. Youth were primarily white, male; average age 10 (range 5–13)	RCT. Pre-/post-treatment, 5-month follow-up	anxiery diagnoses among yourn with an anxious parent Improvements in parent depressive symptoms, self- esteem, and reduced negative cognitions about the child. Trommore residencian
FCBT <sup>29</sup>	n=161. Youth were primarily white, male; average age 10 (range 7–14)	RCT. Pre-/post-treatment, I-year follow-up	reatment adustation Reductions in child anxiety disorder diagnoses, similar to non-parent- support individual CBT. FCBT yielded superior effects among children of two parents with anxiety disorders
A community-based aggression management program <sup>25</sup>	n=123. Youth were primarily male; average age 9 (range 7–11)	RCT. Pre-/post-treatment	Although not superior to control, decreased child behavioral problems and parental stress
Evidence-based engagement strategies <sup>27</sup>	n=109 parents. Youth were primarily black, female; average age 10 (range 1–15)	RCT. File reviews	Greater participation in intake and subsequent services
Time for a Future <sup>30</sup>	n=73. Youth were primarily female; average age 15	RCT. Pre-/post-treatment, 6-month follow-up	Family support alone yielded statistically significant improvements in depression, anxiety, and suicidal ideation, similar to sertraline medication and combined family support + sertraline
FRIENDS (a family-based group n=71. Yout cognitive behavioral treatment) <sup>28</sup> average age age has a versic has a versic <b>Informational. instructional and advocacy support</b>	n=71. Youth were primarily female, Australian; average age 7 (range 6.5–10 years). FRIENDS has a version for adolescents, ages 12–16 <b>v subbort</b>	RCT. Pre-/post-treatment, I 2-month follow-up	More children in FRIENDS were diagnosis-free compared to children in control conditions. High parent and child treatment satisfaction
Trauma-focused cognitive behavioral therapy <sup>32</sup>	n=229. Youth were primarily white, female; average age 11 (range 8–14)	RCT. Pre-/post-treatment, 6- and 12-months follow-up	Improvements in parent depression, distress, and parenting skills. Reduced child symptoms of posttraumatic stress disorder, depression, behavioral problems, and problematic cognitions
Individual and multi-family psychoeducation <sup>34</sup>	n=9–35.Youth ages 8–I I	<ol> <li>Pre-/post-treatment evaluations,</li> <li>pre-/post-treatment evaluations, and 3) RCT. Pre-/post-treatment,</li> <li>6-month follow-up</li> </ol>	<ol> <li>Increased knowledge about mood disorders, decreased expressed emotion;</li> <li>increased positive behaviors and decreased negative behaviors, high satisfaction;</li> <li>increased parental knowledge about mood disorders, increased child-reported parental social support, increased efficacy in obtaining mental health services</li> </ol>
The Parent Education and Skills Training Group <sup>35</sup>	n=107 parents. Youth were primarily male; average age 14 (range 12–17)	Pre-/post-treatment evaluations	Improvement in child behavior, parenting skills, reduced parent-child conflict, high parent satisfaction

Table I Clinician-led interventions

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Child and family focused cognitive n=34. Youth were primarily whi behavioral therapy, aka The Rainbow middle-class socioeconomic stat Program <sup>36</sup> age 11 (range 5–12) Emotional and informational or emotional and instructional support	n=34. Youth were primarily white, male, of middle-class socioeconomic status; average age 11 (range 5–12) ional and instructional support	Exploratory pre-/post-treatment feasibility study	Reductions in pediatric bipolar disorder symptoms and severity: high parental satisfaction with treatment
51 EPP (Strategies to Enhance Positive Parenting) Program <sup>37</sup>	n=120. Youth were primarily white, male; average age 7 (range 5–12 years)	RC I . Pre-/post-treatment, 3-month follow-up	Initial improvements in parent mental health and stress, child oppositional defiant disorder symptoms, increased involvement in treatment
Family group psychoeducation <sup>40</sup>	n=25. Youth were average age 14	RCT. Pre-/post-treatment	Weight gain associated with both the family support treatment (family group psychoeducation), and family therapy. No change in psychological functioning
Family-based education, support, and attention <sup>29</sup>	Same sample and design as noted for FCBT (listed in this table under Informational and Instructional Support)	See FCBT	Family-based education, support, and attention was less effective than FCBT in terms of reducing child anxiety disorder diagnoses
Psychoeducation and support group intervention for bereavement <sup>38</sup>	n=52 families (75 children). Youth were primarily white, female; average age 10. This intervention targets youth, ages 6–15 years	RCT. Pre-/post-treatment	Reduced anxiety and depressive symptoms. No change in children's posttraumatic stress or social adjustment. No change in parent depression
Educational and support group for parents with schizophrenic adolescents <sup>39</sup>	n=32 parents. Youth were primarily male; average age 19	Pre-/post-treatment evaluations. Qualitative analysis	No increases in knowledge about schizophrenia; increased ability to manage the adolescent
Abbreviations: CBFT, cognitive behavioral famil	Abbreviations: CBFT, cognitive behavioral family therapy; FCBT, family cognitive behavioral therapy; RCT, randomized controlled trial; CBT, cognitive behavioral therapy.	domized controlled trial; CBT, cognitive behavioral th	ierapy.

Family support programs

common type of clinician-led program. Among clinician-led programs that combined instructional, informational, and advocacy support, beneficial caregiver outcomes included reductions in distress,<sup>32,33</sup> and aversive behavior<sup>34</sup> as well as improvements in parenting skills,<sup>32,33,35</sup> parenting confidence,<sup>35</sup> and increased knowledge regarding the child's disorder.<sup>34</sup> Additionally, some studies reported high levels of caregiver satisfaction with the treatment.<sup>34–36</sup> Positive child outcomes included significant decreases in mental and behavioral health problems, 32,33,35,36 reduced problematic cognitions,<sup>32,33</sup> and increased parental social support.<sup>34</sup> One study also reported high levels of child satisfaction with the treatment.34 Clinician-led programs that combined instructional, informational, and advocacy support yielded favorable results and were linked to improvements in caregiver's mental health, parenting knowledge and skills, as well as benefits for children's mental and behavioral health.

### Clinician-led with a combination of either emotional and instructional or emotional and informational support

A minority of clinician-led programs included emotional support combined with either instructional or informational support. These programs were associated with null effects<sup>37</sup> and initial improvements - that were not maintained at 3-month follow-up<sup>37</sup> – on parental mental health. Although parents did not experience increased knowledge about the child's disorder,<sup>39</sup> they exhibited increased involvement in treatment.<sup>38</sup> Child outcomes were also mixed and included initial but nonmaintained improvements in behavioral problems,<sup>37</sup> as well as reductions<sup>38</sup> and null effects on mental health and social adjustment.<sup>38,40</sup> Additionally, family support programs that combined emotional support with either informational or instructional support evidenced non-superior effects versus comparison non-family-support interventions in one study,<sup>40</sup> and weaker effects than a family support intervention that combined informational and instructional support.<sup>29</sup> Evidence for clinician-led programs that emphasized emotional support combined with either instructional or informational support is mixed, with positive and null effects, as well as equivalency but non-superiority or weaker effects relative to a comparison nonfamily support intervention and a family support intervention with different combinations of support components.

### Peer-led

Peer-led programs were the second most common family support service delivery model after clinician-led programs.<sup>2</sup> The peer-led family support programs included in this review

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are described in Table 2. Caregiver outcomes included improved mental health<sup>23</sup> and increased self-care,<sup>22</sup> but one study found no differences in parental strain.<sup>41</sup> One study reported enhanced knowledge regarding mental health and treatment,<sup>23</sup> but another study reported no effect of the program on knowledge of community resources or court knowledge.19 Two studies reported increased caregiver empowerment,<sup>22,42</sup> and one study reported no differences in caregiver empowerment.<sup>41</sup> One program was more effective among highly strained parents.<sup>20,21</sup> Other caregiver outcomes included improvements in select aspects of communication<sup>22</sup> and treatment satisfaction.<sup>19,23</sup> Peer-led programs yielded little to no evidence of effectiveness for youth's behavioral, emotional, and academic functioning.<sup>20,21,41,42</sup> While veteran parents may serve as an important source of support for parents,<sup>2</sup> there was inconsistent evidence of benefits from these programs for caregiver mental health and empowerment, and the effects on child functioning were largely null.

#### Team-led

Team-led programs were a relatively rare model of service delivery. Team-led family support programs included in

this review are described in Table 3. Beneficial caregiver outcomes included increases in caregiver knowledge about mental health services and increased self-efficacy regarding the ability to acquire mental health treatment for the child.43 However, several studies reported no effect or non-superior effects of the team-led family support treatments relative to comparison treatments for parental outcomes such as caregiver involvement in the child's mental health services, parent problem-solving skills, coping skills, or perceived social support. In terms of child outcomes, one study showed reductions in child disruptive behavior, while another study showed nonsuperior effects of the team-led family support intervention relative to comparison treatment on child behavior. In sum, although team-led treatment studies showed some positive effects on caregiver outcomes, child outcomes were more mixed, and there was minimal evidence demonstrating the superiority of team-led family support programs over comparison treatments.

### Treatment effectiveness summary

Overall, treatment effectiveness varied by service delivery model. Clinician-led and team-led models often were

#### Table 2 Peer-led programs

Program, source	Sample demographics	Design	Relevant findings
Parent Empowerment Program <sup>41</sup>	n=124 low-income minority parents	RCT	No differences in parents' service self- efficacy, empowerment, or strain. No impact on child emotional or behavioral functioning
EPSDT Family Associate Program <sup>42</sup>	n=239 families. Youth were primarily white, male; ages 4–7 years; from households with annual incomes of less than \$10,000. This program targets parents of youth, ages 4–18 years	Quasi-experimental. Pre-/ post-treatment	Increased caregiver empowerment concerning family issues and the children's services. No changes in child behavior problems
Parent Connectors <sup>20,21</sup>	n=115 and 128. Youth were primarily male, black, of low socioeconomic status; average age ~14 years	<ol> <li>Proof of concept study using random assignment,</li> <li>RCT. Pre-/post-treatment</li> </ol>	Intervention more effective among highly strained parents. Little to no evidence of effectiveness for youth; improved youth school functioning but not academic functioning
NAMI Basics Program <sup>22</sup>	n=82. Youth were primarily male; average age 10; parents were primarily white. NAMI Basics targets children and adolescents	Pre-/post-treatment evaluations	Improvements in parent empowerment and self-care. Reductions in inflammatory/incendiary communication but no improvement in positive/affirming communication
Juvenile Justice 101 (JJ 101) <sup>19</sup>	n=111. Sample was primarily female, and white-non-Hispanic. JJ 101 targets juveniles	Post-treatment evaluation	Most participants endorsed satisfaction but denied increased knowledge of community resources. No significant effect on court knowledge
Screening, Education, and Empowerment <sup>23</sup>	n=24, but eight mothers (others were peer advocates and supervisors). Youth were primarily Hispanic, male; average age ~9 years	Feasibility study with post- treatment evaluation	Parents were primarily satisfied with the intervention and perceived it as relevant. Perceived benefits included enhanced knowledge about depression and treatment, and improvement in mental health

Abbreviations: RCT, randomized controlled trial; EPSDT, Early and Periodic Screening, Diagnosis and Treatment Program; NAMI, National Alliance on Mental Illness.

Program, source	Sample demographics	Design	Relevant findings
Vanderbilt Caregiver Empowerment <sup>43</sup>	n=250 parents. Youth were primarily male; ages 6–17 years, and parents were primarily white	3- and 12-month follow-ups	Increased parental knowledge and mental health services self-efficacy; no effect on involvement in treatment. No effect on child mental health
Multiple Family Group <sup>44</sup>	n=88.Youth were primarily black, male; average age 9 years.The Multiple Family Group program targets youth, ages 7–11 years	Pre-/post-treatment evaluations	Reduced child disruptive behavior
Support, Empowerment and Education Group Intervention <sup>45</sup>	n=94 parents. Average age of youth at intake was ~11 years	RCT. Baseline (intake), 9 months, 18 months (treatment duration was a minimum of 6 months, and average time for comparison condition was 12 months)	No differences between the family support intervention and treatment as usual for parent or child outcomes

#### Table 3 Team-led programs

Abbreviation: RCT, randomized controlled trial.

evaluated using experimental designs and, most importantly, randomized controlled trials.<sup>2</sup> In contrast, peer-led programs were less rigorously studied, and the research evidence regarding their effectiveness was weak. Clinician-led programs yielded positive benefits on caregiver mental health, parenting knowledge, and parenting strategies, as well as improvements in child mental and behavioral health. However, there were also some null effects and lack of evidence of superiority of clinician-led programs relative to comparison/control conditions. Team-led treatments were associated with some benefits including increased empowerment and reductions in child disruptive behavior, but as with clinician-led programs there was minimal evidence demonstrating enhanced outcomes of team-led family support programs compared with comparison/control conditions. Peer-led treatment outcomes were mixed regarding effects on caregiver empowerment, and there were largely no effects on child functioning.

### Effectiveness of family support prevention programs

Methods of prevention can be classified along four levels – universal, selective, indicated, or multilevel.<sup>3</sup> Universal prevention programs – sometimes referred to as primary preventions – aim to reduce the incidence of new cases of disorder by preventing the onset of disorder. Selective prevention programs – sometimes termed secondary preventions – attempt to reduce the prevalence of disorders via early identification and aggressive treatment of subclinical problems. Indicated preventions intervene with individuals displaying symptoms of, but not meeting full diagnostic criteria for, mental and behavioral health disorders, and these prevention programs focus on minimizing further negative consequences. Prevention programs containing more than one prevention level are classified as multilevel preventions.<sup>3</sup> When multilevel preventions are employed, universal interventions may serve as a screening mechanism, and individuals may be identified for more intensive prevention based on increased risk. Program components were quite similar across preventions – with nearly all prevention programs including instructional and informational elements – therefore, prevention programs are organized by levels of prevention (universal, selective, indicated, or multilevel) rather than by program components.

# Universal family support prevention programs

Universal prevention programs often attempt to promote mental and behavioral health through education. Universal preventions are the second most common type of family support prevention program.<sup>3</sup> The universal family support prevention programs included in this review are described in Table 4. Positive child outcomes include decreases in withdrawal, hyperactivity, sexual behavior problems, and oppositional and delinquent behaviors<sup>46–52</sup> – however, there were some exceptions wherein programs did not have significant effects on problem behaviors.53,54 Youth in universal prevention programs experienced longer delays in the onset of involvement with antisocial peers, substance use, and arrests.<sup>51</sup> While it is preferable to prevent rather than delay the incidence or onset, delaying onset is also important because it reduces the adverse impact of risky behaviors such as substance use by reducing the duration of them. Improvements in prosocial behavior such as increases in social competence were noted in some<sup>47,50</sup> but not other<sup>55</sup> studies. Reductions in mental health problems such as anxiety and depression were also experienced among youth who participated in universal preventions.26,56-59

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#### Table 4 Universal prevention programs

Program, source	Sample demographics	Design	Relevant findings
Center for Improvement of Child Caring Effective Black Parenting Program (EBPP) <sup>46</sup>	n=109 black families. EBPP has been used with youth up to age 18 years, but this study included youth in first and second grades	Quasi-experimental. Pre-/post- treatment, I-year follow-up	Reduced child hyperactivity and delinquency, reduced poor parenting strategies and increased parental use of praise
FRIENDS <sup>56,93</sup>	n=594 and 692. Youth were primarily female; ages 9–16	RCT. Pre-/post-treatment, I2-month follow-up	Reduced anxiety, reduced depressive symptoms only for FRIENDS participants with high levels of anxiety at pre- treatment. Initially, younger participants experienced stronger effects
Home-based Intervention <sup>57,58</sup>	n=80 families. Youth were primarily female; assessed at ages 14–15, 20–21	Systematic sampling, assignment to intervention or control group; 15-year and 20-year post- treatment follow-ups	Reduced adolescent overall symptoms, particularly internalizing rather than externalizing symptoms. Intervention was more effective among youth from high-risk relative to low-risk families
Linking the Interests of Families and Teachers (LIFT) <sup>50,51,66</sup>	n=671 and 351. Youth were in grades five through 12, primarily white	RCTs. Pre-/post-treatment, I- and 3-year follow-ups; assessments in grades 5–12	Reduced behavioral problems and increased prosocial behavior. LIFT was more effective for reducing maternal aversive behavior among mothers who demonstrated higher (versus lower) levels of aversive behavior at pre-treatment
Resourceful Adolescent Program-Family (RAP-F) <sup>59</sup>	n=260. Youth were primarily Anglo-Saxon, female, from low to middle socioeconomic status families; ages 12–15 years (average age 13)	Pre-/post-treatment, 10-month follow-up	The family support program (RAP-F) was not superior to the non-family-support condition, and both treatment groups evidenced fewer symptoms of depression and hopelessness at post-treatment and follow-up relative to controls

Abbreviation: RCT, randomized controlled trial.

Positive parent outcomes included reductions in poor parenting behaviors - such as parental rejection of the child, authoritarian parenting strategies, and physical punishment - as well as increased use of positive parent management strategies such as greater use of praise and effective discipline.46,47,49-52,55 However, one study found no impact of the prevention program on parental monitoring or consistent discipline.49 Parent-child dyadic interactions became more positive in response to universal preventions, and these changes were maintained at follow-ups.47,48 Parents in universal preventions also experienced increased knowledge regarding parenting of children at specific developmental stages.<sup>48</sup> Reductions in parental mental health problems – including depression and distress<sup>47,48</sup> – and improvements in positive feelings - such as increased self-esteem and self-efficacy55 were also reported outcomes of universal programs - with some exceptions.54 Increased satisfaction with social support and parent satisfaction with the programs also were reported.47,48,55

Overall, evidence for the effectiveness of universal preventions is mixed – there were several positive findings, but also some null effects, as well as evidence that the universal prevention programs did not yield more beneficial effects compared with control conditions.<sup>53,54</sup> Some evidence indicated that universal preventions may only be effective<sup>26,56</sup> or may be especially effective<sup>50,51,58</sup> for reducing mental and behavioral health problems among children displaying the highest levels of mental health issues. This interaction effect suggests that targeting interventions for youth who are at risk for mental and behavioral health problems may be a more efficient and productive strategy.<sup>60</sup> More targeted preventative programs – selective preventions – will be reviewed next.

### Selective family support prevention programs

Selective preventions focus on early identification of individuals at high risk for developing a disorder due to experiencing environmental or psychosocial risk factors for the disorder. The majority of family support prevention programs are selective.<sup>3</sup> The selective family support prevention programs included in this review are described in Table 5. Outcomes for divorcing parents included improved communication,<sup>61</sup> reductions in conflict,<sup>62,63</sup> and reductions in interjecting the child in the parent's conflict,<sup>61</sup> but also increases in<sup>64</sup> and null effects on conflict.<sup>61</sup> Additionally, female – but not male – ex-spouses perceived improved ability to

Table 5 Selective prevention programs	grams		
Program, source	Sample demographics	Design	Relevant findings
Child Anxiety Prevention Study (Coping and Promoting Strength; CAPS) <sup>94</sup>	n=40 families. Youth were primarily white, male; ages 7–12 (average age 9)	RCT. Pre-/post-treatment, I 2-month follow-up	Reduced the 1-year incidence of new cases of anxiety disorders and reduced anxiety symptomatology in the children of parents with anxiety disorders, compared with control eroup
ClM) <sup>61,62,64</sup> (ClM) <sup>61,62,64</sup>	n=76, 345, and 815 parents. CIM targets youth, ages 3–15, but ages of children sampled not reported. Parents were primarily white and of moderate socioeconomic status	Pre-/post-treatment evaluations, 3- to 9-month follow-ups	Improved parental communication, but effects on parental Improved parental communication, but effects on parental conflict were inconsistent – including both reductions and increases in parental conflict. Reduced child exposure to and interjecting into parental conflict. No effects on child behavior in one study, but improvements in child behavior in control with control conflict.
Children of Divorce Intervention Program (CODIP) <sup>71</sup>	n=70 parents. Youth were primarily male; average age ∼10 (range 8–15). Parents primarily white	RCT. Pre-/post-treatment evaluations	In another soury. Figh parent satisfaction Reduced child aggression, but no effect on depression, anxiety, or conduct problems. Improved parent use of discipline for mothers who had less consistent (as opposed to more consistent) discipline at pre-treatment
Dads for Life (DFL) <sup>63</sup>	n≓214 fathers. Youth were primarily female; average age was approximately 11 years	Random assignment to intervention and control groups. Pre-/post- treatment, 4-months and 1-year follow-ups	Reduced conflict between divorcing parents. No change in father's perceptions of the mother's and father's ability to effectively cooperate as co-parents, but mothers whose ex-spouses were in DFL perceived improved co-parenting
Family Bereavement Program (FBP) <sup>65,95</sup>	n=156 families. Youth were primarily white, male; average age ∼11 (range: 8−16 years)	RCT. Pre-/post-treatment, II-month and 6-year follow-ups	Initially, some improvements in youth coping skills, but at follow-up, only girls and youth with greater difficulties at pre-treatment evidenced reductions in internalizing and externalizing behaviors. Parents evidenced improvements in parenting and initial improvements in mental health
Keeping Families Strong (KFS) <sup>%</sup>	n=10 families. KFS targets youth, ages 9–16, but ages of youth sampled not reported. Youth were primarily male; parents primarily white	Pilot study. Pre-/post-treatment evaluations	Improved child coping and mental and behavioral health and functioning. Improved parental mental health and perceptions of familial support and closeness. Increased mental warmth and acceptance, improved family functioning, and decreased stressful family events
Metropolitan Area Child Study Research Group (MACS) <sup>75</sup>	n=1,500. Youth were primarily black and male	Random assignment. Pre-/post- treatment evaluations	The family support level of the intervention – which was the most comprehensive intervention condition – decreased aggression only when delivered early (ie, grades 2–3 versus 5–6) and in communities with more resources and less strain as opposed to communities with fewer resources and more strain. No levels of the intervention were effective in preventing aggression among older elementary school children
New Beginnings Program (NBP) <sup>73,97</sup>	n=218 and 240 families. Approximately 50% of youth were female. Youth were primarily white; average age ~17–26 years	RCT. Pre-/post-treatment, 6- and I5-year follow-ups	it + adolescent NBP youth mental health pared with the contr ar initial externalizin, atments
			(continued)

Program, source	Sample demographics	Design	Relevant findings
Parent Management Training –	n=102 and 238 families. Youth were	RCT. Pre-/post-treatment, 9-month,	In one study, prevented parental depression from adversely
Oregon (PMTO) <sup>69,98</sup>	primarily male; ages ranged from	30-month and 9-year follow-ups	affecting parenting skills, and in another study, reduced
	5–21 years		depression among mothers who improved parenting skills.
			Reduced child behavior problems. Improved parenting
			practices, and reduced involvement with antisocial peers
			mediated the reduced rates of adolescent delinquency
Preventive Intervention Project	n=7, 93, and 105 families Youth	Random assignments and RCT. Pre-/	Improved positive parental behaviors with and attitudes
(Clinician Based Cognitive	average ages were 11–12	post-treatment, I- and 2-year follow-	regarding children. Increase in treatment gains with
Psychoeducational Intervention for		ups and every 9–12 months post-	increased time since intervention. Mixed effects regarding
Families) <sup>70,72,99</sup>		treatment; up to 4.5 years post-	whether the intervention is more effective than control
		enrollment	condition for enhancing children's understanding of
			parental disorders. Not superior to lecture comparison
			condition for reducing child internalizing problems.
			Moderate to high parent satisfaction

**Dove**press

effectively cooperate as co-parents.<sup>63</sup> Other studies yielded improvements in parenting,<sup>65,66</sup> improvements in mental health (although in one study, improved mental health was not maintained at follow-up),65-68 prevention of mental health problems interfering with parenting,69 increased perceived familial support and closeness and better family functioning,67 with an exception.70 In one study, an interaction effect was found such that parental discipline improved for mothers who demonstrated more inconsistent (as opposed to less inconsistent, or more consistent) discipline at pretreatment<sup>71</sup> - adding to the accumulation of findings that program effects are stronger among high-risk participants. Another study reported improved parental behaviors with, and attitudes regarding children, and these gains increased with time since the intervention.70 Parent satisfaction with treatments was also reported.62,72

Child outcomes were more mixed – including reductions in<sup>62,68,71</sup> and no effects on<sup>64,71</sup> child behavior problems, no effects on child internalizing problems,<sup>68,71</sup> but improved child coping and mental and behavioral health and functioning.<sup>67,73,74</sup> In several studies, reductions in internalizing and externalizing problems were only experienced among youth at higher risk for, or experiencing the greatest difficulties with, these problems pre-treatment.<sup>65,71,75</sup>

Similar to the evidence for universal preventions, the evidence for the effectiveness of selective preventions is also mixed. Selective preventions yielded more beneficial effects for parents than children, although effects on conflict between divorcing parents was mixed. For children, both improvements in and null effects on internalizing and externalizing problems were found. In keeping with the theme of findings from other programs in this review, selective prevention effects were sometimes only found among families with the worst pre-treatment level of functioning – again, suggesting the increased efficacy of interventions for individuals at highest risk.

# Indicated family support prevention programs

Indicated preventions target youth displaying minimal but noticeable symptoms of mental or behavioral health disorders suggesting the possibility of developing a clinical disorder in the future, although diagnostic criteria is not met at the time prevention is enacted.<sup>16</sup> The indicated family support prevention programs included in this review are described in Table 6. Child outcomes from the indicated preventions were generally positive, although outcomes from some programs were inconsistent. Beneficial child effects included significant

Abbreviation: RCT, randomized controlled trial.

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Table 5 (Continued)

#### Table 6 Indicated preventions programs

Program, source	Sample demographics	Design	Relevant findings
Cognitive Behavioral Interventions for Trauma in Schools (CBITS) <sup>79-81</sup>	n=48, 126, and 198. Youth average age ~11 years	Pre-/post-treatment, 3-month follow-up	Reduced PTSD symptoms, depression, and psychosocial dysfunction compared with wait-list control. Greater decrease in PTSD and depression symptoms among intervention group youth with clinically significant levels of PTSD or depression at pre-treatment. No difference between treatment and control groups in acting out behavior, shyness, or learning difficulties
Coping Power Program (CPP) <sup>82–84</sup>	n=183–245. Youth were primarily black or white, male, fourth and fifth graders	Pre-/mid-/post-treatment, I- and 3-year follow-ups	Improved youth behavior and parenting, especially for more comprehensive CPP interventions
Early Risers "Skills for Success" <sup>85</sup>	n=125. Early Risers targets youth, ages 6–12 years, but this study included fourth-graders with average age ~6 years. Youth were primarily male	RCT. 4-year follow-up	Higher levels of prosocial functioning compared with controls
Penn Resiliency Program (PRP) <sup>76–78</sup>	n=293–693. Youth were ages 11–13 years, primarily male, white or Australian	RCTs. 18-month to 3-year follow-ups	Mixed effects, and weak support. Often no effect on depression, anxiety, or social skills. In one study, improvements in explanatory style (associated with depression) at 2-year follow-up. More effective for preventing internalizing and adjustment disorders among girls and individuals with elevated initial symptoms
Queensland Early Intervention and Prevention Anxiety Project (QEIPAP) <sup>86,87</sup>	n=128. Youth were ages 7–14; primarily white	RCT. 6-, 12-, and 24-month follow-ups	Inconsistent effects on reducing incidence and prevalence of anxiety disorders over time – eg, QEIPAP not superior to control post-treatment, but treatment gains emerged at 6-month and 2-year follow-ups

Abbreviations: PTSD, posttraumatic stress disorder; RCT, randomized controlled trial.

improvements in youth mental and behavioral health and social functioning,<sup>76–85</sup> with some exceptions of no effects on mental health or behavioral or social functioning.<sup>76,78,86,87</sup> Two studies noted greater benefits of the indicated preventions among youth at higher risk for, or experiencing more, mental health problems at pre-treatment<sup>78,81</sup> – consistent with the pattern of findings suggesting that treatments targeting high-risk groups may be more efficient.

Parent outcomes were less studied among indicated programs compared with universal and selective preventions.<sup>3</sup> Among those indicated intervention studies that assessed parenting outcomes, results were positive – and suggested improvements in positive parenting and use of effective discipline strategies.<sup>82</sup>

The evidence for indicated family support preventions was generally favorable. Child outcomes included reductions in both internalizing and externalizing problems, as well as

improvements in the cognitive mechanisms contributing to depression - in line with the principle of prevention to target factors implicated in the development and maintenance of disorders. Two of the three instructional-support-only indicated programs yielded inconsistent findings, while results of the third instructional-support-only indicated program were consistently positive. Given that the majority of instructionalsupport-only indicated programs produced inconsistent results relative to programs that combined multiple forms of support, it is possible that providing only one form of support - which may not be helpful to all clients - is not as effective as providing multiple forms of support that are more likely to impact many. Across all of the indicated programs, parent outcomes were not well studied, and the only parent outcomes studied were parenting strategies - parental wellbeing and mental health were not evaluated. Despite the lack of attention to parenting outcomes among indicated programs,

parental outcomes that were addressed showed beneficial effects of the indicated programs.

# Multilevel family support prevention programs

Multilevel family support prevention programs integrate assessment and prevention to maximize beneficial outcomes. With multilevel family support preventions, the intensity and nature of the prevention strategies provided may be adjusted depending on an individual's responsiveness. Multilevel family support preventions are as common as indicated preventions and - like indicated preventions - were relatively rare compared with universal and selective programs.<sup>3</sup> The multilevel family support prevention programs included in this review are described in Table 7. Beneficial child outcomes associated with multilevel family support preventions included reductions in externalizing behavior<sup>88,89</sup> and internalizing problems,<sup>90</sup> as well as improved prosocial behavior.88 Participation in more intensive prevention levels accounted for two programs' beneficial effects, 90,91 and one study reported an interaction effect wherein intervention participants at highest initial risk evidenced reductions in diagnoses and behavioral symptoms.92

Similar to indicated preventions, parent outcomes were not a primary focus of studies testing multilevel family support preventions. However, parenting outcomes reported were positive, and included improvements in mental health and parenting skills.<sup>88</sup> Additionally, an interaction effect was found wherein parents in a more intensive prevention level experienced reductions in the use of over-reactive parenting strategies<sup>91</sup> – again suggesting that greater intensity of intervention may be helpful.

Multilevel prevention programs appeared to be highly effective. Positive child outcomes primarily included reductions in externalizing behavior and involvement with antisocial peers. The reduction in involvement with antisocial peers is in line with the aim of prevention programs to alter causal mechanisms contributing to disorder. Although parent outcomes received less attention, positive caregiver outcomes included both mental health improvements as well as improvements in parenting behavior and skills.

#### Prevention effectiveness summary

Overall, prevention programs appear to be effective – although effectiveness varies both across levels of prevention, and within levels across specific prevention programs. Multilevel programs and indicated preventions yielded

Program, source	Sample demographics	Design	Relevant findings
Adolescent Transition Program (ATP) <sup>90</sup>	n=106. Youth were primarily black and female; assessed in 6th–9th grades	RCT. Three-yearly assessments	ATP prevented escalations in depressive symptoms. Intervention effect was driven by participation in the selected and indicated levels of ATP
Fast Track <sup>92</sup>	n=891. Youth were primarily black; average age ~6 years. Ten-year intervention (through grade 9)	RCT. Assessments after grades 3, 6, and 9	Intervention participants at highest initial risk evidenced reductions in diagnoses and behavioral symptoms
Incredible Years <sup>88</sup>	n=18 families. Youth were primarily black, female; ages 5–12 (average age 8)	Pilot study. Pre-/post- treatment	Reduced youth behavioral problems, improved prosocial behaviors, improved parental depression and parenting skills (laxness, over-reactivity and verbosity)
Teen Triple P – Positive Parenting Program <sup>91</sup>	n=280. Youth were primarily male; ages 8–13 (average age 10 years), from families with income below the poverty line	No control group. Pre-/ post-treatment evaluations	Fewer adolescent behavior problems and less use of over-reactive parenting strategies in more intensive Teen Triple P level compared with the less intensive level and waitlist control conditions
Raising Healthy Children <sup>®</sup>	n=959. Youth were primarily white and male. Study began when youth were average age ~7 years, in 1st and 2nd grades. Intervention implemented through high school; outcomes assessed during 6th–10th grades (early to mid-adolescence)	Matched random assignment	Reduced growth in frequency of alcohol and marijuana use, but no effect on use versus non-use

 Table 7 Multilevel preventions programs

Abbreviation: RCT, randomized controlled trial

more consistently positive results than the less intensive preventative interventions - selective and universal. Findings from studies that evaluated whether increased intensity of preventions improved outcomes are in line with a body of other evidence suggesting that increasingly intensive and comprehensive levels of prevention are more effective than less intense preventative measures. Another consistent finding across prevention levels was that individuals with elevated levels of mental and behavioral health problems experienced better outcomes compared with individuals less in need of the services. This suggests that it may be more efficient for prevention efforts to target individuals at high-risk for mental and behavioral health problems than to target the entire population - as in universal prevention strategies. It is possible that more consistently positive evidence was found among indicated and multilevel preventions simply because there were fewer of these programs than the universal and selective preventions. Overall - across all prevention levels - parent outcomes were less studied than child outcomes. Parent outcomes primarily included improvement in parenting strategies, but some studies also focused on parental mental health and wellbeing. In terms of child outcomes, reductions in externalizing behavior were most common, followed by improvements in mental health and internalizing problems such as anxiety and depression, and only a few studies noted improvements in prosocial behavior such as social competence.

### **Overall summary**

Family support programs demonstrated some effectiveness in improving caregiver mental health and parenting strategies as well as enhancing child mental and behavioral health. Among treatment programs, clinician-led programs that provided a combination of instructional, informational, and advocacy support demonstrated the most effectiveness. Peer-led programs had the weakest research base and least effectiveness. More research is needed to investigate the efficacy of peer-led programs given that parents/veteran parents who typically lead peer-led programs can serve as important supports and mentors for parents enrolled in the family support programs.<sup>2</sup> Among prevention programs, multilevel and indicated programs demonstrated greater levels of effectiveness compared with the lower-level - universal and selective - preventions. Across all programs reviewed, those that included the most diverse forms of support were the most effective. Combining different forms of support may be useful, because different clients may need different forms of support and approaches. The evidence reviewed here

suggests that when family support programs are riveted to providing one form of support, their effectiveness is limited. In other words, being rigid in the provision of support can shut out potential solutions to meeting each family's needs. For instance, multilevel prevention programs can improve the ability to select the best forms of support and tailor them for individual clients and presenting concerns. While all family support programs need not provide every form of support, it may be beneficial for family support programs to be open to using forms of support other than the primary form to enhance effectiveness and efficiency.

### Disclosure

The authors report no conflicts of interest in this work.

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