Regional Educational Laboratory
At SRI International

# REL Appalachia Ask A REL Response 

Behavior and Mental Health

February 2019

## Question:

What are the short- and long-term academic and behavior outcomes associated with mentoring for at-risk students?

## Response:

Thank you for your request to our REL Reference Desk regarding evidence-based information about mentoring at-risk students. Ask A REL is a collaborative reference desk service provided by the 10 Regional Educational Laboratories (RELs) that, by design, functions much in the same way as a technical reference library. Ask A REL provides references, referrals, and brief responses in the form of citations in response to questions about available education research.

Following an established REL Appalachia research protocol, we searched for peer-reviewed articles and other research reports on mentoring programs for at-risk students. We focused on identifying resources that specifically addressed the effects of mentoring programs on academic and behavioral outcomes for at-risk students. The sources included ERIC and other federally funded databases and organizations, research institutions, academic research databases, and general Internet search engines. For more details, please see the methods section at the end of this document.

The research team did not evaluate the quality of the resources provided in this response; we offer them only for your reference. Also, the search included the most commonly used research databases and search engines to produce the references presented here, but the references are not necessarily comprehensive, and other relevant references and resources may exist. References are listed in alphabetical order, not necessarily in order of relevance.

## References

Bayer, A., Grossman, J. B., \& DuBois, D. L. (2015). Using volunteer mentors to improve the academic outcomes of underserved students: The role of relationships. Journal of Community Psychology, 43(4), 408-429. Retrieved from https://mpra.ub.unimuenchen.de/85106/1/MPRA paper 85106.pdf

From the abstract: "Schools can benefit from understanding how to use community volunteers to achieve academic goals. A randomized control evaluation, involving 1,139
students from 71 schools, of the school-based mentoring program of Big Brothers Big Sisters of America found modest but statistically significant improvements in the teacherrated academic performance and self-reported scholastic efficacy of mentored students. The present study explores the causal mechanism behind these effects. We find that a close relationship between mentor and protégé appears key to better academic outcomes. Because relationship closeness is not randomly assigned, we use two-stage least squares and other methods to control for potential selection bias. The role of emotional closeness as a mediator of program effects is evident across mentoring relationships of various lengths and statuses. Students were more likely to feel close to their mentors in programs that included weekly meetings and opportunities for mentor-protégé pairs to interact outside of a large-group setting."

Gordon, J., Downey, J., \& Bangert, A. (2013). Effects of a school-based mentoring program on school behavior and measures of adolescent connectedness. School Community Journal, 23(2), 227-250. Retrieved from https://eric.ed.gov/?id=EJ1028864

From the abstract: "In an effort to increase students' success, schools and communities have begun to develop school-based mentoring programs (SBMP) to foster positive outcomes for children and adolescents. However, experts have called for more research into the effectiveness of these efforts for students across grade levels. Therefore, this study was designed to examine the impact of participation in a SBMP on behavioral and social outcomes for sixth through tenth grade students. Analyses revealed that compared to control students, SBMP participants had significantly fewer unexcused absences (with moderate effect size) and discipline referrals (with large effect size) and reported significantly higher scores on four measures of connectedness (with moderate to negligible effect sizes). First year participants also reported significantly higher scores on one measure of connectedness (with a large effect size). Implications for practice and suggestions for further research are provided."

Grossman, J. B., Chan, C. S., Schwartz, S. E. O., \& Rhodes, J. E. (2012). The test of time in schoolbased mentoring: The role of relationship duration and re-matching on academic outcomes. American Journal of Community Psychology, 49(1-2), 43-54. Retrieved from https://bobcat.militaryfamilies.psu.edu/sites/default/files/placed-programs/Grossman\ et\ al\ 2012\ -\ role\ of\ relationship\ duration\ and\ rematching\ in\ academic\ outcomes.pdf

From the abstract: "The influence of match length and re-matching on the effectiveness of school-based mentoring was studied in the context of a national, randomized study of 1,139 youth in Big Brothers Big Sisters programs. The sample included youth in grades four through nine from diverse racial and ethnic backgrounds. At the end of the year, youth in intact relationships showed significant academic improvement, while youth in matches that terminated prematurely showed no impact. Those who were re-matched after terminations showed negative impacts. Youth, mentor, and program characteristics associated with having an intact match were examined. Youth with high levels of baseline stress and those
matched with college student mentors were likely to be in matches that terminated prematurely, while rejection-sensitive youth and mentors who had previous mentoring experience were more likely to be in intact relationships. Implications for research and practice are discussed."

Herrera, C., Grossman, J. B., Kauh, T. J., \& McMaken, J. (2011). Mentoring in schools: An impact study of Big Brothers Big Sisters school-based mentoring. Child Development, 82(1), 346361. Abstract retrieved from https://eric.ed.gov/?id=EJ927867; full text available at https://bobcat.militaryfamilies.psu.edu/sites/default/files/placed-programs/Herrera\ et\ al\ 2011\ \ Impact\ Study\ in\ Child\ Devt.pdf

From the abstract: "This random assignment impact study of Big Brothers Big Sisters SchoolBased Mentoring involved 1,139 9- to 16-year-old students in 10 cities nationwide. Youth were randomly assigned to either a treatment group (receiving mentoring) or a control group (receiving no mentoring) and were followed for 1.5 school years. At the end of the first school year, relative to the control group, mentored youth performed better academically, had more positive perceptions of their own academic abilities, and were more likely to report having a 'special adult' in their lives. However, they did not show improvements in classroom effort, global self-worth, relationships with parents, teachers or peers, or rates of problem behavior. Academic improvements were also not sustained into the second school year."

Kolar, D. W., \& McBride, C. A. (2011). Mentoring at-risk youth in schools: Can small doses make a big change? Mentoring \& Tutoring: Partnership in Learning, 19(2), 125-138. Abstract retrieved from https://eric.ed.gov/?id=EJ925040

From the abstract: "The impact of length of the match and age of the child was evaluated in a site-based mentoring program. At-risk children ranging in age from 7 to 12 were matched with an adult mentor and met approximately once a week at school during the academic year. Results indicated that neither the length of the match nor the age of the child influenced the impact of mentoring. Pre/post analyses of several psychological variables indicated that children liked school better ( $p=.002, \eta 2=.11$ ), behaved better in the classroom ( $p=.021, \eta 2=.07$ ), got along better with their peers ( $p<.001, \eta 2=.25$ ), and had increased self-esteem ( $p<.001, \mathrm{\eta} 2=.14$ ) at the end of mentoring. No improvement in grades was found. The results indicate that matches that are relatively short in duration can have an important impact on at-risk children. In addition, the results indicate that at-risk children who are both younger and older can have positive outcomes from mentoring."

Raposa, E. B., Rhodes, J. E., \& Herrera, C. (2016). The impact of youth risk on mentoring relationship quality: Do mentor characteristics matter? American Journal of Community Psychology, 57(3-4), 320-329. Retrieved from http://www.rhodeslab.org/wpcontent/uploads/2016/06/Risk.pdf

From the abstract: "Although mentoring is a widely used intervention strategy, effect sizes for at-risk youth remain modest. Research is therefore needed to maximize the impact of
mentoring for at-risk youth who might struggle to benefit from mentoring relationships. This study tested the hypothesis that different types of youth risk would have a negative impact on mentoring relationship quality and duration and explored whether mentor characteristics exacerbated or mitigated these negative effects. Results showed that elevated environmental stress at a youth's home and/or school predicted shorter match duration, and elevated rates of youth behavioral problems, such as poor academic performance or misconduct, predicted greater youth dissatisfaction and less positive mentor perceptions of relationship quality. Mentors with greater self-efficacy and more previous involvement with youth in their communities were able to buffer the negative effects of environmental stress on match duration. Similarly, mentors' previous involvement with youth buffered the negative effects of youth behavioral problems on mentor perceptions of relationship quality. Findings have important implications for the matching of mentors and at-risk youth in a way that improves mentoring outcomes."

Tolan, P. H., Henry, D. B., Schoeny, M. S., Lovegrove, P., \& Nichols, E. (2014). Mentoring programs to affect delinquency and associated outcomes of youth at-risk: A comprehensive meta-analytic review. Journal of Experimental Criminology, 10(2), 179-206. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4224303/pdf/nihms509978.pdf

From the abstract: "Objectives: To conduct a meta-analytic review of selective and indicated mentoring interventions for effects for youth at risk on delinquency and key associated outcomes (aggression, drug use, academic functioning). We also undertook the first systematic evaluation of intervention implementation features and organization and tested for effects of theorized key processes of mentor program effects. Methods: Campbell Collaboration review inclusion criteria and procedures were used to search and evaluate the literature. Criteria included a sample defined as at-risk for delinquency due to individual behavior such as aggression or conduct problems or environmental characteristics such as residence in high-crime community. Studies were required to be random assignment or strong quasi-experimental design. Of 163 identified studies published 1970-2011, 46 met criteria for inclusion. Results: Mean effects sizes were significant and positive for each outcome category (ranging from $\mathrm{d}=.11$ for Academic Achievement to $\mathrm{d}=.29$ for Aggression). Heterogeneity in effect sizes was noted for all four outcomes. Stronger effects resulted when mentor motivation was professional development but not by other implementation features. Significant improvements in effects were found when advocacy and emotional support mentoring processes were emphasized. Conclusions: This popular approach has significant impact on delinquency and associated outcomes for youth at-risk for delinquency. While evidencing some features may relate to effects, the body of literature is remarkably lacking in details about specific program features and procedures. This persistent state of limited reporting seriously impedes understanding about how mentoring is beneficial and ability to maximize its utility."

## Additional Organizations to Consult

National Mentoring Resource Center: $\underline{\text { https://nationalmentoringresourcecenter.org/ }}$

From the website: "Youth mentoring programs can use the Center to strengthen their services by:

- Applying for no-cost training and technical assistance, including customized coaching to enhance your program and troubleshoot challenges using evidence-based practices
- Accessing high-quality program implementation resources, including tools, program curricula, and training materials
- Nominate your program or tools to be highlighted on the NMRC
- Learning about what works in mentoring through evidence reviews on the effectiveness of program models and specific programs, practices, and services for specific populations of mentees

Our goal is to improve the quality and effectiveness of youth mentoring across the country through increased use of evidence-based practices and sharing practitioner innovations."

MENTOR: The National Mentoring Partnership: https://www.mentoring.org/
From the website: "MENTOR's mission is to fuel the quality and quantity of mentoring relationships for America's young people and to close the mentoring gap for the one in three young people growing up without this critical support."

## Methods

## Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

- mentor* AND "at-risk" AND student* AND (outcome* OR achievement OR behavior*)


## Databases and Resources

We searched ERIC, a free online library of more than 1.6 million citations of education research sponsored by the Institute of Education Sciences (IES), for relevant resources. Additionally, we searched the academic database ProQuest, Google Scholar, and the commercial search engine Google.

## Reference Search and Selection Criteria

In reviewing resources, Reference Desk researchers consider-among other things-these four factors:

- Date of publication: Searches cover information available within the last ten years, except in the case of nationally known seminal resources.
- Reference sources: IES, nationally funded, and certain other vetted sources known for strict attention to research protocols receive highest priority. Applicable resources must be publicly available online and in English.
- Methodology: The following methodological priorities/considerations guide the review and selection of the references: (a) study types-randomized controlled trials, quasi experiments, surveys, descriptive data analyses, literature reviews, policy briefs, etc., generally in this order; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected), study duration, etc.; (c) limitations, generalizability of the findings and conclusions, etc.
- Existing knowledge base: Vetted resources (e.g., peer-reviewed research journals) are the primary focus, but the research base is occasionally slim or nonexistent. In those cases, the best resources available may include, for example, reports, white papers, guides, reviews in non-peer-reviewed journals, newspaper articles, interviews with content specialists, and organization websites.

Resources included in this document were last accessed on January 29, 2019. URLs, descriptions, and content included here were current at that time.

This memorandum is one in a series of quick-turnaround responses to specific questions posed by education stakeholders in the Appalachia region (Kentucky, Tennessee, Virginia, and West Virginia), which is served by the Regional Educational Laboratory Appalachia (REL AP) at SRI International. This Ask A REL response was developed by REL AP under Contract ED-IES-17-C-0004 from the U.S. Department of Education, Institute of Education Sciences, administered by SRI International. The content does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.

