



MENTORING FOR YOUTH WITH DISABILITIES

National Mentoring Resource Center Population Review

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Summary

This review examined research on mentoring for youth (ages 25 and younger) who have a disability, including physical, cognitive, learning, and developmental disabilities, and excluding psychiatric disabilities which have been discussed elsewhere.¹ It addressed four questions:



1. What is the documented effectiveness of mentoring for youth with disabilities?
2. What factors condition or shape the effectiveness of mentoring for youth with disabilities?
3. What are the intervening processes that are most important for linking mentoring to outcomes for youth with disabilities?
4. To what extent have efforts that provide mentoring to youth with disabilities reached and engaged targeted youth, been implemented with high quality, and been adopted and sustained by host organizations and settings?



The review found a total of 40 studies addressing these questions. Benefits of mentoring program participation for youth with disabilities include improved employment and career-related decisions, transitions to adulthood (as well as college and work), postsecondary education goals, and independent living skills.

Although the research in this area is still relatively new, it suggests the following takeaways:

- Potential benefits of mentoring programs for youth with disabilities include several in the areas of academic and career development, employment, psychosocial health and quality of life, transition, and life skills.
- Although various types of mentoring models were used in these studies, it is unclear which formats work best for youth with disabilities.
- Results suggest several potential processes occur between mentoring provision and ultimate outcomes (i.e., mediators), such as self-determination, and some factors could influence, or moderate, the effects of mentoring for youth with disabilities, including gender and ethnicity.

The review concludes with insights for practitioners that highlight a number of factors to consider when developing and implementing mentoring programs for youth with disabilities. This commentary suggests that programs looking to serve youth with disabilities consider accessibility factors that would better enable mentees to participate in activities offered, which may include not only physical access to facilities but also access to program materials in various formats. Furthermore, programs are advised to consider expanding the age ranges of youth they serve in order to meet the needs of youth with disabilities, who often need support during their transitions into adulthood (e.g., transition to independent living).

INTRODUCTION

Worldwide there are an estimated 93 to 150 million children and youth with disabilities. This number is expected to rise given medical advancements that promote higher survival rates and life expectancy.² Within the United States, there are approximately 6.7 million students aged 3 to 21 who receive special education services.³ Thirty-four percent of these students have a learning disability, 20 percent have a speech or language impairment, 9 percent have autism, 6 percent have a developmental delay, 14 percent have other health impairments, and the remainder face other types of physical disabilities.^{3, 4}

Young people with disabilities encounter many challenges and barriers to participating in society. For instance, they often experience social isolation and physical exclusion,⁵ are at risk of abuse and poor developmental outcomes, and are less equipped with the emotional, social, and cognitive resources to fully achieve positive life outcomes.^{2, 5} Many youth with disabilities also lack educational and employment opportunities.^{2, 6} For instance, youth with disabilities are underrepresented in higher education and have a lower probability of completing school than children without disabilities.⁷ ⁸ Furthermore, they are at risk of living below the poverty line⁹ and are more likely to encounter extreme social and economic disparities relative to youth without disabilities.⁴ Negative attitudes, discrimination, lack of resources and supports, and inaccessible environments contribute to these trends.^{10, 11}

The UN Convention on the Rights of Persons with Disabilities aims to enhance inclusion and participation of youth with disabilities toward realization of their human rights.¹² Mentoring is one promising mechanism that could help achieve this goal by enhancing youth's inclusion in society.^{13, 14, 15, 16, 17} Mentors can serve as role models and share experiences while helping to support youth in their academic, career, and psychosocial development^{5, 15, 18} and in their transition to adulthood. Mentors can help teach or advise youth, offer support and coping strategies, and help them to feel less alone.¹⁹

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Until recently, most mentoring programs did not include or specifically target youth with disabilities.^{14, 20} Therefore, the number of youth with disabilities in the United States who are engaged in mentoring is largely unknown. Studies focusing on mentoring for youth with disabilities show potential benefits on the transition to postsecondary education and employment,^{14, 21} self-esteem, social competence,²² and independent living skills.²³ Having mentors for youth with disabilities also may be important for the development of social capital, self-determination, quality of life, and career and employment goals.^{14, 15, 21, 24, 25, 26, 27}

Scope of Review

For this review, disability is defined as follows (using the World Health Organization’s definition)⁸: “Disability is an umbrella term covering impairments, activity limitations, and participation restrictions. An impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Disability is, therefore, not just a health problem. It is a complex phenomenon reflecting the interaction between features of a person’s body and features of the society in which they live.”

Furthermore, the National Mentoring Resource Center defines mentoring as “relationships and activities that take place between youth (i.e., mentees) and older or more experienced persons (i.e., mentors) who are acting in a nonprofessional helping capacity, whether through a program or, more informally, to provide support that benefits one or more areas of the young person’s development” (for further details, see [What is Mentoring?](#)).

Studies were included in which:

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1. Youth participants are age 25 and under, or the average age of the sample was 18 or under; or findings were delineated by age, with findings outlined for a subsample of youth 25 and under. This target age was expanded from that used in other NMRC reviews because youth with disabilities are often delayed in their transition to adulthood relative to youth without disabilities.²⁸ We sought to include youth up to age 25 years to capture the “other side” of their transition to adulthood.
 2. At least 80 percent of study participants have a disability (using the World Health Organization’s⁸ definition of disability), or the authors conducted analyses that examine youth with disabilities as a distinct group.
 3. The study was a report of quantitative or qualitative empirical research with sufficient methodological detail included to be able to assess study rigor and findings.
 4. The study reported findings that bear on one or more of the four core questions for the review and examined either (a) an intentional, structured intervention or program involving mentoring, or (b) natural mentoring relationships occurring with youth with disabilities.

Mental health conditions were excluded as a disability because an NMRC review has already been conducted on mentoring youth with mental health challenges.¹ Temporary disabilities (e.g., cancer and the youth has fully recovered) and chronic illnesses/conditions that are not classified as a disability using the World Health Organization’s definition⁸ were also excluded. We also excluded chronic illness (e.g., chronic pain, diabetes) because a systematic review of peer support interventions for youth with chronic illness is already reported elsewhere.²⁹ In addition, we excluded program descriptions and studies that did not have empirical findings.

A literature search was conducted to identify potentially eligible journal articles, book chapters, and other types of reports, including searches of PubMed, ProQuest, PsycINFO, and Google Scholar, using an established set of keywords. Keywords used in the searches included “disability” (and a broad list of various types of physical, developmental, cognitive, and intellectual disabilities), “children and youth,” and “mentoring.” After two authors independently applied our inclusion criteria, we found a total of 40 studies addressing these questions with most of the studies focusing on youth aged 25 and under.

1. What are the Demonstrated Effects of Mentoring on Youth with Disabilities?

BACKGROUND

There are several reasons to suggest that youth with disabilities could benefit from mentoring relationships. Youth with disabilities are a vulnerable population with unique social, developmental, educational, and vocational needs.¹⁴ Children with disabilities are more likely to report being victims of peer aggression and social exclusion because they often do not have the protective function of friendships.^{10,30} They are bullied at disproportionately higher rates compared to youth without disabilities and are nearly three times as likely to experience social exclusion including limited social integration, fewer friends, and lower levels of friend support.^{10,31} Given that they often encounter social isolation and exclusion, social support is an area of particular need for youth with disabilities. Therefore, mentoring may be a good resource for them to build friendships and other social networks that facilitate their development. Research also suggests that mentoring can improve academic and employment outcomes—areas of need for many youth with disabilities. This section presents findings on the potential benefits of mentoring for youth with disabilities.

RESEARCH

First, we discuss the following broad outcome areas that were explored in this review: academic and career development; employment; psychosocial health, quality of life, and protective factors; and transition and life skills. Next, we describe the types of mentoring models used within the studies found in our review.

Academic and career development. Six studies in this review assessed the benefits of mentoring for academic outcomes and career development. For example, Kolakowsky-Hayner et al.³² used a pre-post survey to evaluate a community, group-based mentoring program (i.e., Back on Track to Success) to help 131 youth (aged 16 to 26) return to work and school after a brain or spinal cord injury. Participating youth reported that mentoring was beneficial for achieving postsecondary educational goals. In another study using a repeated measures design, Bell³³ explored the effects of an online mentoring program for transition-age youth with blindness and found a significant increase in efficacy to make career-related decisions compared to their efficacy at the beginning of the program. Similarly, Kim-Rupnow and Burgstahler³⁴ evaluated a community-based online mentoring program using a cross-sectional post-survey design and found a significant improvement in knowledge of

career options. O'Mally and Antonelli¹⁸ used a longitudinal design to explore how a one-on-one career mentoring program benefited college students who were legally blind and found a pattern of improved career adaptability among participants over time. Burgstahler and Chang's³⁵ study assessed the impact of the Access STEM/DO-IT online program among youth with various types of disabilities. Using a case study design, they found that youth improved their career options (e.g., interest in STEM) over time. Finally, Powers et al.³⁶ assessed the impact of an online group-based program on youth with various types of disabilities using a RCT (randomized controlled trial) design and reported significant improvements in educational planning among participants compared to controls.³⁶

Employment. Six studies in this review found that mentoring was associated with employment-related improvements, specifically improved knowledge of employment services and supports,^{37, 38} transition to employment,^{32, 37} knowledge of employment preparedness³⁴ (e.g., the key skills needed to apply for a job), increased job-seeking self-efficacy and assertiveness in job hunting,¹⁸ as well as improvements in employability.³⁹

Francis et al.^{37,38} used a mixed-method design (i.e., surveys and qualitative methods) to evaluate a group mentoring program serving youth with various types of disabilities. They found improved self-rated knowledge of employment services and supports and different types of competitive employment positions.^{37, 38} Kolakowsky-Hayner et al.³² evaluated a community-based group mentoring approach for youth with a brain or spinal cord injury. The researchers used a pre-post survey design and reported that promising numbers of program participants showed progress toward achieving their goals of postsecondary education, employment, and community independence. Another study focusing on youth with various types of disabilities³⁴

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involved an online group mentoring program and found significant improvements in perceived Internet and computer skills, career options, employment preparedness, perseverance, self-esteem, social skills, self-advocacy, and independence. O'Mally and Antonelli's¹⁸ study focused on a one-to-one career mentoring program serving youth with vision impairments. Using a longitudinal design, they found that participants experienced increased job-seeking self-efficacy and career adaptability, and made significant gains in assertiveness in job hunting. Another study³⁹ found that youth with spinal cord injury participating in an online, phone-based mentoring program experienced significant improvements in student education planning and transition awareness.

Psychosocial health, quality of life, and protective factors. Fourteen studies included in this review found positive mentoring outcomes among youth with disabilities in areas which are important protective factors, including self-determination,^{25, 40} self-efficacy,¹⁸ social and emotional support,^{41, 42, 43} self-advocacy,^{25, 34, 42, 44} self-esteem,^{34, 45, 46} self-confidence,^{16, 47} and sense of community.^{39, 47} Studies showing benefits in these areas used a wide range of methods (e.g., quasi-experimental, pre-post, qualitative) and focused on youth with various disabilities including intellectual disability,⁴⁰

43, 45 vision impairments,¹⁸ pediatric liver transplant,⁴¹ deafness,⁴² autism,⁴⁶ and various additional disabilities.^{34, 44, 48} Studies also included a wide range of mentoring models, such as one-to-one mentoring^{18, 41, 43} taking place at a college, out-patient or employment setting; group-based mentoring;^{34, 40, 44} e-mentoring;^{25, 34, 48, 49} naturally occurring mentoring;^{42, 45} and mixed models.³⁴ We did not note any strong patterns in outcomes based on methodological design, type of disability, or type of mentoring.

Eleven studies showed improvements in quality of life and social connections. Specifically, four studies^{41, 46, 50, 51} using various methodological designs (i.e., pre-post, case study, RCT) showed enhanced quality of life among youth with autism, brain injury, pediatric transplants, and other various types of disabilities (i.e., learning, emotional, behavioral). One study found an improved ability to manage their condition⁴⁹ among those with juvenile arthritis. Studies focusing on youth with autism that used pre-post designs showed improvements in social anxiety⁴⁶ and empathy.⁵² A qualitative study further found that role modeling⁴² helped youth with deafness. Improvements in social skills,³⁴ social acceptance,⁴⁷ social connectedness,^{46, 47, 53} ability to make new friends,²² and positive attitudes toward disability³³ were seen for youth with autism, developmental disabilities, learning disabilities, physical disabilities, blindness, and other types of disabilities. These studies used survey, pre-post, and qualitative designs.

Transition and life skills. Five studies using a range of designs (e.g., 3 RCTs, pre-post surveys) highlighted that mentoring yielded improvements in skills related to the transition to adulthood and life skills. Specifically, Powers et al.^{16, 36, 51} used an RCT design in three separate studies to assess the impact of mentoring programs for youth with various types of disabilities. They found significant differences between the treatment and comparison groups at post-intervention and/or follow-up in transition-related goals and planning, accessing transition services,⁵¹ engagement in independent living activities,⁵¹ and knowledge about strategies to promote independence,¹⁶ as well as significant improvements over time in program participants relative to the control group in transition awareness.³⁶ Kolowsky-Hayner's³² evaluation of a community, group-based mentoring program for youth with brain and spinal cord injury used a pre-post survey and found improvements in community independence³² over time.

Studies within this review also reported on benefits of mentoring for the development of life skills. For example, Powers¹⁶ evaluated an online and in-person mentoring program for youth with physical disabilities, using an RCT design and found significant improvements in daily living skills (i.e., choice management, problem-solving)^{16, 54} compared to controls. Kramer et al.⁵⁴ similarly found improvements in problem-solving over time for a one-to-one e-mentoring program for youth with intellectual and developmental disabilities. Another study evaluated an in-person, group-based mentoring program for youth with intellectual disabilities using a pre-post design and found significant improvements in self-regulation and assertiveness.⁴⁰ Two studies focusing on youth with physical disabilities participating in online mentoring programs found significant improvements in typing skills⁵⁵ as well as Internet and computer skills.³⁴

Types of mentoring models. Of the studies included within our review, five different types of mentoring models were studied. Two studies involved naturally occurring mentoring,^{42, 45} fifteen involved one-to-one mentoring, (see references ^{17, 18, 22, 24, 26, 41, 43, 46, 50, 53, 56, 57, 58, 59, 60}) and eleven studied group-based mentoring programs(see ^{13, 16, 32, 34, 36, 37, 38, 40, 44, 51, 52}). Online or e-mentoring

was studied in 21 evaluations (see ^{13, 16, 25, 33, 34, 35, 36, 39, 47, 48, 49, 51, 54, 55, 58, 61, 62, 63, 64, 65, 66}), revealing both the promise and relevance of this modality given that it helps to address many of the barriers that youth with disabilities often encounter in traveling to meet a mentor. Six studies had mixed models (i.e., combined approaches).^{13,16,34,36,51,58} The studies of naturally occurring mentoring focused on youth with deafness and youth with learning disabilities, whereas the one-to-one based mentoring interventions focused on youth with a wide variety of disabilities including intellectual, learning, and developmental disabilities; autism; blindness; pediatric transplants; acquired brain injury; and various other (i.e., mixed) types of disabilities. The group-based models focused on youth with physical and intellectual disabilities, acquired brain injury, spinal cord injury, autism, and various other types of disabilities. Finally, studies using an e-mentoring approach focused on youth with cerebral palsy; spina bifida; intellectual, learning, and developmental disabilities; blindness; spinal cord injury; juvenile arthritis; and various types of physical disabilities.

CONCLUSIONS

1. Research on mentoring programs and interventions for youth with disabilities shows that there are potential benefits of mentoring on academics, employment, psychosocial health and quality of life, and transition-related and life skills.
2. Given the various mentoring formats and disability types included in the studies, it is difficult to draw conclusions about what formats work best for which types of youth.
3. The limited number of RCTs conducted and the various types of outcomes explored in studies to date only allows for tentative conclusions about the effectiveness of mentoring programs for youth with disabilities.

2. What Factors or Conditions Influence the Effectiveness of Mentoring for Youth with Disabilities?

BACKGROUND

The impact of mentoring—both for youth with and without disabilities—can vary due to individual-level factors (e.g., gender, age, level of commitment), relationship-level factors (e.g., parent support), and program factors (e.g., duration).^{16, 67, 68} Also, the impact of mentoring has been thought to depend on program practices (e.g., training, supervision, characteristics of the mentor).⁶⁹ For example, the impact of a mentoring program may be stronger if the program includes structured training with continued intermittent training and supervision⁶⁷ or if it involves mentors who also live with disabilities.⁶⁹ The impact may depend on program location and organizational culture and climate.

RESEARCH

Research on children and youth with disabilities has not formally tested moderation (i.e., factors influencing the extent to which youth benefit), but qualitative and small-scale exploratory studies suggest some potential factors.

Demographics and type of disability. For example, in one study of secondary and postsecondary students (n=189) with a university-defined disability (e.g., autism, learning disability), the effects of a virtual mentoring program to keep students involved in science, technology, engineering, and mathematics (STEM) were found to vary by type of disability and race/ethnicity.²⁵ More specifically, minority students did not experience gains in self-determination that were apparent for nonminority students. Also, students with attention deficit hyperactivity disorder (ADHD) actually decreased in their math-related self-efficacy, whereas students without ADHD made gains in this area.²⁵ Burgstahler and Chang⁶¹ also found gender differences in the perceived value of a mentoring program for students with disabilities. Male DO-IT program participants reported more interest, or saw more value, in STEM areas of career goals and financial security, while females reported more interest in program areas related to independent living.⁶¹ Thus, although no studies in our review formally examined moderators, these qualitative findings suggest that race/ethnicity, gender, and type of disability may influence program effectiveness and should be prioritized as potential moderators in future studies.

Communication. A small group of studies suggest that communication between mentors and youth may influence the impact of mentoring: stronger communication may foster stronger program benefits. One study involving the DO-IT program found that youth particularly enjoyed “having conversations about their work plans for the future.”⁶¹ It was these types of conversations that

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fostered youth satisfaction and, thus, potentially influenced educational and employment outcomes.¹³ One e-mentoring study with a small group of mentoring dyads (n=9)⁵³ reported that the type of communication style within the mentoring relationship affected its success.⁵³ Another e-mentoring study found that unsuccessful mentoring pairs used a more formal and distant communication style, whereas successful dyads had mentors who used a more informal and supportive communication style.⁶⁴

Communication was also highlighted as important in an evaluation of a mentoring program for young adults with intellectual disabilities on a college campus (n=24 participants across three focus groups).⁵⁷ One of the main themes in this study was that program effectiveness was perceived to be affected by the strength of communication and collaboration across stakeholders (e.g., with parents and professors).⁵⁷ Combined with the findings highlighting the importance of strong mentor-mentee communication, these findings suggest that the effects of mentoring may be strengthened by strong communication on both the dyadic and programmatic levels.

CONCLUSIONS

While the studies within our review did not formally assess factors influencing the effectiveness of mentoring, they suggest some potentially important factors and set the stage for the next phase of research. Next steps for the field should include formally examining the influence of some of these potential moderators.

1. Gender and race/ethnicity of program participants may strengthen or weaken program effectiveness; however, research to understand whether mentoring programs should be designed to target youth with specific types of disabilities or whether a more generic approach could be similarly effective is lacking.
2. Communication (e.g., strength, style) between mentor and mentee emerged as another potential factor that may affect outcomes of mentoring for youth with disabilities.

3. What Processes Are Most Important in Linking Mentoring to Outcomes for Youth with Disabilities?

BACKGROUND

Numerous mentoring conceptual frameworks, models, or theories have proposed possible pathways through which mentoring can benefit youth (see Rhodes⁷⁰; Parra et al.⁷¹). In the field of mentoring for youth with disabilities, some researchers have begun to apply these theories and others (e.g., relational cultural theory) to their research but, to date, there is no single dominant theory for how mentoring impacts youth with disabilities. The studies reviewed in this section are suggestive of some of the important processes that may ultimately lead to positive youth outcomes, such as work, school, or relationship improvements. Where possible, we group studies together by mediator (i.e., the processes through which mentoring achieves its benefits) and/or type of disability.

RESEARCH

Among the studies within our review, there were no direct investigations of processes through which mentoring may influence outcomes for youth with disabilities. However, a group of empirical descriptive and qualitative studies provide some early evidence for important processes that youth experience in these relationships and that may be key in contributing to program effects. Qualitative data are often a first step in understanding how an intervention, such as mentoring, makes an impact. Future studies will need to test these potential pathways.

Social processes. Mentoring relationships can have effects on social processes and relationships (e.g., improved social skills, improved relationships with parents or peers). In addition, the impact of mentoring on specific youth outcomes, such as employment and college success can be achieved *through* effects on other relationships, making these relationships an important process in linking mentoring with outcomes. For example, using data from the classic Big Brothers Big Sisters evaluation,⁶⁸ Rhodes et al.⁷⁰ found that the impact of mentoring on academic outcomes occurred, in part, through improved relationships with parents.

One small qualitative study of 22 adolescents with physical disabilities, such as spina bifida or cerebral palsy, were connected with 5 mentors online for 25 sessions over 6 months.⁵⁵ Youth's responses to semistructured interviews postintervention suggest that they felt the program increased their social connections with other teens, reduced their feelings of loneliness, and increased their feelings of social acceptance.⁴⁷ A second qualitative study with adolescents with

autism spectrum disorders reported that both youth and other stakeholders (e.g., parents, mentors, staff) had improved social connectedness and willingness to take social risks.⁴⁶ These social outcomes could certainly foster distal improvements in a wide range of areas.

Learning processes. Another important process that research suggests could mediate the ultimate outcomes of mentoring is knowledge or learning. Two studies suggest that youth learn important information through mentoring. One study examined the use of peer mentors for youth in a cosmetology program and found improvements in work-related performance; one youth reported that a peer mentor provided them an opportunity to learn and “ask questions that¹⁴ they may have been hesitant to ask before working with (their mentors).”⁵⁸ There was learning taking place through the provision of the peer mentorship program, which focused on praise, corrective feedback, and demonstrations.⁵⁸ These types of processes could then support further positive outcomes.

Another mentoring program, the Family Employment Awareness Training (FEAT), focused on improving competitive employment for youth with disabilities and reported that expectations and knowledge improved through the program.^{37, 38} Relatedly, Barnard-Brak and colleagues²⁴ conducted a study involving 43 high school students attending a one-to-one mentoring program aimed at improving academic outcomes for students with a variety of disabilities. Participation improved youth’s attitudes toward help-seeking (e.g., requesting accommodations).²⁴ As stated earlier, theories have suggested cognitive, emotional, and modeling pathways to ultimate outcomes in mentoring, and some of these preliminary qualitative studies suggest that examining attitude change and enhanced knowledge may similarly inform our understanding of how mentoring influences outcomes for youth with disabilities.

Self-determination. Some research suggests that self-determination is an outcome of mentoring participation. One study further suggests that it also may help to explain how mentoring achieves impacts on quality of life.⁵¹ “Take Charge” is a mentoring program for youth enrolled in special education and involved in the foster care system. An evaluation of this program reported that self-determination partially mediated, or explained, effects on enhanced quality of life for participants.⁵¹ Another study found that e-mentoring was empowering for youth with special needs.⁶⁵ While the study did not test empowerment, or self-determination, as a potential mediator, it could be important in fostering other positive outcomes. Although the field of mentoring for youth with disabilities is in its infancy, these two studies together suggest that fostering the process of enhancing self-determination and empowerment may be important; however, research in this area is notably limited.

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Emotional support. Finally, emotional support is a common process that is addressed by mentoring programs for many different groups of youth, as it is a key process in youth development. One qualitative study on youth with hearing impairments reported that emotional support, in addition to advice-giving and role modeling, were important for mentees in achieving career success.⁴² Informal mentors provided a foundation for the mentees to break through common barriers to career success (e.g., lack of self-belief) for deaf youth. The relationships assisted these youth by advocating for

additional needed support services and having faith and belief in them as they struggled to move forward in their lives.

CONCLUSIONS

1. Potential areas for formal tests of mediation roughly map onto previous conceptual models of youth mentoring, namely a socioemotional mediating pathway, a cognitive pathway, and a modeling pathway.
2. Overall, the field of mentoring interventions for children, youth, and young adults with disabilities needs to move beyond qualitative research to rigorously test potential mediators that have emerged as important in qualitative studies.

4. Have Mentoring Programs and Supports for Youth with Disabilities Reached Intended Youth, Been Implemented with High Quality, and Been Adopted and Sustained?

BACKGROUND

Studies included in this review focused on mentoring programs designed specifically for youth with disabilities. These programs have shown some evidence of reach through their ability to enroll a targeted number of participants. However, with the exception of the DO-IT program, most of the mentoring programs discussed in this review have not been adopted on a wider scale. Our review indicates that relatively little is known about best practices for setting up a sustainable and effective mentoring program for youth with disabilities.

RESEARCH

Challenges in mentoring youth with disabilities. Several studies in this review highlighted challenges encountered by programs and the mentors they support when serving this population. Some mentors found it difficult to engage youth and to develop a rapport with them,⁷² particularly engaging younger mentees in career development conversations. This may have been a result of youth with disabilities often starting to think about employment and careers at a later stage compared to youth without disabilities.²⁸ Communication style was highlighted in Shpigelman and Gill's⁶⁴ study where they noted that unsuccessful mentoring was associated with a more formal style and distant tone. Others similarly reported challenges common to mentoring other populations of youth—for example, that having a mismatch in the values, work styles, or personalities of the youth and mentor, combined with distancing behavior⁶⁴ hindered communication. Pham²⁶ found that building positive mentoring relationships requires sustained rather than time-limited or random efforts. Mentors need to think about communicating in a way that enhances trust and reduces feelings of alienation.²⁶ This work suggests that additional and/or tailored training and support beyond that which is provided in more typical mentoring programs is needed when working with

this population to ensure that mentors are adequately prepared for the unique challenges that these youth are experiencing.

Other studies highlighted difficulties with the accessibility of the program setting,⁷³ challenges in arranging transportation,^{17, 73} and/or overprotective parents.⁷³ Other hurdles specific to mentoring youth with disabilities include that there is not a “one-size-fits-all” approach; mentoring programs should be designed specifically for the youth and type of disability that they are targeting.³ It is also difficult to assimilate persons from diverse backgrounds, needs, and abilities into one mentoring program.⁴² Barnfather et al.⁵⁵ also noted that the age and ability level of the participants need to be considered when matching them.

Others (e.g., Pham²⁶) discovered that a program’s own evaluation efforts may be challenged given that youth with learning disabilities, autism, and intellectual disabilities had difficulties completing some of the self-assessment outcome measures. Bedell et al.⁷⁴ found that youth with acquired brain injury had social participation barriers and fewer strategies for overcoming them compared to youth without disabilities. Because mentoring is an inherently social activity, some youth with disabilities may need support and resources beyond that which is provided by mentoring to help them achieve their goals. Other challenges noted by programs mentoring youth with disabilities include lack of mentor training, length of time for mentoring,^{17, 49, 64, 75} difficulty locating mentors,⁷⁶ and challenges specific to e-mentoring (e.g., connectivity, security, privacy).²⁵

Other studies highlighted difficulties with the **accessibility** of the program setting, challenges in **arranging transportation**, and/or **overprotective parents**. Other hurdles specific to mentoring youth with disabilities include that there is **not a “one-size-fits-all” approach**; mentoring programs should be designed specifically for the youth and type of disability that they are targeting.

Reach and engagement. Very few studies in this review reported on reach and engagement (i.e., participation in the program). Of those that did, one study reported a mean engagement of 8.53/10 (i.e., participants self-reported on their engagement level with the program).⁴⁹ The Kramer et al.⁵⁴ study reported that mentees had high rates of attendance (87 percent) in peer mentoring calls and high rates of engagement within these calls, suggesting that mentoring is a promising approach for engaging this population. They also noted that some mentors with disabilities relied on a script to maintain engagement with participants.⁵⁴ The highest rates of fidelity were achieved when addressing objectives related to participants’ unique interests and strengths or goals.⁵⁴

Powers et al. found that having experiential and hands-on activities (e.g., visiting colleges, shadowing professionals on job sites, touring STEM clubs and organizations, volunteering) helped to increase engagement in the mentoring relationship.⁷² Francis et al.³⁷ further noted that having small group activities helped with engagement of participants. Others⁵⁷ reported that clearly articulating the expectations of mentors at the outset helped with participant engagement. Requiring a social component (i.e., meeting face-to-face) is also a catalyst for more frequent, spontaneous, natural interactions, helping to foster a meaningful bond.

Three studies highlighted that e-mentoring can help to reach and engage youth because it uses a convenient format, can reach youth in remote locations, and is anonymous.^{15, 25, 77} Gregg et al.,^{25, 48} for

example, found that a collaborative use of online learning modules, in which mentors and participants met to complete these modules, was essential to participant engagement (i.e., participation in the program). Another aspect of engagement, noted in two studies,^{16, 78} was the importance of having family supports and engaging family members in the intervention.

Quality of implementation. Six studies within this review reported that their mentoring program or intervention was feasible and acceptable to the participants.^{17, 22, 46, 54, 66, 74}

Adoption and sustainability. Some studies within this review reported on the adoption and sustainability of mentoring programs for youth with disabilities. For example, Stumbo et al.¹⁵ found that e-mentoring can be used to create and sustain a community that benefits both peers and mentors. These authors argue that engaging youth early on (i.e., beginning of college) can help to sustain their participation in mentoring over the longer term.¹⁵ Francis et al.^{37, 38} suggested that their program (FEAT) could be formatted as a professional development program for employment agencies to reach vocational rehabilitation counselors, job coaches, and other employment-related professionals. The authors also highlighted the potential for this program to expand to other states. They argue that expanding into schools would provide a sustainable foundation for teachers to empower their students.^{37, 38} Burghstahler and Crawford⁷⁷ noted that the steps involved in sustaining an e-mentor community include: establishing goals for the program; selecting appropriate technology for the communication; developing the community structure; developing guidelines for protégés, mentors and parents; standardized procedures for recruiting, screening, and orienting participants; providing supervision and ongoing support of mentors; managing the mentor-mentee discussions; and evaluating the program.

Furthermore, Kramer et al.⁵⁴ emphasize that community-based organizations adopting e-mentoring should consider partnering with local colleges or vocational training institutions, which could help provide students with valuable hands-on experience and ensure that they also have access to qualified personnel.⁵⁴ E-mentoring could help to sustain the program because of its ease of access.

CONCLUSIONS

1. Several mentoring programs that are designed specifically for youth with disabilities appear to have successfully engaged substantial numbers of youth on a local level; however, most of these programs have not been adopted on a larger scale.
2. Research on the factors influencing the adoption and longer-term sustainability of the programs is lacking.
3. Challenges in mentoring youth with disabilities are similar to those found in mentoring programs for youth without disabilities, with the exception of the accessibility of the program.

IMPLICATIONS FOR PRACTICE

(Mike Garringer, *MENTOR: The National Mentoring Partnership* and Genelle Thomas, *Partners for Youth with Disabilities*)

As noted in the review of the research presented on the preceding pages, there is considerable evidence that mentoring relationships can be beneficial to youth with disabilities in a wide range of aspects of their lives, including their education, careers, engagement with the community at large, and their own sense of identity, direction, and purpose. This evidence is especially important given the high prevalence of disability within the U.S. population. With one in five people experiencing some type of disability, it is a virtual guarantee that all mentoring programs are serving youth with disabilities (even when the program does not proactively recruit youth with disabilities). Therefore, whether a mentoring program explicitly engages youth with disabilities or whether the inclusion of youth with disabilities has occurred in a less intentional way, all mentoring programs should be prepared to adopt an inclusive approach to ensure that youth with disabilities are being served in a meaningful, equitable way.

Despite the evidence of the value of mentoring for youth with disabilities, the review also notes challenges that practitioners can face in providing meaningful mentoring to these youth. Here we attempt to review some of the programmatic and relationship factors that can maximize the benefit of mentoring for youth with disabilities, building on the content of the review to support practitioners in developing inclusive, responsible, and meaningful mentoring services.

1. **FIRST AND FOREMOST, PROGRAMS SHOULD ENSURE THAT THEIR SERVICES ARE ACCESSIBLE FOR YOUTH WITH DISABILITIES IN THEIR DESIGN AND DELIVERY.**

A number of included studies discussed the challenges mentoring programs encountered with accessibility-related issues. The most foundational step a program can make around disability inclusion is to ensure a physically accessible environment. Program meetings and events should only be held in accessible locations and if transportation is provided, that transportation should be accessible to everyone. Examples of very basic accessibility include accessible bathroom facilities, clear signage, a level entrance to a building, accessible parking, meeting rooms with enough space for wheelchair access, and an elevator if a meeting is held above the first floor.

Accessibility can also include less obvious (but still important) steps, such as having materials available in alternate formats, asking about and providing reasonable accommodations, and providing a low-stimulus area. To download a no-cost tip sheet and checklist, "Disability Inclusion Tips for Youth Sports and Recreation Programs," go to: https://www.pyd.org/blog/wp-content/uploads/2018/07/PYD-Tips-and-Checklist_Printable.pdf.

Online or electronically delivered mentoring models also need to pay attention to accessible design. Although they may not have physical spaces that youth and mentors visit in person, they certainly offer virtual spaces that need to be just as accessible. Please see section 5 on

e-mentoring platforms below for further discussion about how virtual mentoring programs can ensure accessibility for all.

In addition to physical accessibility, programs should ensure programmatic accessibility by understanding and using Universal Design for Learning principles. Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn. When programs take a proactive approach to developing trainings and activities, all youth participants are more engaged and retain more information. Programs can gain knowledge around UDL through CAST (www.cast.org). Programs and professionals can evaluate their own accessibility by accessing no-cost online inclusion self-assessments on the Partner's for Youth with Disabilities (PYD) Pathways to Inclusion eLearning network. By registering on <http://p2i.pyd.org>, individuals can measure their individual and organizational strengths and areas for growth in key areas, allowing them to focus on their greatest area of need for future training. Additional training materials can be found at no cost on the PYD website (<https://www.pyd.org/guidebooks.php>) or through online courses on the Pathways to Inclusion network for a nominal fee. Readers should also note that there are UDL concepts for physical spaces as well, making this a principle that can be woven into all efforts to make a program's physical, virtual, and educational spaces accessible and valuable to all.

2. FOCUSING ON PERIODS OF TRANSITION FOR YOUTH WITH DISABILITIES MAY BE ESPECIALLY BENEFICIAL.

Included in this review were several examples of mentoring programs that intentionally served youth with disabilities at key transition points. This included examples related to educational and career transitions, as well as transitions out of services, such as leaving the child welfare system. Mentors can be tremendous assets in supporting transition planning and in helping mentees navigate other services and acclimate to new environments and routines. This can include transitions that are both sudden (e.g., the Back on Track to Success program³² that worked with youth who had experienced a spinal cord injury and needed help returning to familiar activities with new limitations), as well as those that are known well in advance (e.g., the work of Powers and colleagues focused on transitions to independent living as youth aged out of juvenile services).^{16, 51}

One key point related to transitions that practitioners and program developers should keep in mind is that these transition points often happen at later ages for youth with disabilities than they do for their peers. Due to the Individuals with Disabilities Education Act, some youth with disabilities choose to remain in high school until age 22, which extends their transition period compared to their peers without disabilities. Similarly, there may be delays in entering the workforce, living independently, or in other major life milestones. Programs may want to expand the age ranges they serve so that they can meet youth with disabilities where they are on their progression toward key milestones. Many service providers increase the upper limit of the age range they serve, with some including youth up to age 26 to reflect the reality of the timelines that youth with disabilities may experience. Unfortunately, many youth age out of

“juvenile” services long before they are practically ready, so keep in mind that mentoring that supports these stressful transition points may be very beneficial to these youth.

3. A SELF-DETERMINATION APPROACH CAN BE PARTICULARLY EMPOWERING FOR YOUTH WITH DISABILITIES.

Many youth with disabilities face barriers to making independent decisions. Even well-intentioned supports in healthcare, education, and family life can leave youth feeling like they have little say in how they participate in the world and the paths that are open to them. Mentoring programs, and mentors, may be uniquely positioned to help young people with disabilities think about and strategize about life plans that are important to *them*. The research review offers several excellent examples of this type of programming in action, especially in the Take Charge³⁶ and My Life⁵¹ programs, which support the transition out of the foster care system. These programs offer intensive transition planning and dogged pursuit of specific goals set by the youth (along with very little coaching from the mentors or staff about what is a “worthy” goal to pursue). Many of the features of these programs are designed to give the mentee the authority to guide activities, seek additional resources, and set timelines and milestones. This type of approach is often a breath of fresh air to youth who are used to authority figures telling them what their experiences will be based on their disability. Unsurprisingly, reports of self-determination predicted, in part, the other outcomes of the Take Charge program,³⁶ particularly perceptions of overall quality of life.

One simple way that programs can start a self-determination approach is to give youth with disabilities extensive say in who they are matched with. For example, some may want a mentor with a similar disability who can teach them how to overcome the specific barriers that their disability provides. Other youth with disabilities may want a mentor with a specific skill or who can connect them to career opportunities. What is important is that the program is not prescriptive in the type of mentor they offer the young person. By allowing these mentees to say, “This is what I want to achieve and here is who I want to help me get there,” programs are giving a gift that goes well beyond the support the mentor actually provides.

Programs can also ask mentors to explicitly engage mentees in activities that help them envision potential directions for their lives and allow for focused goal setting and asset mapping. This type of activity can greatly improve mentee feelings of self-competence, agency, pride, and life satisfaction, even if they don’t reach their ultimate goals. A self-determination approach emphasizes the quality of the journey, not just the destination.

4. TEACHING AND PRACTICING ADVOCACY, BOTH FOR SELF AND OTHERS, CAN ALSO EMPOWER YOUTH WITH DISABILITIES.

Another skill mentors can teach that pairs well with a self-determination approach is the concept of self-advocacy. This empowers youth to stand up for themselves more effectively when interacting with institutions, such as schools or workplaces, and in their personal relationships, including with parents and other adults. Teaching youth to identify and respond to situations where their rights are discounted or when their decisions are negated will help

them not only fight back against discrimination but also access the proper supports and resources to pursue their goals.

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Practicing **self-advocacy skills** with a mentor can help **prepare youth with disabilities** for situations where they need to push back against authority or protect their rights. It can also build **self-confidence** and feelings of **self-worth**.
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This self-advocacy may be especially important for older youth who are on the cusp of aging out of services or special protections under the law. Youth with disabilities under the age of 18 are *entitled* to certain services, accommodations, and protections under the law, but upon entering adulthood are only *eligible* for services and protections and often have to

request or even fight for them in the systems and institutions they will interact with in their young adulthood. Practicing these skills with a mentor can help prepare youth for situations where they need to push back against authority or protect their rights. It can also build self-confidence and feelings of self-worth.

While a self-advocacy approach can be instrumental in building a sense of self and in achieving personal goals, mentoring programs may also want to encourage youth with disabilities to go beyond their own journey and engage in civic activities, advocacy, and activism that improves the well-being of all people with disabilities or other underserved groups. One of the most popular ideas in recent years in the youth mentoring field is that of “critical” mentoring, which builds on the concepts of critical race theory, pedagogy of place, and other critical perspectives to focus the impact of mentoring beyond the individual to larger communities and groups of people. Most notably, this work has been championed by academics like Torie Weiston-Serdan, whose seminal work *Critical Mentoring: A Practical Guide* argues that mentoring programs have an obligation to not only help youth cope with the negative impact of living in “toxic” environments (both literally and metaphorically), but to also help youth do transformative work at the community level in an effort to, as she phrases it, “clean the air and purify the water.”

This approach may have particular appeal to youth with disabilities who, as noted above, have often experienced frustrations with institutions, agencies, service providers, and a society that generally is not inclusive and can neglect, if not outright ignore, their needs. They may find tremendous purpose and passion in advocacy or activism that helps address causes of systemic discrimination or disenfranchisement. They may also have passions that are totally unrelated to disability, but from which they have been excluded from having and acting on their voice. Mentors can be especially supportive in helping young people understand the root causes of systemic discrimination and underrepresentation and, in turn, develop strategies to combat these things in the real world. Youth may also find supportive peer relationships and a broader community by engaging in activism and other forms of civic engagement. So, while much of the mentoring journey should be focused on personal development and growth, programs are encouraged to remember that many youth often relish the opportunity to channel their passions to change the often dismissive world they were born into.

5. E-MENTORING PLATFORMS OFFER AN OPPORTUNITY TO BUILD CLOSER RELATIONSHIPS, AS WELL AS EXPAND CIRCLES OF SUPPORT FOR YOUTH WITH DISABILITIES.

Of note in this review are the numerous examples of online mentoring programs and the use of technology to supplement and support mentoring relationships that also meet face-to-face. Online communication platforms can help youth with disabilities overcome many barriers to accessing the help of a mentor, particularly those that involve limited physical mobility. The ability to communicate with a mentor without leaving home can give these youth another pathway to getting the support they need, particularly in instances where there are transportation barriers, such as a lack of accessible public transit, instances of inclement weather that disproportionately impact those with disabilities, or for isolated rural youth who can find it especially challenging to meet face-to-face.

Increasingly, all youth, but especially youth with disabilities, are comfortable using digital platforms as the *primary* way of communicating. While this can be unfamiliar territory for older mentors, many youth today may prefer text-based communication to in-person meetings or even talking on the phone. Text-based communication can be helpful for youth who have trouble communicating orally because of a disability or who face anxiety bringing up certain subjects in person. In fact, many youth may prefer to discuss difficult or painful experiences and fears within the relatively safe space of a “chat,” where the distance between the participants can somewhat mask feelings of pain and frustration and where they have more control over the flow and depth of the conversation. Mentors working with youth with disabilities are encouraged to accept these communication alternatives and recognize that online platforms can actually enhance the relationship and the mentor-mentee bond rather than subvert it.

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Online chat groups and message boards can expose youth with disabilities to a chorus of supportive voices and other perspectives, which can be especially helpful in **career exploration** or **transition-focused programs**.

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Online platforms also offer another advantage for youth with disabilities: access to a wider pool of mentors. Online chat groups and message boards can expose youth with disabilities to a chorus of supportive voices and other perspectives, which can be especially helpful in career exploration or transition-focused programs. This wider pool of mentors can help offset the impact of a mentor-mentee pair that is not “meshing” as intended, while also providing access to more social capital and networking opportunities that can help with career transitions or academic pursuits.

Of course, one key to providing meaningful online mentoring opportunities to youth with disabilities is doing so on platforms that are designed with their needs and limitations in mind. Programs offering some form of e-mentoring should work with a competent designer

who understands online disability issues and can ensure that the platform or technology will be accessible and easy to use for a variety of potential disabilities. This is yet another area where the principles of UDL can play a role in ensuring that technology platforms work not only for youth with disabilities but for *all* users. Common elements of accessible design include making text high-contrast with the background for low-vision or colorblind users and providing alternative text and transcripts for page elements such as images and any audio or video files. Once again, qualified designers can help ensure that all elements of online platforms will work with screen readers and other assistive technology, meeting the needs of all users.

One good example of a well-designed platform that is not only functional for youth with disabilities, but also hits on some of the additional benefits of e-mentoring noted here, is the Campus Career Connect platform (c3.pyd.org) developed by Partners for Youth with Disabilities. Campus Career Connect (C3) was created to aid transitioning young adults with disabilities from school to work and connect them to mentors within their desired career field. By promoting job readiness, inclusion, and advocacy training and advice, C3 mentors help make the transition from school to employment positive and socially impactful. Mentoring on C3 can be found through the platform's use of online events, local job listings, networking, résumé building, soft- and hard-skill coaching, and an interactive forum space for questions and advice. C3 was designed by Thunder Media and was created to be fully accessible and meet the standards set by the Web Content Accessibility Guidelines (WCAG).

6. ENSURE THAT MENTORS FOR YOUTH WITH DISABILITIES ARE WILLING TO COMMIT TO MAKING THE RELATIONSHIP SAFE AND POSITIVE.

It goes without saying that all young people in mentoring programs deserve a relationship that is safe, supportive, and aligned with their needs and dreams. But youth with disabilities may be especially sensitive to experiences that fall short of this type of responsiveness. They may have a long history with “helping” services that are anything but helpful, and may be especially sensitive to feelings of rejection, bullying, and isolation from their peers. This means that mentors who are paired with youth with disabilities must possess some special characteristics that reduce potential harm and allow them to effectively serve youth with disabilities:

- They must commit to sticking with the match through all the ups and downs they may experience. All mentors commit to this at some level, but youth with disabilities might especially need someone to be a stable, constant, unwavering presence in their lives. This makes mentors who are likely to be mobile in their lives, or who seem unsure about taking on the challenge, a poor fit for mentoring a young person with a disability. These mentors also must be patient, especially with the possible extended transition to adulthood noted earlier. Programs must emphasize the nonnegotiable nature of meeting frequency and longevity of these relationships to prospective mentors.
- They must commit to learning about their mentee's disability and the impact that disability has on their life and their pursuit of goals. This includes becoming aware of

how to talk about the disability, either with the youth directly or with others, in ways that do not add to the stigma that these youth may already be experiencing. Mentors can follow the youth's lead in how they talk about and respond to disability within the relationship—an approach that can empower youth and allow them to determine what the relationship looks like. Programs can support mentors in this endeavor by providing trainings and learning materials related to disability etiquette and inclusive communication.

- They must have the capacity to express empathy, understanding, and compassion, while also challenging their mentee to grow and expand their horizons. This is a delicate balancing act, but mentors can be instrumental in encouraging mentees with disabilities to try something new or to take a risk—something other adults in their life may have discouraged. Mentors also have to be able to express empathy and understanding for those times when the youth may face barriers related to their disability. And most critically for mentors who themselves have a disability: they must be willing to talk about their own journey. While the research noted in this review is unclear on whether youth benefit more from having a mentor with a shared disability, there were qualitative examples in the literature (most notably Powers and colleagues^{36, 51}) where having a mentor who was willing to share their personal journey of overcoming adversity related to their disability was absolutely critical in helping the young person feel hopeful and inspired for the hard work that may lay ahead for them.

RECOMMENDED RESOURCES ON THE NMRC WEBSITE

- [Best Practices for Mentoring Youth with Disabilities](#)
- [Starting a Mentoring Club in your High School for Students with Disabilities](#)
- [Supporting Students on the Autism Spectrum: Student Mentor Guidelines](#)

OTHER RELEVANT ONLINE RESOURCES FOR SUPPORTING YOUTH WITH DISABILITIES

- [Kids as Self Advocates](#)
- [National Consortium on Leadership and Disability for Youth](#)
- [National Gateway to Self-Determination](#)
- [National Youth Leadership Network](#)
- [Self-Advocates Becoming Empowered](#)

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