

JOURNAL OF DISABILITY STUDIES

# Unleashing Potential: Empowering Individuals with Intellectual Disabilities through Effective Counseling

# Yuleinys A. Castillo

California State University, Fresno, USA

Received on: March 6, 2025 Accepted on: April 14, 2025

### ABSTRACT

Counselors play a crucial role in understanding the unique personal and social needs of individuals with intellectual disabilities (ID). This review explores how various factors—including family dynamics, school environment, and societal stigma—influence assessment, diagnosis, and interventions. Emphasis is placed on strengths-based, family-centered, and early intervention approaches to empower children and adolescents with ID. Understanding the intersecting roles of caregivers, educational institutions, and social systems can enhance service delivery and promote inclusion. Counselors can help individuals with ID become active, contributing members of society through supportive, collaborative, and evidence-based practices.

Keywords: Intellectual disability, adolescents, stigma, strengths-based intervention, inclusive education

# INTRODUCTION

When working with children and adolescent clients who have intellectual disabilities, it is important to consider the impact of the diagnosis and assessment considerations. Doing so will lead to appropriate and effective interventions. Intellectual disability (ID), formerly known as mental retardation, affects intellectual ability and adaptive behavior (Stavrakantonaki & Johnson, 2018). It is a term that encompasses the behavior of a very diverse group of people with different backgrounds and abilities. The individual with ID experiences significant limitations in intellectual ability and adaptive behavior before the age of 18 (Tassé et al., 2016). This neurodevelopmental disorder group ranges from individuals with severe developmental disabilities, who need constant care, to individuals with mild cognitive delays. Due to the diverse ability in this group, there are many potential outcomes, opportunities for community participation, and venues for inclusion in their communities.

Individuals with ID have intellectual and adaptive functioning deficits with a reported prevalence between 1% and 3% of the population (Patel et al., 2018). Approximately 6.5 million people in the United States

©IS Publications ISSN: 2454-6623 http://pubs.iscience.in/jds

have an intellectual disability with an onset of intellectual and adaptive deficits occurring between infancy and adolescence (Peacock, 2019). Intellectual disability lacks specific physical traits but dysmorphisms may be the earliest sign with some conditions (Kliegman, 2020). In addition, intellectual disability is often grouped with developmental disabilities. There are many types of ID with diverse causes and level of severity. Medical professionals have identified many causes for Intellectual disabilities including genetic conditions, issues during pregnancy, birth complications, and health conditions (Kliegman, 2020).

Regardless of a specific condition, individuals with ID have certain intellectual functioning limitations including communication, social and self-care skills (Patel et al., 2020). They also experience learning difficulties, and struggle with processing new information, knowledge application, solving problems, and thinking creatively (Farrell, 1997; Hollomotz, 2018). Most children with ID fall behind their peers in meeting developmental milestones and age-appropriate expectations (Patel et al., 2020). Children with ID develop and learn more slowly than children without an intellectual disability learn. Additionally, children and teens with disabilities may have challenges completing everyday social and engaging in practical activities. Counselors can provide proper assessment by understanding the lived experineces of children and teens with disabilities and considering effective interventions that can lead to effective treatment.

<sup>\*</sup>Corresponding Author's Email: yuchas@aim.com

**Cite as:** Castillo, Y. A. (2025). Unleashing Potential: Empowering Individuals with Intellectual Disabilities through Effective Counseling. *Journal of Disability Studies*, Epub

### Assessment considerations

There are many guidelines that help one to assess conditions. Guidelines and tests available to diagnose children with an intellectual disability are critical to ensuring that one understands the limits and strengths of an individual client. An intellectual disability leads to limitations in both intellectual abilities and adaptive behavior shaping conceptual, social, and practical skills. Since an intellectual disability influences a person's quality of life and social integration in multiple levels, clinicians need to consider range of abilities and interpersonal qualities when assessing for an intellectual disability.

When working with children and teens with potential symptoms of an intellectual disability, clinicians need to understand the impact of this condition on day-to-day activities. According to the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, (5th ed.; DSM-5; American Psychiatric Association, 2013), an intellectual disability (intellectual developmental disorder) has an onset during the developmental period that includes both intellectual and adaptive functioning deficits in conceptual, social, and practical domains. Similarly, the American Association on Intellectual and Developmental Disabilities (AAIDD) defined intellectual disability as a disability characterized by significant limitations in both intellectual functioning and adaptive behavior as expressed in conceptual, social, and practical skills that originates before the age of 18 (Schalock et al., 2021).

During diagnosis, clinicians consider guidelines set by well-respected professional agencies and experts. For instance, the American Association of Intellectual and Developmental Disabilities established that an individual has an intellectual disability when the person meets three criteria: 1. Intelligence Quotient (IQ) is below 70-75; 2. There are significant limitations in two or more adaptive areas (skills that are needed to live, and play in the community, work, such as communication or self-care); and 3. The condition manifests itself before the age of 18. The DSM- 5 also explains that the diagnosis of intellectual disability requires deficits in intellectual function, deficits in adaptive function, and onset before the age of 18 (Table 1). An impaired adaptive function happens with an individual displays deficiencies in personal independence and social responsibly in comparing to the individual's age and cultural group (Tassé et al., 2016).

In the diagnosis and assessment of individuals with neurodevelopmental disorders, such as intellectual disabilities, the measurement of global intellectual functioning is usually included. A test of intelligence or cognition provides an Intelligence Quotient (IQ) score used to diagnose an intellectual disability (Sansone et al., 2014). The Wechsler Intelligence Scale for Children-Fifth Edition (WISC-V), which can be administered to children ages 6 to 16 years, is the most frequently used scale for assessing intellectual function in children and adolescents (Flanagan & Alfonson, 2016). While there are other means to assess mental capacity for reasoning, learning, and problem solving, IQ is currently recommended as a criterion of general cognitive ability in the DSM-5. An IQ of around 70 or below, obtained using a standardized, individually administered intelligence test indicates significant deficits in cognitive functioning (Sansone et al., 2014).

In addition to IQ, clinicians also evaluate clients' behaviors and adaptive behaviors related to coping skills and social interactions (Little et al., 2017). Furthermore, clinicians assess self-care, social skills, communication skills, social participation and independent living skills. While an IQ score may be below 70, clinicians need to assess adaptive behavior holistically. For instance, an individual with an IQ below 70 with positive adaptive function would not meet the criteria for an intellectual disability. On the other hand, an individual with a 70 IQ or higher with severe adaptive function deficit falls under the classification for an intellectual disability. Medical tests can also be used to determine intellectual disability.

Blood test, ultrasound or other medical methods may lead to a diagnosis for intellectual disability and other conditions during pregnancy or after birth (Kliegman, 2020). Newborn screening uses blood samples while newborns are still in the hospital to identify any conditions that lead to ID. Clinicians should use evidenced based clinical practices for differential diagnosis and consider mitigating factors that could affect cognitive and adaptive functioning. Therefore, clinicians must assess clients holistically, including assessments, third party reporting and medical reports to properly diagnose an intellectual disability. Children growing up with an intellectual disability may face challenges.

### Growing up with an intellectual disability

When working with a child or teen with an intellectual disability, it is critical to consider the client's lived experiences, adjustment to abilities, and community participation. Children and adolescents with an intellectual disability experience limitations in mental functioning and skills that affect their personal interactions, general wellbeing, and social participation. They may struggle with communication, social, learning, and adaptive skills in different social settings. In addition, these children may learn and develop more slowly than a child without an intellectual disability develops (Schuengel et al., 2019). A child with an intellectual disability, or cognitive disabilities, may also take longer to communicate, walk, and manage

independent living skills. Furthermore, the level of intellectual disability varies greatly in children leading to unique abilities and needs. It is important to consider the level of impairment.

Considering the degree of impairment, experts use intellectual disability categories: mild, moderate, severe, and profound (Patel et a., 2020). Researchers from the Centers for Diseases Control and Prevention (CDC) reported on an estimate of the number of children with intellectual disabilities by looking at 8-year-olds in several communities across the United States (Patrick et al., 2021). CDC researchers described that 1.2% had IQ scores of 70 or below meeting the score for an intellectual disability diagnosis with most children (78%) having a mild intellectual disability while 12% had a moderate classification and one percent were considered severe or profound. (Patrick et al., 2021). In the same study, boys and Black children were twice as likely as girls and White children to have an intellectual disability. Therefore, clinicians need to consider the impact of clients' individual characteristics and experiences that may affect diagnosis and treatment.

Children and teens with intellectual disabilities have unique characteristics that shape their lived experiences. Clinicians need to understand the potential impact of diversity traits (e.g., gender, sexual orientation, social economic status, spiritual/religion preferences, race/ethnicity, etc.) on having an intellectual disability. In a recent study, the evaluation of male individuals with intellectual disabilities was positive while female participants received social judgment (Coleman et al., 2015). Likewise, gender, race, education level, and cash benefits were significantly associated with employment outcomes for youth with intellectual disabilities (Kaya, 2018). When considering the intersection of race, gender and disability, African American students with intellectual disability were more likely to have juvenile justice contact with no grace or excuses from behaviors than other groups (Mendoza et al., 2020). Therefore, clinicians need to consider the intersectionality of multiple identities influencing the disability adjustment and social participation of children and youth with intellectual disability. Considering these factors can lead to better outcomes and support for these individuals.

Adequate service supports for children and teens with disabilities may address limitations on everyday activities functioning. Most children could learn a great deal of abilities and skills that could lead to a partially or even fully independent live as adults. Many children may also have other conditions along with an intellectual disability such as autism spectrum disorders, cerebral palsy, and depression. In the United States, each state offers educational and support services for children and adults with intellectual disabilities to promote community inclusion and participation. Clinicians working with children and teens with intellectual disabilities need to understand support services available to their clients that can improve quality of life and increase social inclusion.

### **Societal Factors**

Within society, those who are different may struggle with inclusion in society. Clinicians need to recognize the impact of societal views and access to services, when working with children and teens with intellectual disabilities. Health disparities are health differences that result from systematic forces reflecting social injustice affecting social disadvantaged groups (Braveman et al., 2011). The COVID-19 pandemic exposed social inequalities leading to conversations about health disparities among marginalized groups, including individuals with intellectual disabilities. While challenges existed before the pandemic, professionals need to consider limited access to education and health services (Jeste et al., 2020) and potential negative impact on the mental health of children and teens with intellectual disabilities due to social isolation and restrictions.

Moreover, clinicians need to contemplate health disparities of children and adolescence with intellectual disabilities to improve service delivery. In previous systematic reviews (MacRae et al., 2015; McVilly et al., 2014), individuals with intellectual disabilities had higher prevalence figures for diabetes than people without disabilities due to genetics, lifestyle, and health issues. People with intellectual disabilities also have higher mortality and morbidity rates than others and are at increased risk of having multiple, chronic, and complex health conditions (Stancliffe et al., 2020). Moreover, they are more likely to eat unhealthier, exercise less, and lead a more sedentary lifestyle than people without disabilities. Finally, they are more likely to be unemployed and reliant on government support than individuals without disabilities (Bollard et al., 2018). These health disparities affect not only clients' general wellbeing but also access to services, services adherence, counseling-client relationship, and social integration.

While policies and legislation aim to improve the inclusion of children and teens with intellectual disabilities, clinicians need to ascertain the impact of social practices and behaviors on clients' wellbeing. For young people with disabilities being accepted by peers, feeling valued, and having supportive relationships with adults increased their sense of belonging and connectedness (Foley et al., 2012). Interpersonal relationships and community participation, core domains of quality of life, may also facilitate positive outcomes for social inclusion of young adults with intellectual disabilities (Louw et al., 2019). Despite social efforts to promote social inclusion, children with

disabilities still report feeling lonely and excluded with limited social contact outside of home while facing systemic barriers (Woodgate et al., 2019). Bullying, discrimination, unequal access to healthcare and social services, and inadequate policies are some examples of systematic barriers affecting children and teens with intellectual disabilities. Part of this may be due to stigma related to intellectual disabilities.

Stigma represents a significant challenge for children and teens with intellectual disabilities. Stigma involves differential power between groups leading to negative attitudes and mistreatment against someone based on a specific characteristic (Pescolido & Martin, 2015). Intellectual disability is a person's attribute that tends to resulting be devalued in stereotyping and discrimination. Stigma influences multiple life domains associated with wellbeing and quality of life including poverty, safety, education, employment, community participation, reproductive rights, and selfdetermination among people with intellectual disabilities (Ditchman et al., 2016). Stigma may undermine care seeking and service participation due to person level as well as provider and system level barriers (Corrigan et al., 2014) for children with intellectual disabilities and their families.

Additionally, stigma can affect the social participation and self-worth of children with intellectual disabilities. In a previous study (O'Byrne & Muldoon, 2017), stigma was associated with having fewer social comparison with peers among youth with intellectual disability. The authors also reported that the category of intellectual disability and gender are significant factors of young people with intellectual disabilities' sense of worth and physical appearance. Young individuals with moderate intellectual disability expressed more positive social comparisons than other students with mild and borderline diagnoses. Likewise, adolescents with borderline intellectual disability report higher scores in perception of global self-worth and more positive perception about their physical appearance than adolescents with mild and moderate intellectual disability. Finally, males with intellectual disabilities reported more positive social comparisons with others than females, and females with intellectual disabilities reported a greater experience of stigma. Family can play a major role in how an individual handles stigma and other challenges.

### **Family Involvement**

Families of children and teens with disabilities play an integral role in how they view the world. Many children with intellectual disabilities live at home with their families; thus, clinicians need to value parents' views (or guardians') and their participation in service is crucial to the effective services. Parents and family members have different reactions to the diagnosis with feelings of fear, confusion, anger, pride and love. Equally important, children and teens with disabilities can explain to the clinician their experiences with their family members including communication, support, and love.

Caregivers may inform medical professionals about any delay or challenges that support the assessment process. Additionally, they may report behaviors, mood changes, learning difficulties or other concerns that could assist in the diagnosis of intellectual disability. When assessing older children and adolescents, caregivers can also provide information about the nature and extent of learning difficulties. However, parents of a child with an intellectual disability face challenges to quickly learn about relevant healthcare and social services as well as advocate for the child to obtain proper services and support (Boshoff et al., 2019). The recognition of an intellectual disability through diagnosis and subsequent adaptation is a journey for the child and family (Cadwgan & Goodwin, 2018). Since parents are part of the child's support system, clinicians can assess the acceptance of the child's disability as this could affect experience of the client with an intellectual disability.

Parents or caregivers also navigate social experiences and community structures that affect family dynamics. For instance, parents of children with intellectual disability (ID) tend to report higher than averages rates of stress, anxiety and depression (McConnell & Savage, 2015) and experience stigma (Mitter et al., 2019). Child behavioral difficulties, ineffective parental coping strategies and poor family environment have been associated with parental stress (Biswas et al., 2015). Family functioning, family demands, rising costs of services, dwindling resources, and family changes related to intellectual disability and also affect family health (Lima-Rodriguez et al., 2018). However, parents of children with intellectual disabilities described that their children brought many positive changes in themselves and family (Beighton & Wills, 2017). Some positive changes include: an increased sense of personal strength and confidence, changed priorities, greater appreciation of life, pleasure in the child's accomplishments, increased faith/spirituality, meaningful relationships and the positive effect that the child has on the wider community.

The experience of parents of children with intellectual disabilities can shape service delivery and involvement. Paternal involvement is vital for cognitive and language development in children with intellectual disabilities (Zablotsky & Black, 2020). Mothers of children with intellectual disabilities have been found to assume greater responsibility and have lower wellbeing than that of fathers (Balcells-Balcells et al., 2019) as well as have poor health (Fairthorne et al., 2015). They also

experience an ongoing sense of responsibility to balance competing rights and concerns as they support selfdetermination of their children (Curryer et al., 2020). During the pandemic, mothers experienced increased burden and stress and embraced change for a positive future. Similarly, self-stigma, when a person with a disability internalizes a sense of prejudice and discrimination (Corrigan & Kosyluk, 2014), can affect the experience of children with intellectual disability and their families. However, compared to their parents, people with intellectual disabilities often reject the stigma associated with intellectual disabilities and therefore do not internalize stigma. This lack of internalization for the child may be due to a lack of cognitive development and overprotection from significant others.

Clinicians need to recognize family members, especially parents and caregivers, as truly equal partners promoting family empowerment and family quality of life. Parents of children with disabilities spend the longest time as caregivers often for more than 20 years and this influences their wellbeing (Emerson et al., 2012). Adequate professional support combined with the level of satisfaction with the professional support provided to the families could lead to a positive family's quality of life (Balcells-Balcells et al., 2019). Besides, the family quality of life can improve with informal (i.e., family, friends) and formal (i.e., professional) social relationships (Boehm & Carter, 2019) for caregivers and children with intellectual disabilities. Therefore, clinicians can work closely with parents to identify community and personal tools to diminish the impact of intellectual disability at the individual and familial level. At the community level, schools play a critical role in providing services for children and teens with intellectual disabilities.

# **School Environment**

School represents a significant part of the community experience and inclusion of children with intellectual disabilities. According to the Individuals with Disabilities Education Act (IDEA), a child diagnosed with a disability should receive free appropriate public education (Zirkel, 2015). IDEA defines intellectual significantly subaverage disability as general intellectual functioning, existing concurrently with deficits in adaptive behavior and manifested during the developmental period, that adversely affects a child's educational performance.

Although intellectual disability is a culturally defined construct, children with this label are often at the greatest risk of isolation and low expectations within school environments (Hanreddy & Östlund, 2020). Adolescents with intellectual disabilities have an increased risk of developing academic, social, and psychological problems compared with non-disabled peers (Verberg et al., 2018). They are also likely to experience failure and to struggle with friendships and personal relationships at school (Gilmore et al., 2013). Children with intellectual disability have also reported to participate in fewer community-based social activities, recreational, family-enrichment and formal activities than peers with typical development (Shields et al., 2014).

Intellectual disabilities also affect the general wellbeing of students, shaping their emotions and interactions. Being labeled as having an intellectual disability also brings stigma for children and teens leading to self-stigma (Ali et al., 2012), low levels of self-esteem (Verberg et al., 2019), and negative selfevaluations (Paterson et al., 2012). Youth with intellectual disabilities also display more externalizing problems, such as attention problems and aggressive behavior (Dekker et al., 2022) and internalizing problems, such as depression and anxiety than children without disabilities (Alimovic, 2013; Hauser-Cram & Woodman, 2016). In addition, fewer adolescents with ID reported that they have someone with whom to do physical activity and a greater percentage of adolescents with ID perceived that physical activities were too hard to learn (Stanish et al., 2016). Peer mentoring in physical education classes could increase physical activity while teaching children with ID to exercise activities, build social support with peers (Park et at., 2021). Likewise, children with intellectual disabilities tend to experience a bigger level of social distance from their peers at school than their peers without disabilities (Ditachman et al., 2013).

Despite legislative pieces that guarantee free, appropriate public education for students with disabilities in the least restrictive environment, students with intellectual disability are still educated largely in segregated classrooms and settings in the United States (Park et. al, 2021; Wehmeyer et al., 2021). Nevertheless, inclusive education has positive benefits for students intellectual disabilities including with school engagement and general education participation. In fact, children without disabilities from inclusive school settings showed more positive attitudes towards peers with intellectual disabilities and used fewer negative adjectives to describe them than children from noninclusive settings (Georgiadi et al., 2012). Therefore, clinicians should assess the school experience of their young clients with intellectual disabilities to potentially offer alternative options to parents and other professionals and school-based skills for clients.

Clinicians working with children and teens with intellectual disabilities in school settings become part of an interdisciplinary team that aims to support the success of these students. Collaboration between stakeholders involved in schooling – students, professionals, and parents - can contribute to promote inclusion and positive views of children with intellectual disabilities (Castillo & Larson, 2020). Despite mandates for family involvement, school-home partnerships persist elusively, principally for low-income and culturally and linguistically diverse families (Hirano et al., 2018). Each state has its own special education criteria for students with intellectual disability. In a study (McNicholas et al., 2018), comparing regulations and guidelines from the 50 United States and the District of Columbia, authors determined about the states that only 10% used the federal definition of ID, 63% used intellectual disability as a term, 37% referenced a fixed IQ cutoff, and 49% referred to a flexible IQ cutoff. Moreover, the assessment in intellectual functioning was better defined than the assessment of adaptive behavior while health-related features associated with ID were not commonly referenced across states. Therefore, clinicians working with K-12 students, need to become familiar with their state regulation and guidelines related to individual disabilities and identify engage families from marginalized ways to backgrounds.

In order to support children and teens with disabilities beyond the classroom, clinicians need to collaborate with parents, disability professionals, and community providers. Parents' involvement during school year increases the chances of employment after high school for children with disabilities (Mazzotti et al., 2015). In order to support teens with intellectual disabilities transition from high school to adult roles, professionals can engage family and providers in supporting students with disabilities to achieve their post school goals through the Individualized Education Program (IEP) (Whittle et al., 2018). As teens consider vocational and educational options for post high school, clinicians can help them decide on realistic, achievable goals while supporting their transitional aspirations.

# Co-occurrence of Intellectual Disabilities and other disorders

Even though medical advances in recent years, there are still challenges in diagnosing an intellectual disability. Intellectual disability (ID) is a descriptive term that can occur in isolation or associated seizures, congenital malformations, dysmorphism and autism spectrum disorders (Puri et al., 2016). The DSM-5 conceptualization of ID represents an informed psychobiological approach that can help distinguish cooccurrence of mental disorders within the neurodevelopmental section with onset during the developmental period as well as the later onset of other mental disorders (Munir, 2016).

Intellectual disability (ID) is associated with a range of risk factors that make children more vulnerable to adverse developmental outcomes, including mental health problems. (Gilmore et al., 2013). Children and youth with disabilities navigate different social environments that can affect their general wellbeing. Individuals with intellectual and developmental disabilities are three to four times more likely to have a co-occurring mental health diagnosis than their typically developing peers (Munir, 2016). Yet, individuals with ID are at risk of underdiagnoses and underservicing for their mental health problems (Buckley et al., 2020) due to stigma, misdiagnosis, and limited access to services (Whittle et al., 2018). People with intellectual disability and psychiatric problems may be more sensitive or negatively impacted by life events (Krahn et al., 2006), experience communication problems, and face social isolation. Even

Additionally, individuals with disabilities may deal with misdiagnose due to misinterpretations of behaviors and poor explanation of symptoms. Diagnostic overshadowing, when a clinician misclassifies a set of symptoms as an expression of an intellectual disability instead of a distinct manifestation of a psychiatric condition (Rush et al., 2004). For example, a clinician may evaluate poor attention in a child with ID as part of ID rather than the present of mood disorders (CHECK). Since autism spectrum disorder (ASD) symptoms may be expected to occur to some extent in all individuals with intellectual disability (Thurm et al., 2019), professionals need to use diagnostic tools to discern between ID and ISD symptoms. In fact, the diagnostic criterion dictates that ASD should not be diagnosed if symptoms are accounted for by ID or general developmental delay (Thurm et al., 2019).

Clinical characteristics of autism spectrum disorder and intellectual disability may overlap, generating potential for diagnostic confusion. In a CDC study, also children with intellectual disability, the study found that 39% also had autism. (Patrick et al., 2021). Using the DSM-5 criteria, restricted interests or repetitive behaviors best differentiated between ASD and ID while social interactions and stereotyped behaviors, as subset of criteria, were the most effective to differentiate ID and AD (Pedersen et al., 2017). Intellectual disability is associated with violent and sexual offending and victimization. Specifically, men and women with mild or moderate/severe intellectual disability and comorbid Attention-deficit/hyperactivity disorder (ADHD) had elevated risks of violent crimes and assault victimization while women with mild ID without comorbidities or with comorbid autism also had elevated risks of violent crimes and victimization (Latvala et al., 2022).

### Interventions

When working with children and teens with intellectual disabilities, it is important to consider interventions that can be beneficial in helping children and teens to reach their full potential. Providing a diagnosis brings the family a sense of relief from the uncertainty, ends the diagnostic odyssey, and specific therapeutic interventions (Puri et al., 2016). The severity of intellectual disability is based on adaptive functioning rather than on IQ alone (American Psychiatric Association, 2013). Providers must also consider individual, social, and familiar contexts that operate directly and indirectly shaping the lived experience of children and teens with intellectual disabilities.

While there are multiple approaches and interventions to assist children and teens with intellectual disabilities, clinicians need to embrace and identify each client's abilities, strengths and challenges before selecting an evidenced based intervention. Using evidence-based interventions and approaches, clinicians can support clients in achieving personal goals, living a partial or fully independent life, obtaining employment, and establishing love relationships. Of course, these just a few areas enhance the quality of life and selfdetermination of children and youth with intellectual disabilities. In this chapter, clinicians are encouraged to consider strength-based interventions, family centered approaches, and early intervention to help children/teens with ID and their families.

### **Strengths Based Interventions**

There has been a growing emphasis on using strengths-based interventions when working with individuals with ID. Using a strength-based approach can help children with intellectual disabilities to embrace, use and celebrate their differences rather than feeling stigmatized and needing to isolate from others (Chakraborti-Ghosh, 2019; Garwood & Ampuja, 2019). Instead of focusing on the child's intellectual disability, counselors can build strengths and reinforce abilities (Cook, 2017). Clinicians can use a person-centered, strengths-based orientation, rather than needs-based services that focus on helping those with disabilities cope with deficits, (Nevin & Smith, 2007) to recognize children with intellectual disabilities as competent and capable.

A strengths-based approach (Jones-Smith, 2020), pulling from positive psychology, supports that each individual's strengths are the greatest room for growth. Counselors are not only focusing on the positives but also recognize concerns to help clients identify their strengths to build on existing competencies. Clients can learn how their current coping skills and how to develop new skills while forming a positive mindset to improve resilience and change negative worldviews. For children and teens with intellectual disabilities, a strength-based approach can increase their confidence, reduce stress related to the condition, and improve general wellbeing.

Counselors can use a strength-based approach to support transition goals, increase self-worth, and identify clients' strengths. Children and teens with disabilities may be overlooked or judged by disability professionals affecting their self-worth, self-talk, and self-awareness. Youth with intellectual disability may be excluded from postsecondary education opportunities even though there are more than 200 postsecondary education (PSE) in the United States (Cook, 2017). Individualized education program (IEP) with transition goals that include strengths-based assessment as well as focus on character intervention can be highly beneficial for teens as they consider life outside of high school (Shogren et. al, 2017). By adopting a strength-based approach, professionals can focus on remediating deficits by paying attention to the student as an individual and highlight their students' many strengths and capabilities (Elder et al., 2018). Knowing their strengths can help youth with intellectual disability feel empowered to build resilience, advocate for self, and ignore stigmatized behaviors.

Another powerful intervention to enhance the psychological development of youth with intellectual disabilities is growth mindset. Growth mindset has been associated with psychological empowerment (Schleider & Weisz, 2016). Empowerment involves having control and exercising autonomy over decisions, outcomes, and resources (Block et al., 2011) with positive impact on self-advocacy, self-determination, and self-worth. In addition to empowerment, growth mindset shapes the belief on one's own capabilities to regulate behavior and motivation and to learn new abilities (Burnette et al., 2013). Growth mindset interventions are brief psychological interventions centering on implicit theories of intelligence and personality that reinforces the message that attributes are malleable (Yeager et al., 2013). They are generally one to eight sessions that focus on implicit and unconscious beliefs instead of teaching new skills or behavior (Verberg et al., 2018). Even though adolescents with intellectual disabilities tend to have a fixed mindset, a mindset intervention had a positive impact on their academic achievements and psychosocial development (Verberg et al., 2018; Verberg et al., 2022).

Character strengths can also help counselors working with children and teens with intellectual disabilities. Character strengths involve a positive trait to think, feel, and behave in ways that benefit oneself and others (Niemiec, 2013). In a meta-analysis, character strengths interventions had a significant impact on increasing life satisfaction, strengths, and happiness while decreasing depression (Schutte & Malouff, 2019). In a previous study, youth with intellectual disability rated themselves lower on each character strength than youth without disabilities (Shogren et al., 2015). The authors suggested that environmental factors might influence the beliefs of youth with disabilities about themselves and their strengths. Clinicians can utilize character strengthsbased interventions that aim to help clients recognize and apply their character strengths in their daily lives to bring benefit to oneself, others, and/or society (Ruch et al., 2020). Because of potential positive impact of character strengths on clients' general wellbeing, clinicians can include this intervention to increase life satisfaction and emotional wellness for children with ID. Families can also play a critical role in recognizing the strengths of individual family members with ID.

## **Family Centered Interventions**

Since family members, especially parents or caregivers, provide a significant support to children and teens with intellectual disability, parent education (or family) using strength-based perspective can help with positive adaptation to the child's disability. Using a strength-based approach that highlighted child's strengths helped parents to displayed improved affect, made more positive statements about their child, and also exhibited more physical affection toward their child during the strength-based approach (Steiner, 2011). Similarly, siblings and mothers reported that a strengthbased, family centered intervention, which focused on positive dimensions of sibling relationships and provided opportunities for the child with disability to demonstrate their talent and abilities, fostered feelings of pride and enhanced family engagement (Diener at al., 2015). Therefore, clinicians may want to infuse strength-based interventions with a family focus to enhance family engagement and family support.

Dean et al. (2021) discussed the importance of involving family in treatment since family is critical to development of self-determination the and empowerment with teens with intellectual disability. The teen years are vital years when the teen cultivates a sense of identity, compares oneself to others and asks questions about life. Parents can foster the development of self-determination by engagement activities and supporting children in making basic choices (Dean et al., 2021). Considering an appropriate cognitive development standpoint for children and teens, counselors can work with parents to utilize strategies to support clients' decision-making. A child might feel empowered, for example, when deciding to go for a family walk, choosing the next television show/movie, or even offering ideas for the next meal. By practicing decision-making, children with ID can learn to make more complex decisions in the future and enhance their resilience.

Additionally, parental training and family education are of tremendous value to the child/teen with an intellectual disability. Providing developmentally sensitive parenting skills training reduces the risk of problematic behavior for children with intellectual disability while supporting family well-being and parent mental health (McIntyre, 2008). In addition, familycentered evidence-based interventions can promote parenting skills, enhance caregiver well-being, and reduce child-challenging behavior (McIntyre, 2020). Parent acquisition of relevant skills (e.g., behavior management strategies) can decrease stressful parentchild interactions during family routines and increase their child's independence (Clarke et al., 1999) while parent-implemented interventions can improve child outcomes plus parent self-efficacy and well-being (Dunst et al., 2007). Moreover, evidence-based strategic parent skill training and mindfulness interventions can reduce parental stress and create indirect benefits for children's behavioral competencies (Crnic et al., 2017). Clinicians can incorporate evidenced based family focused intervention to develop effective parenting skills and enhance family health.

Furthermore, counselors can utilize psychoeducation, communication, and training to improve the family unit. For instance, a psychoeducational intervention for adolescents with mild intellectual disability and their parents led to positive impact on participants' understanding of the diagnosis, managing of everyday challenges, and social networking (Ericson et al., 2022). Vandesande et al. (2022) explained that professionals could help parents to gain additional knowledge and understanding regarding their child's behaviors and communication issues benefiting treatment. When parents lack understanding and knowledge about behaviors of children with intellectual disability, it can be difficult to determine the best course of action and ways to support the child. A systematic review reported that professional contact and guidance improved efficacy of parent training on behavioral sleep interventions for children with ID (Kirkpatrick et al., 2019). By helping parents understand their child's behavior and communication challenges, parents can effectively cope with the difficult situations and embrace their child's strengths.

Parents can also benefit from family centered interventions to address problematic, challenging behaviors. Problem behaviors are significantly more likely to occur with children and teens who have ID than their typically developing peers (Newcomb & Hagopian, 2018). Some of these behaviors include selfinjury, aggression, pica, disruption, and elopement result in a diminished quality-of-life for the individual and family. Problem behaviors can damage family relationships, create sibling conflicts, increase stress level, and hinder service delivery. Mindfulness training for parents and their children can help to manage problem behaviors supporting quality domestic and social life (Hwang et al., 2015). Parenting programs that provide parents with intervention tools and peer support groups could also be beneficial in addressing behavior challenges in children with ID (Farris, et. al, 2020). Support groups can help parents to learn from each other how to navigate the challenges they face in raising children with ID.

### **Early Intervention for Children**

Early intervention is considered an overall term that describes a full range of support designed to promote positive child development in the early and formative years. Early childhood is a period for optimum brain growth when development in language, cognition, motor and social-emotional domains happen in the early first years (Smythe et al., 2021). Children who may have or have been diagnosed with intellectual disability need to have access to effective, knowledge-based, and affordable services in natural environments. During these crucial early years, clinicians can build the strengths of the child and family, address any specific needs, embrace cultural and familiar perspectives, and offer evidenced based interventions.

Initial interventions for children with intellectual disabilities has mainly focused on efforts to impact core cognitive and academic deficits associated with the diagnosis (Crnic et al., 2017). However, practitioners can focus on positive traits and strengths to increase resilience among children. Providing services and resources to families of children with ID as soon as possible can improve the long-term prognosis including enhanced wellbeing, active community participation and positive family support. Children in foster care or adoptive homes should be screened for at-risk issues related to any potential learning delay. Child development cam be encouraged with early intervention in childhood to improve development by integrating family support, health, nutrition and educational services, and creating direct learning experiences to children and families (Smythe et al., 2021). Nonetheless, the level of intervention does not always match the need of the child (Sapiets et. al., 2020) suggesting an improved assessment to accurately determine the best match between services and child.

Early interventions, with behavioral and psychosocial components, address the needs in families of children with intellectual disability effectively (Machalicek et al., 2015). Programs that promote children's development by enhancing parent-sensitive responsiveness and improving children's cognitive and social outcomes in inclusive preschool settings are helpful for children with intellectual disability (Guralnick, 2017). Vandesande et al. (2022) discussed the significance of using various interventions to focus on the parents' understanding and perception of the relationship between them and their child. A counselor can provide education and guidance for a parent with unrealistic expectations or uncertainty to handle disruptive behaviors. Early intervention efforts should focus on building parents' coping skills to potentially increase long-term outcomes, as the child grows older (Machalicek et al., 2015).

In many cases, the mother of the child with intellectual disability works with professionals on diagnosis, seeks early intervention services, and assist with family adjustment. It is important to note that care is often deferred to the mother due to father's feeling uncomfortable working with professionals and focusing on paying on early intervention services (Evans et. al. 2016). Mothers often serve as the primary caregiver in many families and spend more time on childcare activities than fathers (Vilaseca et al., 2020). However, mothers and fathers show very similar strengths and weaknesses when interacting with their children with intellectual disabilities. Getting parents support and guidance at the critical early stages of their children's development can be highly beneficial in setting appropriate family rules and fostering success in childhood development.

Parent-Child Interaction Therapy (PCIT) is an evidence-based intervention, for children 2 to 7 years, focused on improving parent-child relationship and creating firm discipline (Chengappa et al., 2017). The therapist observes a parent-child dyad first through a one-way mirror and supports the parent with coaching to positively attend to child's behavior. There are two sequential phases child-directed interaction (CDI) and parent-directed interaction (PDI) that begin a didactic session to teach the parent skills then followed by direct coaching sessions (Thomas et al., 2017) . Coaching sessions are opportunities for parents to practice positive communication skills with the goal of fostering positive parent-child relationships (www.pict.org for additional information). In a meta-analysis (Thomas et al., 2017), authors found robust positive outcome after PCIT including reduced parent-related stress and child related stress, child's compliant to parent request, and reduced children's externalizing behavior.

Counselors can also infuse animal assisted intervention in the context of an early intervention services. Since companion animals or pets play an important role in the American family and animal assisted interventions can enhance clients' wellbeing (Silcox et al., 2014), counselors can use structured intervention with animals to improve communication and social functioning among children with neurodevelopmental disorders (Hill et al., 2019). Using animal assisted intervention, as a complementary therapeutic strategy in early intervention services, to promote social participation of children with neurodevelopmental disorders occasioned improvements in communication, interaction, and social engagement (Avila-Alvarez et al., 2022). If children with intellectual disability and their parents/guardian are comfortable with the presence of a trained animal in session, counselors could practice social skills, teach effective communication, explore emotions, and assess relationship with animals/people.

# CONCLUSION

In short, counselors have a major role when it comes to ensuring that children and teens with intellectual disabilities receive the services they need. Counselors can work with clients, families, schools and other agencies in society to promote inclusion of individuals with intellectual disabilities. They can offer support, guidance and facilitate access to resources to assist children and teens with intellectual disabilities to reach their full potential. They can help families to develop strategies and structure to promote independence. Additionally, counselors can work with schools to help determine appropriate programs that can lead to successful employment and postsecondary education opportunities. Understanding the strengths of children and teens with ID and building upon those strengths can help lead to positive outcomes that will benefit not only those with ID but society in general. The role of the counselor is to also advocate towards that end and consider how changes in changes in society can have a major impact on how children and teens are able to effectively interact with others and find their places in society as productive and contributing members.

### **Source of Funding**

Nil

### **CONFLICT OF INTEREST**

None

### REFERENCES

- Ali, A., Hassiotis, A., Strydom, A., & King, M. (2012). Self-stigma in people with intellectual disabilities and courtesy stigma in family carers: A systematic review. *Research in developmental disabilities*, 33(6), 2122-2140.
- Alimovic, S. (2013). Emotional and behavioural problems in children with visual impairment, intellectual and multiple disabilities. *Journal of Intellectual Disability Research*, 57(2), 153-160.
- American Psychiatric Association (APA). (2013). Diagnostic and statistical manual of mental disorders (5th ed.) (DSM-5). https://doi.org/10.1176/appi.books.978089042559
- Ávila-Álvarez, A., Alonso-Bidegain, M., Ramos-Veiguela, D., Iglesias-Jove, E., & De-Rosende-Celeiro, I. (2022). Changes in social functioning and engagement during canine-assisted intervention for children with neurodevelopmental disorders in the context of an early intervention service. *Research in Developmental Disabilities*, 124, 104216.
- Balcells-Balcells, A., Giné, C., Guàrdia-Olmos, J., Summers, J. A., & Mas, J. M. (2019). Impact of supports and partnership on family quality of life. *Research in Developmental Disabilities*, 85, 50-60.

- Beighton, C., & Wills, J. (2017). Are parents identifying positive aspects to parenting their child with an intellectual disability or are they just coping? A qualitative exploration. *Journal of Intellectual Disabilities*, 21(4), 325-345.
- Biswas, S., Moghaddam, N., & Tickle, A. (2015). What are the factors that influence parental stress when caring for a child with an intellectual disability? A critical literature review. *International Journal of Developmental Disabilities*, 61(3), 127-146.
- Developmental Disabilities, 61(3), 127-146. Black, J. M., & Hoeft, F. (2015). Utilizing biopsychosocial and strengths-based approaches within the field of child health: What we know and where we can grow. New directions for child and adolescent development, 2015(147), 13-20.
- where we can grow. *New alrections for child and adolescent development*, 2015(147), 13-20.
  Block, P., Rodriguez, E. L., Milazzo, M. C., MacAllister, W. S., Krupp, L. B., Nishida, A., ... & Keys, C. B. (2011). Building pediatric multiple sclerosis community using a disability studies framework of empowerment. In *Disability and community*. Emerald Group Publishing Limited.
- Boehm, T., & Carter, E. (2019). Family quality of life and its correlates among parents of children and adults with intellectual disability. *American Journal* on *Intellectual and Developmental Disabilities*, 124(2), 99–115. https://doi.org/10.1352/1944-7558-124.2.99
- Bollard, M., Mcleod, E., & Dolan, A. (2018). Exploring the impact of health inequalities on the health of adults with intellectual disability from their perspective, *Disability & Society*, 33(6), 831-848. https://doi.org/10.1080/09687599.2018.1459476
- Boshoff, K., Gibbs, D., Phillips, R. L., Wiles, L., & Porter, L. (2019). A meta-synthesis of how parents of children with autism describe their experience of advocating for their children during the process of diagnosis. *Health & Social Care in the Community*, 27(4), e143-e157.
- Braveman, P., Kumanyika, S., Fielding, J., LaVeist, T., Borrell, L., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: The issue is justice. *American Journal of Public Health*, 101, S149–S155, https://doi.org/10.2105/AJPH.2010.300062
- Buckley, N., Glasson, E. J., Chen, W., Epstein, A., Leonard, H., Skoss, R., ... & Downs, J. (2020).
  Prevalence estimates of mental health problems in children and adolescents with intellectual disability: A systematic review and meta-analysis. *Australian & New Zealand Journal of Psychiatry*, 54(10), 970-984.
- Burnette, J. L., O'Boyle, E. H., VanEpps, E. M., Pollack, J. M., & Finkel, E. J. (2013). Mind-sets matter: a meta-analytic review of implicit theories and self-regulation. *Psychological bulletin*, 139(3), 655.
- Cadwgan, J., & Goodwin, J. (2018). Helping parents with the diagnosis of disability. *Paediatrics and Child Health*, 28(8), 357-363.
- Castillo, Y. A., & Larson, A. (2020). Attitudes towards people with disabilities: Systematic review of intervention effectiveness. *COUNS-EDU: The International Journal of Counseling and Education*, 5(2), 40-57.
- Chakraborti-Ghosh, S. (2019). Strength-Based Instruction (SBI): A systematic instructional training

model with a primary focus on a child's strength. In S. Halder & V. Argyropoulos (Eds.), Inclusion, equity and access for individuals with disabilities (pp. 647-664). Palgrave Macmillan.

- Chengappa, K., McNeil, C. B., Norman, M., Quetsch, L. B., & Travers, R. M. (2017). Efficacy of parent-child interaction therapy with parents with intellectual disability. *Child & Family Behavior Therapy*, 39(4), 253-282.
- Clarke, S., Dunlap, G., & Vaughn, B. (1999). Familycentered, assessment-based intervention to improve behavior during an early morning routine. *Journal of Positive Behavior Interventions*, 1(4), 235-241.
- Coleman, J. M., Brunell, A. B., & Haugen, I. M. (2015). Multiple forms of prejudice: How gender and disability stereotypes influence judgments of disabled women and men. *Current Psychology*, 34(1), 177-189.
- Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological science in the public interest: A journal of the American Psychological Society*, *15*(2), 37–70. https://doi.org/10.1177/1529100614531398
- Corrigan, P. W., & Kosyluk, K. A. (2014). Mental illness stigma: Types, constructs and vehicles for change. In P.W. Corrigan (Ed.), The stigma of disease and disability: Understanding causes and overcoming (pp.35–56). Washington, DC, US: American Psychological Association.
- Crnic, K. A., Neece, C. L., McIntyre, L. L., Blacher, J., & Baker, B. L. (2017). Intellectual disability and developmental risk: Promoting intervention to improve child and family well-being. *Child development*, 88(2), 436-445.
- development, 88(2), 436-445. Curryer, B., Stancliffe, R. J., Wiese, M. Y., & Dew, A. (2020). The experience of mothers supporting selfdetermination of adult sons and daughters with intellectual disability. *Journal of applied research in intellectual disabilities: JARID*, 33(3), 373–385. https://doi.org/10.1111/jar.12680
- Dean, E. E., Kirby, A. V., Hagiwara, M., Shogren, K. A., Ersan, D. T., & Brown, S. (2021). Family role in the development of self-determination for youth with intellectual and developmental disabilities: A scoping review. *Intellectual & Developmental Disabilities*, 59(4), 315–334. https://doi.org/10.1352/1934-9556-59.4.315
- Dekker, M. C., Koot, H. M., Ende, J. V. D., & Verhulst, F. C. (2002). Emotional and behavioral problems in children and adolescents with and without intellectual disability. *Journal of Child Psychology and Psychiatry*, 43(8), 1087-1098.
- Diener, M. L., Anderson, L., Wright, C. A., & Dunn, M. L. (2015). Sibling relationships of children with autism spectrum disorder in the context of everyday life and a strength-based program. *Journal of Child* and Family Studies, 24(4), 1060-1072.
- and Family Studies, 24(4), 1060-1072. Ditchman, N., Kosyluk, K., Lee, E. J., & Jones, N. (2016). How stigma affects the lives of people with Intellectual Disabilities: An preview. In: Scior, K., Werner, S. (eds) Intellectual Disability and Stigma. Palgrave Macmillan, London. https://doi.org/10.1057/978-1-137-52499-7\_3
- Dunst, C. J., Hamby, D. W., & Brookfield, J. (2007). Modeling the Effects of Early Childhood

Intervention Variables on Parent and Family Well-Being. Journal of Applied Quantitative Methods, 2(3), 268-288.

- Elder, B. C., Rood, C. E., & Damiani, M. L. (2018). Writing strength-based IEPs for students with disabilities in inclusive classrooms. *International Journal of Whole Schooling*, 14(1), 116–155.
- Emerson, E, Hatton, C, Robertson, J. (2012) People with learning disabilities in England 2011. Durham. Improving Health and Lives: Learning Disability Observatory
- Ericson, S., Hesla, M. W., & Stadskleiv, K. (2022). Gaining super control: Psychoeducational group intervention for adolescents with mild intellectual disability and their parents. *Journal of Intellectual Disabilities*, 26(2), 350–364.
- Evans, D. L., Feit, M. D., & Trent, T. (2016). African American parents and attitudes about child disability and early intervention services. *Journal of Social Service Research*, 42(1), 96–112.
- Service Řesearch, 42(1), 96–112. Fairthorne, J., de Klerk, N., & Leonard, H. (2015). Health of mothers of children with intellectual disability or autism spectrum disorder: A review of the literature. Medical Research Archives, (3). Retrieved
  - from https://esmed.org/MRA/mra/article/view/204
- Farrell, P. (1997). The integration of children with severe learning difficulties: a review of the recent literature. Journal of Applied Research in Intellectual Disabilities, 10(1), 1-14.
- Farris, O., Royston, R., Absoud, M., Ambler, G., Barnes, J., Hunter, R., ... & Hassiotis, A. (2020). Clinical and cost effectiveness of a parent mediated intervention to reduce challenging behaviour in preschoolers with moderate to severe intellectual disability (EPICC-ID) study protocol: a multi-centre, parallel-group randomised controlled trial. *BMC Psychiatry*, 20(1), 1–11. https://doi.org/10.1186/s12888-020-2451-6
- Flanagan, D.P. and Alfonso, V.C. (2017) Essentials of WISC-V Assessment. John Wiley & Sons, Hoboken.
- Foley, K. R., Blackmore, A. M., Girdler, S, O'Donnell, M., Glauert, R., Llewellyn, G., & Leonard, H. (2012). To feel belonged: The voices of children and youth with disabilities on the meaning of wellbeing. *Child Indicators Research*, 5, 375–391. https://doi.org/10.1007/s12187-011-9134-2.
- https://doi.org/10.1007/s12187-011-9134-2. Garwood, J. D., & Ampuja, A. A. (2019). Inclusion of students with learning, emotional, and behavioral disabilities through strength-based approaches. Intervention in School and Clinic, 55(1), 46-51. https://doi.org/10.1177/1053451218767918
- Georgiadi, M., Kalyva, E., Kourkoutas, E., & Tsakiris, V. (2012). Young children's attitudes toward peers with intellectual disabilities: Effect of the type of school. *Journal of Applied Research in Intellectual Disabilities*, 25(6), 531-541.
- Gilmore, L., Campbell, M., Shochet, I., & Roberts, C. (2013). Resiliency profiles of children with intellectual disability and their typically developing peers. *Psychology in the Schools*, 50(10), 1032-1043.
- Guralnick, M. J. (2017). Early intervention for children with intellectual disabilities: An update. *Journal of Applied Research in Intellectual Disabilities*, 30(2), 211-229.

- Hanreddy, A., & Östlund, D. (2020). Alternate curricula as a barrier to inclusive education for students with intellectual disabilities. *International Electronic Journal of Elementary Education*, 12(3), 235-247. https://doi.org/10.26822/iejee.2020358217
- Hauser-Cram, P., & Woodman, A. C. (2016). Trajectories of internalizing and externalizing behavior problems in children with developmental disabilities. *Journal of abnormal child psychology*, 44(4), 811-821.
- Hill, J., Ziviani, J., Driscoll, C., & Cawdell-Smith, J. (2019). Can canine-assisted interventions affect the social behaviours of children on the autism spectrum? A systematic review. *Review Journal of Autism and Developmental Disorders*, 6(1), 13-25.
- Hirano, K. A., Rowe, D., Lindstrom, L., & Chan, P. (2018). Systemic barriers to family involvement in transition planning for youth with disabilities: A qualitative metasynthesis. *Journal of Child and Family Studies*, 27(11), 3440-3456.
  Hollomotz, A. (2018). Successful interviews with
- Hollomotz, A. (2018). Successful interviews with people with intellectual disability. *Qualitative Research*, *18*(2), 153-170. https://doi.org/10.1016/j.dhjo.2020.101023.
- Hwang, Y. S., Kearney, P., Klieve, H., Lang, W., & Roberts, J. (2015). Cultivating mind: Mindfulness interventions for children with autism spectrum disorder and problem behaviours, and their mothers. *Journal of Child and Family Studies*, 24(10), 3093-3106.
- Individuals With Disabilities Education Act (IDEA), 20 U.S.C. § 300.8 (2004). Child with a disability. US Department of Education.
- Jeste, S., Hyde, C., Distefano, C., Halladay, A., Ray, S., Porath, M., Wilson, R. B., & Thurm, A. (2020). Changes in access to educational and healthcare services for individuals with intellectual and developmental disabilities during COVID-19 restrictions. *Journal of Intellectual Disability Research*, 64, 825–833.
- Jones-Smith, E. (2016). *Theories of counseling and psychotherapy: An integrative approach*. Sage Publications, Inc.
- Kaya, C. (2018). Demographic variables, vocational rehabilitation services, and employment outcomes for transition-age youth with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities*, 15(3), 226-236.
- Kirkpatrick, B., Louw, J. S., & Leader, G. (2019). Efficacy of parent training incorporated in behavioral sleep interventions for children with autism spectrum disorder and/or intellectual disabilities: A systematic review. *Sleep Medicine*, 53, 141-152.
- Kliegman, R. (2020). Developmental delay and intellectual disability. In Kliegman, R., St, G. J. W., Blum, N. J., Shah, S. S., Tasker, R. C., Wilson, K. M., Behrman, R. E., ... Nelson, W. E. (eds). *Nelson textbook of pediatrics*.
- Krahn, G. L., Hammond, L., & Turner, A. (2006). A cascade of disparities: health and health care access for people with intellectual disabilities. *Mental retardation and developmental disabilities research reviews*, 12(1), 70-82.
- Latvala, A., Tideman, M., Søndenaa, E., Larsson, H., Butwicka, A., Fazel, S., & Lichtenstein, P. (2022). Association of intellectual disability with violent and

sexual crime and victimization: a population-based cohort study. *Psychological medicine*, 1-9.

- Little, S. G., Swangler, J., & Akin-Little, A. (2017). Defining social skills. In *Handbook of social behavior and skills in children* (pp. 9-17). Springer, Cham.
- Louw, J. S., Kirkpatrick, B., & Leader, G.(2020). Enhancing social inclusion of young adults with intellectual disabilities: A systematic review of original empirical studies. *Journal of Applied Research in Intellectual Disabilities*, 33(5), 793– 807. https://doi.org/10.1111/jar.12678
- Machalicek, W., Lang, R. & Raulston, T. J. (2015). Training Parents of Children with Intellectual Disabilities: Trends, Issues, and Future Directions. *Current Developmental Disorder Report, 2*, 110– 118. https://doi.org/10.1007/s40474-015-0048-4
- Current Developmental Disorder Report, 2, 110–118. https://doi.org/10.1007/s40474-015-0048-4
  MacRae, S., Brown, M., Karatzias, T., Taggart, L., Truesdale-Kennedy, M., Walley, R., ... & Davies, M. (2015). Diabetes in people with intellectual disabilities: a systematic review of the literature. Research in developmental disabilities, 47, 352-374.
- Mazzotti, V. L., Rowe, D. A., Sinclair, J., Poppen, M., Woods, W. E., & Shearer, M. L. (2016). Predictors of post-school success: A systematic review of NLTS2 secondary analyses. *Career Development* and Transition for Exceptional Individuals, 39(4), 196-215.
- McConnell, D., & Savage, A. (2015). Stress and resilience among families caring for children with intellectual disability: Expanding the research agenda. *Current developmental disorders reports*, 2(2), 100-109.
- McIntyre, L. L. (2008). Parent training for young children with developmental disabilities: Randomized controlled trial. *American Journal on Mental Retardation*, 113(5), 356-368.
- Mental Retardation, 113(5), 356-368. McIntyre, L. L. (2020). Family-based practices to promote well-being. American Journal on Intellectual and Developmental Disabilities, 125(5), 349-352.
- McNicholas, P. J., Floyd, R. G., Woods Jr, I. L., Singh, L. J., Manguno, M. S., & Maki, K. E. (2018). State special education criteria for identifying intellectual disability: A review following revised diagnostic criteria and Rosa's Law. School Psychology Quarterly, 33(1), 75.
- criteria and Rosa's Law. School Psychology Quarterly, 33(1), 75.
  McVilly, K., McGillivray, J., Curtis, A., Lehmann, J., Morrish, L., & Speight, J. (2014). Diabetes in people with an intellectual disability: a systematic review of prevalence, incidence and impact. Diabetic medicine, 31(8), 897-904.
- Mendoza, M., Blake, J. J., Marchbanks III, M. P., & Ragan, K. (2020). Race, gender, and disability and the risk for juvenile justice contact. *The Journal of Special Education*, 53(4), 226-235.
- Mitter, N., & Ali, A., & Scior, K. (2019). Stigma experienced by families of individuals with intellectual disabilities and autism: A systematic review. *Research in Developmental Disabilities*, 89. 10-21. 10.1016/j.ridd.2019.03.001.
- Munir, K. M. (2016). The co-occurrence of mental disorders in children and adolescents with intellectual disability/intellectual developmental disorder. *Current Opinion in Psychiatry*, 29(2), 95–

102.

https://doi.org/10.1097/YCO.00000000000236

- Nevin, A., & Šmith, R. (2007). Infusing Disability Studies into Professional Practice: Perspectives and Strategies. *Online Submission*.
- Newcomb, E. T., & Hagopian, L. P. (2018). Treatment of severe problem behaviour in children with autism spectrum disorder and intellectual disabilities. *International Review of Psychiatry*, 30(1), 96-109.
- International Review of Psychiatry, 30(1), 96-109. Niemiec, R. M. (2013). Mindfulness and character strengths. Hogrefe Publishing.
- O'Byrne, C., & Muldoon, O. (2017) Stigma, selfperception and social comparisons in young people with an intellectual disability. *Irish Educational Studies*, 36(3), 307-322, https://doi.org/10.1080/03323315.2017.1327363
- Park, G., Collins, B. C., & Lo, Y. (2021). Teaching a physical activity to students with mild to moderate intellectual disability using a peer-delivered simultaneous prompting procedure: A single-case experimental design study. *Journal of Behavioral Education*, 30(3), 378–396. https://doi.org/10.1007/s10864-020-09373-7
- Patel, D. R., Apple, R., Kanungo, S., & Akkal, A. (2018). Intellectual disability: definitions, evaluation and principles of treatment. *Pediatric Medicine*, *1*(11), 10-21037.
- Patel, D. R., Cabral, M. D., Ho, A., & Merrick, J. (2020). A clinical primer on intellectual disability. *Translational pediatrics*, 9(Suppl 1), S23.
- Paterson, L., McKenzie, K., & Lindsay, B. (2012). Stigma, social comparison and self-esteem in adults with an intellectual disability. *Journal of Applied Research in Intellectual Disabilities*, 25(2), 166-176.
- Patrick, M.E., Shaw, K., Dietz, P.M., Baio, J., Yeargin-Allsopp, M., Bilder, D.A, ... Maenner, M. (2021). Prevalence of intellectual disability among eightyear-old children from selected communities in the United States, 2014. *Disability and Health Journal*, 14 (2), 1936-6574,
- Peacock, G. Improving health for people with intellectual disabilities [PowerPoint Presentation]. CDC Website. https://www.cdc.gov/grand-rounds/ pp/2019/20191015-intellectual-disabilities-H.pdf
- Pedersen, A. L., Pettygrove, S., Lu, Z., Andrews, J., Meaney, F. J., Kurzius-Spencer, M., ... & Cunniff, C. (2017). DSM criteria that best differentiate intellectual disability from autism spectrum disorder. *Child Psychiatry & Human Development*, 48(4), 537-545.
- Pescolido, B. A., & Martin, J. K. (2015). The stigma complex. Annual Review of Sociology, 41, 87–116.
- Puri, R. D., Tuteja, M., & Verma, I. C. (2016). Genetic approach to diagnosis of intellectual disability. *The Indian Journal of Pediatrics*, 83(10), 1141-1149.
- Ruch, W., Niemiec, R. M., McGrath, R. E., Gander, F., & Proyer, R. T. (2020). Character strengths-based interventions: Open questions and ideas for future research. *The Journal of Positive Psychology*, 15(5), 680-684.
- Sansone, S. M., Schneider, A., Bickel, E., Berry-Kravis, E., Prescott, C., & Hessl, D. (2014). Improving IQ measurement in intellectual disabilities using true deviation from population norms. *Journal of neurodevelopmental disorders*, 6(1), 1-15. https://doi.org/10.1186/1866-1955-6-16

- Schleider, J. L., & Weisz, J. R. (2016). Reducing risk for anxiety and depression in adolescents: Effects of a single-session intervention teaching that personality can change. *Behaviour research and therapy*, 87, 170-181.
- Schuengel, C., Van Rest, M., Stanford, C., & Hastings, R. (2019). Impact of research about the Early Development of Children With Intellectual Disability: A Science Mapping Analysis. *Frontiers in Education*, 4. 10.3389/feduc.2019.00041.
  Schutte, N. S., & Malouff, J. M. (2019). The impact of
- Schutte, N. S., & Malouff, J. M. (2019). The impact of signature character strengths interventions: A metaanalysis. *Journal of Happiness Studies*, 20(4), 1179-1196.
- Shields, N., King, M., Corbett, M., & Imms, C. (2014). Is participation among children with intellectual disabilities in outside school activities similar to their typically developing peers? A systematic review. *Developmental Neurorehabilitation*, 17(1), 64-71
- Shogren, K. A., Wehmeyer, M. L., Forber-Pratt, A. J., & Palmer, S. B. (2015). VIA Inventory of Strengths for Youth (VIA-Youth): Supplement for use when supporting youth with intellectual and developmental disabilities to complete the VIA-Youth. Lawrence, KS: Kansas University Center on Developmental Disabilities.
- Shogren, K. A., Wehmeyer, M. L., Lang, K., Niemiec, R. M., & Seo, H. (2017). The application of the VIA Classification of Strengths to youth with and without disabilities. *Inclusion*, 5(3), 213–228. https://doi.org/10.1352/2326-6988-5.3.213
- Silcox, D., Castillo, Y. A., & Reed, B. (2014). The Human-animal bond: Applications for rehabilitation professionals. *Journal of Applied Rehabilitation Counseling*, 45(3), 27–37.
- Counseling, 45(3), 27–37. Smythe. T., Zuurmond, M., Tann, C., Gladstone, M., & Kuper, H. (2021). Early intervention for children with developmental disabilities in low and middle-income countries – the case for action. International Health, 13(3), 222-231.
- Stancliffe, R. J., Durvasula, S., Wilson, N. J., & Lewis, P. (2020). Treatment engagement and people with intellectual disability. In A. Hadler, S. Sutton and L. Osterberg (Eds.), The Wiley Handbook of Healthcare Treatment Engagement (pp 381-398). https://doi.org/10.1002/9781119129530.ch21
- Stanish, H. I., Curtin, C., Must, A., Phillips, S., Maslin, M., & Bandini, L. G. (2016). Physical activity enjoyment, perceived barriers, and beliefs among adolescents with and without intellectual disabilities. *Journal of Physical Activity and Health*, 13(1), 102-110.
- Stavrakantonaki, M., & Johnson, T. (2018). Effects of Rosa's Law on Intellectual-Disability Reporting. *Public Opinion Quarterly*, 82(3), 593-604. https://doi.org/10.1093/poq/nfy024
- Steiner, A. M. (2011). A strength-based approach to parent education for children with autism. *Journal of Positive Behavior Interventions*, 13(3), 178-190.
- Tassé, M., Luckasson, R. & Schalock, R. (2016). The relation between intellectual functioning and adaptive behavior in the diagnosis of intellectual disability. *Intellectual and Developmental Disabilities*, 54. 381-390. https://doi.org/10.1352/1934-9556-54.6.381.

- Thomas, R., Abell, B., Webb, H. J., Avdagic, E., & Zimmer-Gembeck, M. J. (2017). Parent-child interaction therapy: a meta-analysis. *Pediatrics*, 140(3), e20170352.
- Thurm, A., Farmer, C., Salzman, E., Lord, C., & Bishop, S. (2019). State of the field: Differentiating intellectual disability from autism spectrum disorder. *Frontiers in psychiatry*, 10, 526.
- Vandesande, S., Bosmans, G., Sterkenburg, P., Schuengel, C., & Maes, B. (2022). A tailored approach to supporting parent-child attachment in Families with children with severe Disabilities: Matching interventions to needs. *International Journal of Disability, Development & Education*, 1– 22. https://doi.org/10.1080/1034912x.2022.2060950
- Verberg, F. L., Helmond, P., & Overbeek, G. (2018). Study protocol: a randomized controlled trial testing the effectiveness of an online mindset intervention in adolescents with intellectual disabilities. *BMC psychiatry*, 18(1), 1-12.
- Verberg, F., Helmond, P., Otten, R., & Overbeek, G. (2019). Mindset and perseverance of adolescents with intellectual disabilities: Associations with empowerment, mental health problems, and selfesteem. *Research in Developmental Disabilities*, 91, 103426.
- Verberg, F., Helmond, P., Otten, R., & Overbeek, G. (2022). Effectiveness of the online mindset intervention 'The Growth Factory'for adolescents with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities*, 35(1), 217-230.

- Wehmeyer, M. L., Shogren, K. A., & Kurth, J. (2021). The state of inclusion with students with intellectual and developmental disabilities in the United States. *Journal of Policy and Practice in Intellectual Disabilities*, 18(1), 36-43.
- Disabilities, 18(1), 36-43.
  Whittle, E. L., Fisher, K. R., Reppermund, S., Lenroot, R., & Trollor, J. (2018). Barriers and enablers to accessing mental health services for people with intellectual disability: a scoping review. Journal of Mental Health Research in Intellectual Disabilities, 11(1), 69-102.
- Woodgate, R., Gonzalez, M., Demczuk, L., Snow, W., Barriage, S., & Kirk, S. (2020). How do peers promote social inclusion of children with disabilities? A mixed-methods systematic review, *Disability and Rehabilitation, 42*(18), 2553-2579, https://doi.org/10.1080/09638288.2018.1561955
- Disability and Rehabilitation, 42(18), 2553-2579, https://doi.org/10.1080/09638288.2018.1561955 Yeager, D. S., Trzesniewski, K. H., & Dweck, C. S. (2013). An implicit theories of personality intervention reduces adolescent aggression in response to victimization and exclusion. *Child development*, 84(3), 970-988.
- Zablotský, B., & Black, L. I. (2020). Prevalence of children aged 3–17 years with developmental disabilities, by urbanicity: United States, 2015–2018.
- Zirkel, P. A. (2015). Special Education Law: Illustrative Basics and Nuances of Key IDEA Components. *Teacher Education and Special Education*, 38(4), 263–275.

https://doi.org/10.1177/0888406415575377