

A Literature Review of Afterschool Mentoring Programs for Children At Risk

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Abstract: Afterschool programs such as tutoring and school-based or community-based programs have effectively functioned as prevention and intervention programs for children at risk. This literature review focuses on afterschool mentoring programs for children at risk. The purpose of reviewing the literature was to (a) determine the breadth and scope of the literature base, (b) identify program features, and (c) synthesize information to inform practical considerations. A systematic review process yielded 10 articles that met the criteria and were reviewed for (a) mentee characteristics, (b) mentor characteristics, (c) program components, (d) program evaluation procedures, (e) program type, and (f) type of research. Results are discussed in terms of program features and practical implications based on the findings of the review.

Children at risk for negative school and postschool outcomes, such as academic failure, dropout, detention or incarceration, and unemployment, often experience early onsets of problematic behavior and poor choice making (Gruber & Machamer, 2000; Grant et al., 2000; J. J. McWhirter, McWhirter, McWhirter, & McWhirter, 1998). At-risk status is defined in varying ways, but typically includes demographic features, home and community factors, and individual skill deficits. Children at risk for negative outcomes require intense, targeted, structured interventions that both prevent future occurrences of problematic behavior and intervene on specific deficits to ameliorate the common effects of at-risk status. Preventative action should focus on early intervention that promotes the development of protective factors and is inclusive of systematic components surrounding the child, such as the community, schools, and family (Botvin, 1990).

Demographic and Environmental Indicators of At-Risk Status

Both demographic and environmental factors, such as socioeconomic and minority status, often indicate at-risk status for students. Socioeconomic status (SES) can be discussed in terms of low familial income and communities in which low earning families live. Overall effects of low SES status include increased exposure to stressful events and safety and health risks (Manswell Butty, LaPoint, Thomas, & Thompson, 2001). Without the presence of protective factors (e.g., positive community climate, adequate household income), which promote resiliency, families in poverty experience instability and limited access to resources (Nelson, McClintock, & Perez-Ferguson, 2008). The results of poverty affect children negatively by constraining their ability to thrive academically, socially and emotionally, and physically (Nelson et al.).

Early school failure, issues contributed to poverty, social isolation, and neighborhood influences, as well as the absence of adults all factor into determining children's at-risk status. When minority status is merged with these other factors, the at-risk status for children is intensified (Beck, 1999). The average performance of African American and Hispanic students on the Scholastic Aptitude Test (SAT) is

more than 50 points lower than the average performance of White students (Bates, 1990). African American children often are provided with inequitable educational experiences which limit access to resources needed to counter exposure to risk factors in the home and community (Beck, 1999). Because underfunded schools, lack of economic opportunity, and poor living conditions are associated with being a child of color, minority status is viewed as a risk factor (J. J. McWhirter, McWhirter, McWhirter, & McWhirter, 2007).

Home and community life can also contribute to at-risk status for youth. Low-income communities consisting of multiple families in poverty find access to much needed resources more difficult (Manswell Butty et al., 2001). Community economic hardship is a factor in children's lower academic and social skill outcomes (Hanson et al., 2011).

Individual Indicators of At-Risk Status

Disruptive and delinquent behavior is an individual indicator of at-risk status. In general, children begin displaying disruptive or defiant behavior at a young age, often leading to more serious behavior and subsequent consequences, such as incarceration (Cavel, Elledge, Malcolm, Faith, & Hughes, 2009; Gur & Miller, 2004). Low-achieving students and students with disabilities, including learning disabilities and attention deficit hyperactivity disorder, are more likely to experience school failure and poor social skills affecting their ability to maintain positive relationships with peers and adults (Glomb, Buckley, Minskoff, & Rogers, 2006). Adolescents with school histories of disruptive behavior and academic failure are considered at risk for school dropout and delinquency (Hernandez Jozefowicz-Simbeni, 2008).

Best Practices in Afterschool Programming

The number of afterschool programs (ASPs) has spiked in recent years due to the increase of employed mothers, growing concern for academic advancement, and fear of lack of supervision during the high-risk afterschool hours (James-Burdumy, Dynarkski, & Deke, 2008). The needs of children placed at risk due to socioeconomic status, minority status, exposure to environmental risk factors, and the development of individual skill deficits are vast and should drive the design of programming intended

to increase protective factors. Specifically, children at risk require increased access to prevention and intervention resources, such as afterschool programming (Lauer et al., 2006). Afterschool programs can decrease the prospect of at-risk behavior and increase school achievement and prosocial behavior, such as following directions, accepting responsibility, and staying on task (Beck, 1999; Shernoff, 2010). ASPs provide supervision to children in the high-risk hours of 2:00 p.m. to 6:00 p.m. and thus help reduce illegal or harmful behavior in the community (Rorie, Gottfredson, Cross, Wilson, & Connell, 2011). Quality ASPs help students develop positive attitudes toward their school and their community while also improving work habits and reducing dropout rates (Huang & Cho, 2009).

There is a growing demand for accountability in ASPs because of the increase of funding at the federal, state, and local areas (Cross, Gottfredson, Wilson, Rorie, & Connell, 2010). There have been both positive and negative results regarding how and if students benefit from afterschool programming (James-Burdumy et al., 2008). Some research shows that participants in ASPs had improvements in bonding with school, positive social behaviors, academic achievement, as well as a decrease in negative behaviors at school (Durlak, Weissberg, & Pachan, 2010). However, other studies have shown that ASPs have no effect on behaviors.

ASPs have been successful in increasing both student academic performances, as well as increasing positive social behaviors. In order for students to benefit, ASPs should have a social skill-building component. Many programs aim to foster social development through connecting with positive adult role models. ASPs can be critical to enhancing young people's socio-emotional development by encouraging their participation in challenging and meaningful activities (Durlak et al., 2010).

Instructional Features

Academic instruction, social skills lessons, and enrichment are three aspects of instructional features in afterschool programming (Huang & Cho, 2009). Certain models have been proven successful in enriching participants' experience in ASPs. Sequenced, active, focused, and explicit programs (SAFE) have had significant positive results (Granger, 2010). Students in SAFE programs have seen improvements in test scores, as well as personal well-being (Durlak et al., 2010). There is also current research on the benefits of strategic academic tutoring. One-to-one tutoring helped with skills, strategies, and content (Hock, Pulvers, Deshler, & Schumaker, 2001). Social skills lessons and enrichment instruction have also proven to be essential for quality ASPs. Programs that teach prevention, personal, and social skills have positive outcomes in adjusting negative behaviors and improving school performance and feelings about school (Durlak, Weissberg, & Pachan, 2010). Finally, mentoring components specifically provide a positive and consistent adult who can help build strong relationships, navigate stressful life conditions, and promote independence (Herrera, Grossman, Kauh, & McMaken, 2011).

Afterschool Mentoring

Mentoring programs have been implemented in community-based settings for centuries (Guetzloe, 1997). In the context of interventions for at-risk students, mentoring is broadly defined as a mentor working directly with a student where the primary goal is to develop a personal connection that aids in improving student outcomes (Converse & Lignugaris-Kraft, 2009). Afterschool mentoring programs originated in communities and have since been extended to school settings for efficiency and convenience (Converse & Lignugaris-Kraft, 2009). With increased financial support and public exposure, mentoring programs in general have become more common, particularly in the school-based mentoring (SBM) context (Herrera et al., 2011). School-based and community-based mentoring (CBM) programs have resulted in improved student outcomes, such as personal competence, academic achievement, and adult relationships (Caldarella, Adams, Valentine, & Young, 2009; Herrera et al., 2011; Karcher, Nakkula, & Harris, 2005; Converse & Lignugaris-Kraft, 2009).

Community and School-Based Mentoring

The two types of mentoring programs, CBM and SBM, have similar foundations with differing embedded components and applications. Community-based mentoring programs tend to employ volunteers from the community directly affecting the lives of the at-risk students being mentored (Jekielek, Moore, & Hair, 2002). The mentor/mentee relationships in CBM programs tend to be stronger than those found in SBM programs due to increased dosage or amount of time spent together (Herrera, 1999). Mentors meet more often in longer meetings with their mentees in CBM programs, and the mentor/mentee relationship tends to last longer in CBM programs. Typically a community-based mentor will meet with their mentee for approximately three to four hours per week (Herrera et al., 2011). The mentors and mentees in CBM programs are often more appropriately matched based on relevant, common characteristics than in SBM programs. In addition to the mentor/mentee relationship, CBM programs focus on relevant social issues: (a) behavior, (b) in-home relations, such as disagreements with parents, (c) dropout, and (d) substance abuse while CBM programs focus on academic skills and social skills specific to the school setting.

Mentors in SBM programs meet approximately once per week, for one hour at the mentee's school, either before or after school (Herrera et al., 2011). Mentors provide academic instruction and may include social skills instruction or other nonacademic activities. In addition to requiring less time of mentors—making it cost-effective—SBM also improves students' relationships in the school setting with other students, teachers, and administrators (Herrera, 1999). Herrera et al. (2011) suggest SBM programs may improve student-teacher relationships because the teacher may have increased focus on the mentee through the mentoring program. Mentees in SBM programs might also experience improved perceptions of school through positive experiences in the SBM program (Herrera et al., 2011).

Mentoring and Relationship Building

The primary focus in mentoring programs is on developing and fostering a positive relationship between mentor and mentee (Karcher et al., 2005). Meaningful relationships are a powerful factor in promoting resilience, specifically for at-risk students (Laursen, 2002). Of particular importance—for young students in kindergarten through fifth grade—social relationships with adults regulate development, specifically competence (i.e., ability, proficiency; Pianta & Walsh, 1998). Students who have developed meaningful relationships with a caring, positive nonparental adult through mentoring have demonstrated improvements in social, emotional, and behavioral domains (Hamre & Pianta, 2001). Habituation (i.e., adapting and orienting) by adult mentors to positive, caring attitudes and behaviors toward students at risk preclude building powerful, meaningful relationships with the at-risk mentee (Laursen, 2002). Conversely, if the mentor does not have such an outlook and approach, this will hinder the development of a positive relationship, which is the crux of the intervention. The importance of relationships between at-risk children or youth and a positive caring adult in promoting resiliency stems from general systems theory in which the child is affected by surrounding systems and the ways in which systems interact and affect each other (Pianta & Walsh, 1998).

The purpose of this review of recent literature was to (a) examine afterschool mentoring programs for at-risk children; (b) describe features of each program in the areas of mentee, program, mentor characteristics, and program evaluation; (c) synthesize available information; and (d) describe implications for future research.

Method

Initial Search

First, the following keyword search terms were identified (a) afterschool mentoring, (b) after-school mentoring, (c) after school mentoring, (d) community-based mentoring, (e) community based mentoring, (f) school-based mentoring, and (g) school based mentoring. The authors conducted separate initial searches in the ERIC/EBSCO online database. Additional search criteria were that the articles be (a) peer reviewed and (b) published between 1996 and 2011. These dates were selected by the authors so that they could identify all publications within the past 15 years that fit into the remaining search criteria. Articles published prior to 1996 were considered seminal articles and were not included in this review of the recent literature published. The searches yielded a total of 98 articles, with 17 for afterschool, after-school, and after school mentoring; 16 for community-based mentoring and community based mentoring; and 65 for school-based mentoring and school based mentoring. Both authors found the same 98 articles using the search terms, resulting in 100% agreement between separate searches. No further exclusionary criteria were applied to the initial search.

Hand Search

Next the authors independently did hand searches of the articles resulting from the starting search results

and applied exclusionary criteria. An article was not included if: (a) it was a literature review, descriptive piece, or research-to-practice piece; (b) the mentoring took place during the school day; or (c) the study did not focus on children at risk as determined by membership in one of eight established categories. These separate hand searches resulted in all but 10 articles being excluded. Inter-rater agreement on which articles should remain post-exclusionary criteria between the authors was 76%.

Next, each author classified all 10 articles in nine categories: (a) program type (afterschool, community based, or school-based); (b) at-risk category; (c) intensity; (d) duration; (e) mentor characteristics; (f) location; (g) mentee age; (h) mentor characteristics; (i) location; and (j) miscellaneous program details. Additionally, the authors categorized the type of research conducted. Then authors checked 25% of each individually coded sets for inter-rater agreement, which was 100%. Table 1 summarizes these coding results. Additionally, each of the 10 articles was coded for program evaluation characteristics including: (a) program components, (b) number of student participants, (c) measures, (d) results, and (e) type of article. Each of the 10 articles described an ASP program evaluation. The type of research conducted in the published article was reported as either qualitative, mixed methodology, or quantitative according to the type of data analysis reported. See Table 2 for program evaluation information.

Results

Ten articles met the search criteria for inclusion in the review of the literature for ASPs that serve students at risk. Of these, seven articles reported highly effective results as defined by most, if not all, of the participants experiencing expected positive outcomes; two articles reported mixed results; and one article reported negative results, meaning students did not demonstrate the expected positive outcomes of the program. Of the documented program components, the Big Brothers Big Sisters (BBBS) general components were common across all three studies, but the remaining programs did not document common program components. Family support was also implemented in three of the studies. Most study participants were identified as at risk through minority and/or poverty status and participants ranged in age from 6-18. Four of the 10 programs were identified as providing high intensity services, and duration of those services varied from 3-12 months, with 10-12 months being identified most frequently. The location of mentoring services was identified as either community center or "other" six out of 10 times. School-based mentoring locations were identified in two of the studies. Finally, the most frequently identified mentor type was a university student. Volunteers and peers followed in frequency.

Determination of Literature Base

This literature review began with a broad search which yielded 98 articles to analyze. Of these, only 10 met the inclusionary criteria of being research articles related to the issue of mentoring for students at risk. While the final field of 10 articles is small, this group does represent the

Table 1

Literature Review Description

	At Risk	Age	Intensity	Duration	Location	Mentor	Program Type
Bruening, Dover, & Clark (2009)	Minority	NI	Low	3 months	Community Center	University	CBM
Carswell et al. (2009)	Minority, Urban, Behavior	11-16	High	10-12 months	Community Center	University	CBM
Cavell et al. (2009)	Academic	6-8	High	16 months	Other	University	CBM
Clark & Sheridan (2010)	Minority	11-18	High	10-12 months	Club House (Saturdays)	Volunteer	CBM
Gur & Miller (2004)	Behavior	11-18	NI	4-6 months	Other	NI	CBM
Hanlon et al. (2009)	Urban, Minority	11-13	High	10-12 months	School	Volunteer	SBM
Herrera et al. (2011)	Poverty, Minority, Dropout, Academics, Behavior	6-18	NI	6-12 months	School	Peer, University student	CBM
Huang & Cho (2009)	Poverty	NI	NI	NI	NI	NI	NI
Schwartz et al. (2011)	Poverty, Minority, Academics, Behavior	9-15	Low	10-12 months	Other	Volunteer, Peer, University student	CBM
Spencer & Liang (2009)	Urban	13-17	NI	10-12 months	Community Center	NI	CBM

Note. NI = no information, CBM = community-based mentoring, SBM = school-based mentoring.

Table 2

Program Evaluation

	Program Components	Number of Students	Measures	Results	Type of Article
Bruening, Dover, & Clark (2009)	Sports activities	8	Interviews, peer interviews, member checks	Some positive, themes emerged	Qualitative
Carswell et al. (2009)	Family support, community support	109	Questionnaires, interviews	Not positive	Qualitative
Cavell et al. (2009)	Family support	145	Teacher rating scales, Relationship report scales and inventories	More intensive supports were rated higher	Mixed Methodology
Clark & Sheridan (2010)	Video gaming	139	Survey, observation, focus group	Positive perception	Quantitative
Gur & Miller (2004)	Matched mentor, group counseling	79	Demographics, retention	Positive outcomes	Quantitative
Hanlon et al. (2009)	Community support, group mentoring	478	Self-report, behavior checklists, teacher report, school records	Significant effects for GPA and teacher ratings	Quantitative
Herrera et al. (2011)	Big Brothers Big Sisters	1,139	Teacher report, self-report	Academic improvements	Quantitative
Huang & Cho (2009)	Homework help, tutoring	344	Staff, parent surveys, interview, observation	Perceived as positive, positive results	Mixed Methodology
Schwartz, et al. (2011)	Big Brothers Big Sisters	1,139	Demographics, teacher, student, parent, mentor report, student outcomes	Mixed results depending on student relational profile	Quantitative
Spencer & Liang (2009)	Big Brothers Big Sisters	12	Interviews	Themes emerged	Qualitative

current literature base of existing research. The remaining 88 articles either (a) focused on case examples of mentoring programs that did not examine program effectiveness through methodological procedures, or (b) the intervention was not truly a mentoring intervention. For example, several articles described afterschool programs that focused on academic tutoring where an adult was involved, but because the primary focus was not mentoring as defined by the authors—and establishing and building a relationship between the mentor and mentee—such articles were excluded. Likewise, articles that did not present results from experimental research were excluded based on the purpose of this review, which was to review reported outcomes in order to make implications regarding effectiveness for future research and practice. Articles that only described a mentoring program for students at risk, excluding reports of measures, contribute to the literature base, but did not pertain to this review.

Identifying Key Program Features

The second purpose of this literature review was to classify components of the 10 mentoring programs included in the review and, according to reported outcomes and consistency across programs, identify key program features that should be considered requirements for effective mentoring programs for at-risk students. Through evaluating the effectiveness of the 10 studies reviewed, eight features emerged as required components for effective mentoring programs in future research and practice: (a) participant recruitment; (b) mentor training; (c) 1-year mentor commitment; (d) interest-based activities; (e) deficit-area activities; (f) family, community, and school involvement; (g) carefully planned mentoring relationship endings; and (h) program evaluation.

In the area of participant recruitment of the reviewed articles, most described a targeted participant pool, such as second grade students attending the research site (Cavell et al., 2009). This made participation highly encouraged or even required. However, in their highly positive program where students demonstrated overall positive outcomes, Clark and Sheridan (2010) attracted students from a range of areas to the program through promotion efforts. This recruitment strategy may increase mentee buy-in, and ultimately the effectiveness of the program.

The second feature is in the area of mentor training. Many articles reviewed did not describe the training procedures that came before the matching and mentoring procedures (Carswell et al., 2009; Gur & Miller, 2004), but several did, and those articles that described extensive mentor training for the most part reported highly positive results (Cavell et al., 2009; Spencer & Liang, 2009). Extensive mentor training that informs mentors of the specific needs of the target mentee population reduces mentor frustration (Carswell et al., 2009). Mentors in the studies reviewed were equally represented as volunteers and university students. Having mentors who show an interest in the target population does not guarantee that they possess enough knowledge to be successful mentors. Additionally, Cavell et al. (2009) provided matched pairs with a case manager to provide additional support.

The third feature was related to length of mentor commitment. Of the articles reviewed, the ones that reviewed BBBS (Herrera et al., 2011; Schwartz, Rhodes, Chan, & Herrera, 2011; Spencer & Liang, 2009) described a mandatory mentor commitment of one year with the mentee, which increases the quality of the mentoring relationship. Spencer (2007) followed investigated BBBS data that included unsuccessful mentor/mentee matches and found that one of the top reasons for unsuccessful matches was mentor abandonment. Particularly important for students who face complicated risk factors, mentoring relationships should last at least a year. Of the articles in this review, the average duration was 10 months.

The next feature is the importance of including interest-based activities in ASP mentoring programming. Some of the most successful ASPs included interest- or choice-based activities (Cavell et al., 2009; Clark & Sheridan, 2010; Herrera et al., 2011). These programs allowed mentors and mentees to negotiate activities based on shared interests and turn taking. Providing choice and inventorying personal interests are positive strategies to help build and sustain the mentor/mentee relationship. Preferred activities reviewed varied from games to outdoor activities and software design.

The fifth feature identified in this review is the need for deficit-specific instruction. In addition to interest-based activities, activity planning strategies for ASPs that were successful for the reviewed articles also provided needs-based activities (Bruening, Dover, & Clark, 2009; Cavell et al., 2009; Gur & Miller, 2004; Hanlon, Simon, O'Grady, Carswell, & Callaman, 2009; Herrera et al., 2011). Many of the articles reviewed included academic instruction, homework help, or remedial academic instruction. Other articles included group counseling, social skills instruction, and life skills training. Targeted intervention reduces specific risk factors, improving student outcomes.

Next, many articles reviewed included wraparound services in the areas of (a) parental involvement, (b) community support, and (c) school communication (Cavell et al., 2009; Hanlon et al., 2009; Huang & Cho, 2009; Schwartz et al., 2011). The inclusion of outside support correlated with highly positive program results. Parental involvement included parent visitation to the ASP, communication home by the mentor, and home visits. Community support most often was described as connecting mentees and their families with additional community support. School communication included: (a) teachers rating mentees in the context of their school day, (b) mentors communicating academic support needs with teachers, and (c) teachers providing behavioral feedback to the mentor.

The seventh feature identified was the focus on carefully planned endings, such as with the BBBS program (Herrera et al., 2011; Schwartz et al., 2011; Spencer & Liang, 2009). This ASP mentoring component was described as a critical component for the mentees, as it improved mentees' understanding of the conclusion of the pairing. Often, the BBBS provides culminating activities and a celebration toward the end of the year. This planned strategy provides mentors and mentees with positive

strategies to end their relationship rather than the mentee experiencing an abrupt, unexplained ending, which can be damaging.

Finally, afterschool program research is shifting from *if* programs work to determining *why* some programs are more effective than others (Granger, 2010). For afterschool programs to be successful, monitoring student engagement, program management, and staff turnover offers valuable information on the success of the program (Durlak, Weissberg, & Pachan, 2010). As afterschool programs increase in number and public funding, quality of programming will grow in importance. Evaluation and assessment measures in afterschool programs will increasingly provide information to ensure program quality (Huang and Cho, 2009). Just as schools use assessment and evaluation for continual improvement, afterschool programs also need ways to evaluate the effectiveness of their programs. As afterschool programs grow in number and importance, researchers need assessment instruments that can test how the daily environments of programs shape child and youth development (Granger, 2010).

Discussion

The purpose of this literature review was to establish and categorize the existing relevant research, identify key program features that promoted student outcomes in the research, and synthesize these considerations for future research and practice. Low-achieving, at-risk students require intensive interventions to enhance instruction during the school day. ASPs serve as effective supplements for out-of-school time. ASPs can improve academic performance, prevent disruptive and delinquent behavior, and promote socialization (Lauer et al., 2006). Further, participation in quality ASPs may predict positive academic achievement and prosocial behavior (Shernoff, 2010). Specifically, ASPs that provide mentoring from an adult volunteer mentor alter negative, violent trajectories and reduce rates of contact with juvenile justice systems (Cavell et al., 2009). The current literature review sought to identify and synthesize critical components of afterschool mentoring programs for children at risk across the literature base.

Evaluation Implications

Several implications arise from the results of establishing the base of literature around the issue and identifying key features for mentoring programs that serve students at risk. The first implication relates to the limited number of published research-based mentoring programs aimed at improving outcomes for at-risk students. Of the 98 articles originally identified, only 10 included programs that measured and evaluated effectiveness. Future research should include component-specific and whole-program research. Component-specific research would help to identify which specific components of the mentoring program are most efficient in promoting student success. For example, future research may examine the issue of dosage, which in this review was classified as intensity and duration. Bruening and colleagues (2009) included minimal intensity with a brief duration in their study, while Cavell

and colleagues (2009) integrated high intensity and long duration dosage in their study. Both studies included university students as mentors and were classified as CBM programs. An experimental study comparing these two dosages would add to the literature base and improve efficiency of resources.

Conversely, future research should also examine programs as a whole in order to examine the multiplicative effect of multiple research-based mentoring program components. This examination would aid in establishing general guidelines for the development and sustainability of mentoring programs as involved, complex interventions. An example of this type of examination from the literature in this review would be to compare the CBM and SBM programs, such as Clark and Sheridan (2010), where volunteers implemented high intensity, long duration mentoring compared to the intervention presented by Hanlon and colleagues (2009), where volunteers implemented mentoring with a similar dosage, but in a school setting rather than a community setting. While specific characteristics that could be isolated in a component-specific study would not be considered in this study, the setting and its effect on the program as a whole could be examined in this whole-program research.

Another implication for future research would be to specifically examine whether particular mentoring program components are most effective for certain groups of at-risk students. For instance, Gur and Miller (2004) identified at-risk students as those who demonstrated consistent challenging behavior, and Hanlon and colleagues (2009) identified their participants as at risk due to their urban community and minority status, yet both mentoring programs that were implemented incorporated group work with either group counseling or group mentoring. An examination of which components of effective mentoring programs for at-risk students are universal, and which are at-risk type specific, would fill a gap in the existing literature since so many definitions of at risk exist, and it is unlikely that all mentoring intervention components are effective for the different student characteristics that deem them at risk.

Considerations for the future practice of implementing mentoring programs for students at risk were also identified from this review. First, as a result of the limited number of published articles with measured and reported student outcomes, practitioners should ensure that efforts to measure and evaluate program effectiveness are in place. This includes confirming that the intervention is being implemented with integrity through treatment integrity measures; that the intervention is socially valid with parent, mentor, and mentee surveys; and by identifying outcome measures that can serve as benchmarks for evaluating program effectiveness such as GPA changes and teacher ratings of behavior, such as those presented by Hanlon and colleagues (2009).

Finally, practitioners should attempt to incorporate all of the eight key features identified in this review: (a) participant recruitment; (b) mentor training; (c) 1-year mentor commitment; (d) interest-based activities; (e) deficit-area activities; (f) family, community, and school involvement;

(g) carefully planned mentoring relationship endings; and (h) program evaluation during the development, maintenance, and sustainability phases of the program. While this list is not exhaustive since additional key features will be identified through future research efforts, existing mentoring programs for at-risk students should gauge the degree to which the identified key features are in place, and modify the mentoring program based on this evaluation. Similarly, mentoring programs that incorporate all of the aforementioned key features should evaluate the feasibility of the comprehensive effort and determine strategies for continued improvement. While this review did not initially classify individual program components in the areas that ultimately became the identified key features, the synthesis of the 10 programs reviewed highlights that none of the programs included effective levels of implementation with each of the eight key features as is suggested. Due to this limitation, the feasibility of the recommended level of implementation is unknown.

In summary, at-risk students require effective, efficient interventions that are sustainable and aim to improve deficit areas. Mentoring programs are commonly used as interventions for at-risk students; however, few program components can be confirmed as research-based and effective due to the limited breadth of existing research literature in the area. Through this review, a portion of this gap is filled by having established the existing literature and its gaps, identifying eight key features of effective mentoring programs for at-risk students, and presenting research and practice considerations which will add to the reviewed literature base.

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