Inclusion

Exploring the Impact of Training on the Mental Health Aspects of Intellectual and Developmental Disabilities for Direct Support Professionals
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Abstract:	The Mental Health Aspects of IDD (IDD-MH) Course for Direct Support Professionals (DSPs) is a six-session, live, virtual course offered by the National Center for START Services®, a program of the Institute on Disability at the University of New Hampshire. It is co-facilitated by clinicians and people with lived experience of IDD-MH. Evaluation results (N=193) of three training cohorts (2021-2022) are analyzed to examine quantitative and qualitative changes in knowledge, perspective, and confidence regarding provision of positive, strengths-based support to people with IDD-MH. The study concludes with the identification of future topics for DSP training.

Exploring the Impact of Training on the Mental Health Aspects of Intellectual and

Developmental Disabilities for Direct Support Professionals

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Abstract

The Mental Health Aspects of IDD (IDD-MH) Course for Direct Support Professionals (DSPs) is a six-session, live, virtual course offered by the National Center for START Services®, a program of the Institute on Disability at the University of New Hampshire. It is co-facilitated by clinicians and people with lived experience of IDD-MH. Evaluation results (N=193) of three training cohorts (2021-2022) are analyzed to examine quantitative and qualitative changes in knowledge, perspective, and confidence regarding provision of positive, strengths-based support to people with IDD-MH. The study concludes with the identification of future topics for DSP training.

Keywords: mental health and IDD, IDD direct support professionals, DSP mental health training, training for DSPs, training evaluation, DSP professional development

Exploring the Impact of Training on the Mental Health Aspects of Intellectual and

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People with intellectual and developmental disabilities (IDD) are more likely to experience mental health conditions (IDD-MH) at a point prevalence rate of 40%, which is nearly double the rate (21%) in the general population (Maulik et al., 2011; Pinals et al., 2022; Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). Although not all people with IDD are diagnosed with a mental health condition, they are at increased risk. Executive and adaptive functioning limitations can exacerbate the impact of common daily stressors, cognitive processing demands, or interpretation of environmental or social factors. Many people with IDD are marginalized and lack access to inclusive, community-based services and supports that promote wellness and independence (American Association on Intellectual and Developmental Disabilities [AAIDD], 2016).

Many people with IDD-MH access formal, paid supports for community-based care. These services are often provided by Direct Support Professionals (DSPs) (Pinals et al., 2022). In addition to personal care, daily living assistance and skill building, DSPs are the primary source of emotional support, access to recreational activities and transportation for people (President's Committee for People with Intellectual Disabilities [PCPID], 2017; Stone, 2017). DSPs play a pivotal role in promoting community inclusion and identifying ways for people to find meaning in their lives. DSPs are required to multi-task, be organized and make quick, informed decisions often with little immediate supervision. Community-based DSPs work in a variety of settings, including but not limited to family homes, group homes, day programs, schools, nursing/assisted living homes, supported employment settings, and community centers (PCPID, 2017).

People with IDD and their families rely on DSPs a source of support and care. Thus, their role is critical to the promotion of quality of life for people with IDD and mental health needs (IDD-MH) (Friedman, 2018 & 2021). Yet evidence continually suggests DSPs do not consistently receive critical training on best practices for positive, inclusive supports (Pettingell et al., 2022; Randall et al., 2022). Since more than 40% of people with IDD are diagnosed with co-occurring mental health needs, DSP training is critical. Programs must provide content aimed at improving knowledge of common mental health presentations among those with IDD, along with positive, wellness-based interventions to promote overall mental wellbeing for those they serve.

This descriptive study aims to provide a summary of the *Mental Health Aspects of IDD Course for Direct Support Professionals*, a frequency distribution of participant demographics, and various measures of effectiveness. Practice implications and opportunities for continued professional development are also provided.

Background

Workforce Needs

Over the past 20 years there have been growing cries and demands on behalf of a deteriorating direct support workforce (ANCOR, 2022; CMS, 2023; PCPID, 2017; Smith, Macbeth, & Bailey, 2019). This crisis has reached a crescendo. Today, thousands of people with IDD and other disabilities do not receive the supports they need to meet their basic needs for survival and well-being (McAuliff, 2023; Verado, 2021). Gaps in direct support assistance also decreases the quality of life for family units as a whole and increases the likelihood of out of home placement and emergency service use (Kalb et al., 2016). Additionally, turnover rates

impact staff morale and the relationships between DSPs and people with IDD (Hewitt et al., 2022; Smith et al., 2019). Out of home and institutional placements for children and adults with IDD are more costly (Larson et al., 2022). While most people with IDD in the U.S. are living in a family home or their own home, many utilize DSPs for support for everything from providing personal care or getting customized support on the job. DSPs are critical workforce to support the full inclusion of people with IDD in all areas of community life.

Professional Development Needs for DSPs

The President's Committee for People with Intellectual Disabilities (PCPID) submitted a call to action in 2017 identifying a need for competency-based training initiatives for DSPs as a means to addressing the workforce crisis. Competency-based training programs are designed to teach people knowledge and skills as well as to change the attitudes of participants. Dailey, Morris, and Hoge (2015) call for cutting edge, innovative solutions to the crisis, including supporting education and professional development, as it is well known that very few states have universal training standards for DSPs, in part due to challenges in funding access to ongoing quality training (PCPID, 2017; Smith et al., 2019). The workforce shortage also increases demands on those currently employed as DSPs and reduces the amount of time available for structured training opportunities. This quandary supports the need for a shift from in-person, multi-day seminar type training to curriculum-based learning provided through brief virtual sessions.

There are a variety of DSP toolkits and training resources available to providers through organizations such as Council of Quality Leadership (CQL), College of Direct Support, the National Alliance for Direct Support Professionals (NADSP), American Network of Community Options and Resources (ANCOR), and National Association for the Dually Diagnosed (NADD).

These training curricula and resources typically include sessions on person centered practices and positive behavior supports and, in some instances, may include an overview about the mental health needs of people with IDD. However, a comprehensive, evidence-based curricula designed to specifically address the mental health and wellbeing of this population is not widely available. Further, existing curricula often lacks the live coaching and dialogue required to foster true shifts in the attitudes of trainees. The current study provides an evaluation of a novel training approach specific to meeting the needs of DSPs who support individuals with IDD-MH.

Need for Interactive Training Opportunities

Like the service systems themselves, professional development to address mental healthcare and developmental disability service needs have historically been siloed. Many training courses prioritized by providers include those that focus on basic health and safety concerns and compliance. This can be out of necessity, due to the fact there is often limited time to wholistically train and onboard DSPs. While training is an important aspect of professional development, the complex intersectionality of mental health and developmental disability results in a need for DSPs to have a foundational understanding of multiple conditions which impact a person's wellbeing. While didactic training is one important aspect of addressing the gap, generalization of skills and knowledge learned requires active dialogue and opportunities for processing (Pinals et al., 2022). Training recommendations in the 2020 National Needs Assessment: Mental Health Services for People with Intellectual and Developmental Disabilities (Lamar, 2020) highlighted the need for foundational understanding of the IDD-MH population, recognizing mental health symptoms in people with IDD, and engaging people in effective interventions. These topics serve as cornerstones in the *Mental Health Aspects of IDD Course for Direct Support Professionals.* The course further builds on these foundational principles by

strategically teaching strengths-based, positive approaches, both well-established best practices in the field of IDD-MH (Wehmeyer et al., 2017).

National Center for START Services® Professional Development

The National Center for START Services® (NCSS), was established at the University of New Hampshire's Institute on Disability in 2009. The NCSS was established to support the implementation of START programs nationally. START (Systemic, Therapeutic, Assessment, Resources, and Treatment) is an evidence-informed model that utilizes a person-centered, solutions-focused approach to provide community-based crisis intervention for people with IDD-MH (Beasley & Hurley, 2003). The efforts of NCSS include teaching and training on the implementation of START practices, research and evaluation, and professional development to improve the lives of people with IDD-MH and their families. NCSS's professional development efforts began in 2019 and are designed to build expertise within human service disciplines through evidence-based instruction and best practices. Course design and delivery apply adult learning principles (Knowles et al., 2020). NCSS offers professional development opportunities for mobile crisis responders, care/service coordinators, and direct support professionals. Since 2019, the professional development series has provided training to more than 1,000 professionals from across the country.

Direct Support Professionals Course Description

The Mental Health Aspects of IDD Course for Direct Support Professionals was originally piloted in 2019 and become a standard offering in 2021. The course is marketed to DSPs who provide health and community supports for people with IDD in diverse settings (e.g. residential, habilitation, education, and employment). It seeks to address two critical needs; training and professional development for DSPs and enhancing positive, strengths, and wellness-based

supports for people with IDD-MH. This positive approach is built upon the basic principles of

positive psychology. This includes not only identifying and building upon the character strengths

of the person with IDD-MH being supported, but the DSP's own character strengths as well.

Both are seen as important tools for increasing wellbeing (Niemiec et al., 2017).

The course has several attributes: 1) Six (6) live, Zoom sessions facilitated weekly at a

standing day/time, 2) session length of 105 minutes: 75 minutes of instruction followed by 30

minutes of facilitated interactive dialogue focused on reflection and application of concepts, 3)

co-facilitated by clinicians and people with lived experience of IDD-MH, 4) sessions are

recorded and accessible to course participants following each session, 5) provision of additional

materials and resources targeted at improved application of practices including (e.g. worksheets,

articles), 6) administration of pre- and post- surveys and session evaluations, 7) UNH Continuing

Education Units (CEUs) offered, 8) Certificate of Completion in IDD-MH Training for Direct

Support Professionals for those who attend all six sessions. Topics covered in each of the six

sessions are outlined in Table 1.

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Research Questions

The study sought to explore the following questions:

1. What are the characteristics of DSP course participants?

2. Were there changes in perception and knowledge after completion of this course?

3. Does access to previous training impact job satisfaction of DSPs?

4. What additional training needs were identified by DSP course participants?

Methods

Study Design

This applied outcome evaluation uses descriptive statistics to summarize participant characteristics and training outcomes. The target population is DSPs serving in various capacities within the IDD and mental health service delivery systems. Our aims were threefold. First, a descriptive analysis of training participants was conducted to gain insight into the diversity of perspectives, experiences, and backgrounds of DSPs who participated in this professional development opportunity. Second, changes in perception and knowledge were evaluated using self-reported changes in both realms. Lastly, a qualitative inquiry was conducted to explore future training needs. Additionally, t-tests were conducted to examine the relationships between training, job satisfaction, and employment setting.

Sample

The study sample included a total of 193 registrants across three training cohorts (February 2021, February 2022, and September 2022), representing 17 states: Arkansas, California, Iowa, Idaho, Massachusetts, Maine, North Carolina, North Dakota, New Hampshire, New York, Ohio, Oklahoma, Tennessee, Texas, Utah, Virginia, and Vermont.

Data Collection

Standard training evaluations seek to measure general satisfaction and achievement of stated objectives. Along with these metrics, the NCSS Professional Development evaluations sought to measure perceptions and knowledge of participants' understanding of the mental health

aspects of IDD, self-reported ability to deliver quality, positive and wellness-based supports, and to identify topics for future learning. This evaluation approach was premised on training effectiveness models that evaluate the interconnectedness between 1) individual characteristics such as demographics and experiences, 2) context and settings in which training is implemented, and 3) training characteristics such as instructional style, practice, and feedback (Alvarez et al., 2004). Alvarez et al. (2004) aptly summarized NCSS' evaluation approach, "reactions to training are related to learning, learning is related to behavior, and behavior is related to results" (p. 388). Participant perceptions and reactions are ideal sources for determining the usefulness and impact of training offerings.

The three measures used in this study were pre and post surveys and training evaluations. This design controls for response-shift bias and is a cost-effective way to evaluate trainee change (Thomas et al., 2019). Participants registered for the course online using a UNH-licensed platform. All surveys and evaluations used in this study were completed anonymously via Qualtrics, a licensed UNH survey software that is not connected to the registration platform.

Prior to the course start date, participants completed a pre- survey including questions about participants' previous knowledge and training along with 16 multiple-choice knowledge-based questions pertaining to content covered during the course. Immediately following course completion, participants were invited to complete a post-survey. The post-survey consisted of the same knowledge-based questions asked at baseline, questions exploring overall training satisfaction, and a retrospective self-assessment aimed at exploring perceived changes before and after the course. Pre- and post-surveys were estimated to take about 20-30 minutes to complete.

In addition to pre- and post-surveys, a brief evaluation was administered following each weekly session and consisted of general satisfaction ratings and an open text box for recommendations for improvement, future training topics requests, or unanswered questions.

Results

To address the three research questions posed, a descriptive analysis using frequency distributions was employed to evaluate survey responses. In addition to quantitative findings, a qualitative inquiry was completed to explore future training needs.

Participant Characteristics

Participants in the study reflected common demographic patterns in direct support work. Participants (N=115) self-identified as 74% (n= 85) female, 86% (n=99) non-Hispanic, 66% (n=76) white, 53% (n=61) were between the ages of 18-40, 49% (n=56) reported having a at least a Bachelor's degree, and 57% (n=65) had 10 years or less experience as a DSP, with the largest majority (34%, n=39) having 5 years or less experience. Participants supported people across the lifespan, with 14% (n=15) supporting children and families, 63% (n=68) supporting adults. Participants were asked to indicate their current work setting and were allowed to make more than one selection. A resounding majority (87%, n=94) work in community-based settings, the definition representing a diverse array of settings such as host homes (where a person resides with a 'host' family), group homes, community-based mental health, community habilitation and other community support settings. Given the silos known to exist between IDD supports and mental health services it is promising that 12% (n=19) of participants identified as working within the mental health space.

Participants were provided with five statements related to self-reported levels of knowledge, perception, and training. They rated their level of agreement with each statement

using a 5-point Likert scale ranging from strongly agree to strongly disagree. Notably, each of

the five statements garnered agreement from 70% of participants. The highest levels of

disagreement were concentrated within the two training-focused statements: *I receive adequate*

training to do my job well and *I have mastered the skills necessary to perform my work* with 10%

and 7% disagreement, respectively, compared to an average 3% disagreement with the remaining

three statements.

Participants were also asked to rate their overall satisfaction with their job, including all

the different aspects of their work (pay rate/benefits, management and organization of the

agency, relationships with coworkers and supervisors, and day to day responsibilities). They

were provided a 1-10 scale with 1 being not satisfied and 10 being the most satisfied. The mean

score was 7.5 (SD = 1.73). Interestingly, even with what we know about the DSP workforce

crisis, those who completed the survey demonstrated overall satisfaction with their jobs. They

were also provided the time to participate in this training. This begs the question of whether this

sample may have higher job satisfaction than groups who did not participate.

Previous Training Experience

The pre-survey also asked participants about what, if any, training experiences they had

prior to enrolling in the course. Over half (53%) of participants reported previous training

experiences about the mental health aspects of IDD, while 18% were unsure and 30% reported

no previous training experiences. When asked to self-evaluate their current level of knowledge

regarding the mental health aspects of IDD, 70% indicated that they had some but not all the

knowledge they want or need. Only 18% reported feeling very knowledgeable. Participants were

also asked to rate their current level of knowledge of the mental health needs of people with

IDD. Of the 108 total responses, 70% (n=76) indicated they had *some but not all I want or need* while another 11% (n=12) indicated they had *very little.*

Changes in Perception and Knowledge

The 16 multiple-choice knowledge-based questions asked in both pre- and post-surveys were directly tied to session content. A total of 108 participants completed the pre-survey knowledge-based questions with an average score of 72% and 39 participants completed the post-survey knowledge-based questions with an average score of 79%, denoting a 7% increase in knowledge from pre- to post-survey.

A matrix of four statements relating to general training feedback (N=39) was administered using a 5-point rating system ranging from *strongly agree* to *strongly disagree.* Results indicated that 80% (n=31) would recommend the training opportunity to others, 87% (n=34) will apply what they've learned to their daily work, 84% (n=34) plan to share what they've learned with others, and 84% (n=34) agreed that the format of the course was conducive to learning.

Participants were also asked to rate their perceived abilities before and after the course on a scale of 1-5 (1=*low ability/not very good*, 5=*high ability/excellent*). These abilities correspond with the five learning objectives of the course. Table 2 shows the percentage of participants who rated their ability both pre and post training as very high or high (4/5).

<<<<<<<<<<<<< INSERT TABLE 2 HERE>>>>>>>>>>>>>>>>

The increase in participants' self-rated abilities from pre- to post-course demonstrates a significant shift in perceived ability and confidence. While more than half (52%) of participants rated their abilities as *high/very high* in each of the five domains prior to beginning the course, an average of 96% of participants rated their abilities as *high/very high* in each of the five domains post-course. The ability to demonstrate a biopsychosocial understanding of a person's strengths and vulnerabilities had a 56% increase in *high/very high* responses from pre to post.

Training Satisfaction and Future Training Needs

Following each of the six training sessions, participants were asked to rate their satisfaction on a five-point scale (1=not satisfied to 5=very satisfied) in four areas. The content areas rated included: 1) zoom technology, 2) session content, and 3) facilitation of session, and 4) overall satisfaction with session. A total of 460 responses were recorded across all three cohorts. Overall ratings averaged 95% satisfaction with zoom, 96% satisfaction with content, 97% satisfaction with facilitation and a 97% satisfaction with overall experience. The post-survey was completed by 39 participants representing only 34% of the pre-survey sample size (N=115). Participant overall satisfaction with the course averaged 95%.

Training and Job Satisfaction

Job satisfaction ratings were compared across several participant characteristics including years of experience, previous IDD-MH training, age groups served, self-rated level of knowledge of IDD-MH, and education level. Open-source statistical software (R) was used to further understand the relationships between training, job satisfaction, and employment setting using linear regression modeling. Our first hypothesis is that more training experience and working in a community-based setting providing direct support will result in higher job satisfaction.

Using 'no previous IDD-MH training' as the reference group and controlling for community-based settings, there were statistically significant differences in job satisfaction for DSPs who confirmed having previous IDD-MH training, and for DSPs who were unsure if they had previous IDD-MH training. Those with previous training, or unsure of previous training, were more likely to experience an increase in job satisfaction overall. Detailed results of the linear regression can be found in Table 3.

<<<<INSERT TABLE 3 HERE>>>>

A Welch two sample t-test was conducted to compare the mean job satisfaction of DSPs who had reported previous IDD-MH training, and those who reported having no previous IDD-MH training. There was a significant difference in job satisfaction between DSPs who reported previous IDD-MH training (M= 7.6, SD= 1.65), and DSPs who report no previous IDD-MH training (M=6.7, SD= .088) (t (46.52) = -2.023, p <.05). DSPs who reported previous IDD-MH training reported greater job satisfaction than those who had no previous training.

Qualitative Inquiry

Participants were asked to share what training topics they'd be interested in from future NCSS professional development offerings both in session evaluations and the post-survey. An interpretive qualitative inquiry identified the following prominent topics: understanding and applying psychological evaluation recommendations, positive psychology, enhanced focus on lived experience perspective, community employment, calming techniques, trauma-informed care, suicidality, executive functioning, and proactive support strategies.

Discussion

There has been an ongoing workforce crisis and shortage in disability services for more than 10 years and DSPs are desperately needed in all areas of the service system to provide much need support to people with IDD-MH (ICI et al., 2022). Additionally, for DSPs who do work in the field, many do not have access to competency and values-based training, and even fewer are ever provided with training on the specific mental health needs of people with IDD-MH. *The Mental Health Aspects of IDD Course for Direct Support Professionals* is novel in several ways. First, the course is available to a national audience of DSPs. While the primary recipient of the course includes DSPs connected to START programs, many other DSPs from different service areas participated. Second, courses are co-taught and delivered by professionals who experience IDD-MH. Third, the series addresses mental health competencies in IDD for DSPs serving this group. Lastly, the foundational values of the course are based upon START principles, which include positive psychology.

There was a great deal of demographic variability of the sample, including large standard deviations (>1 SD) in the mean values of job satisfaction *with* age, education level, knowledge level, community setting, and years of experience, which is not surprising as DSPs are often a diverse group of professionals with varying backgrounds. This can present a challenge for training design and implementation due to the diversity of DSPs. However, competency-based training, such as the one described in this study, can provide standardized learning and practices. Additional analysis also revealed a significant relationship between job satisfaction and training, which supports previous literature supporting the value of training for DSPs. Employers have varying approaches to training DSPs, yet this study provides additional evidence of the positive impact training can have on DSPs and their outlook on their job, perhaps supporting longevity within the position.

The promotion of happiness, wellbeing, and character strengths are not necessarily common features in training in human services. In a scan of current publicly available training for DSPs, each of the novel features in *The Mental Health Aspects of IDD Course for Direct Support Professionals,* collectively, were not visibly present in other online DSP training (e.g., College of Direct Support, CQL, NADD, NADSP). This course and subsequent study reveal it is possible to teach to DSP competencies using positive psychology, to include those with lived experience as instructors, and that material can be delivered live to a diverse national audience via zoom. Participants reflected:

> *I really enjoyed learning about positive psychology, character strengths and PERMA and then being able to discuss it as a class. There were some good points and thoughts in our discussion that furthered my learning. It felt like a safe place to learn and discuss.*

> *Using the traffic light as way to work with an individual was an awesome way to …. build a plan for individual based on interest. I will take this with [me] in my work as a tool of support.*

Alignment to principles of adult learning is essential for developing training of adults in any industry (Brookfield, 1986; Knowles et al., 2020). Today many training materials on the market for DSPs, including but not limited to Council of Quality Leadership (CQL), College of Direct Support, and National Association for the Dually Diagnosed (NADD), indicate they design training and certification-based principles of adult learning. When training is designed with learner autonomy, flexibility, relevancy, and is goal-driven and respectful of a person's experience, the likelihood of content application can increase (Brookfield, 1986; Knowles et al., 2020). This is demonstrated throughout course design but perhaps most specifically during the "You Spoke, We Listened" segment that begins each session wherein facilitators respond to

comments, questions, and reflections shared by participants in the previous session evaluation. Growing attention has been given to positive psychology approaches in teaching and education. Yet, positive psychology approaches for training DSPs are not readily in the market. Strengths based, including finding strengths in oneself *and* in people with IDD-MH, allows learners to bring and apply their own meaning, challenging traditional methods of teaching that focus on memorization and replicability.

Using positive psychology may provide a twofold benefit in the case of DSPs training. First, allowing for individualized applied meaning by the DSP that promotes self-awareness and positive use of self. The awareness of the mental health needs of DSPs is growing, as DSPs regularly report stress, burnout, and poor mental health (ICI et al., 2022; Hewitt et al., 2020; PCPID, 2017). Results from this study indicate positive psychology approaches also may benefit the DSP learner more personally. Second, healthy and happy DSPs may provide an enhanced quality of support by moving beyond compliance to that of supporting people with IDD-MH to thrive in their communities, home, and relationships.

The intersection of positive psychology and adult learning principles for training is growing but does warrant attention and testing with a focus on various professional positions, such as DSPs. Positive psychology literature does suggest a meaningful impact on coaching (Green & Palmer, 2018; Seligman et al. 2009). The use of positive psychology approaches for DSPs and people with IDD-MH is worthy of further exploration.   The prevailing trend seen within qualitative evaluation feedback indicated a strong interest in training that further explores the application of positive psychology. In response, NCSS is developing a new IDD-MH positive psychology course that will be open to DSPs and all members of the IDD-MH workforce.

As the workforce crisis continues, and a shortage of direct support workers remains, some organizations and states are more willing to provide easily deployable training in non-traditional ways, such as zoom. Organizations and employers are also more willing to purchase training from other entities, rather than creating their own training from scratch, which are incredibly labor intensive. The cost of development and delivery of comprehensive well-designed training is both cost-prohibitive and inconceivable for many human service organizations (PCPID, 2017). *The Mental Health Aspects of IDD Course for Direct Support Professionals* includes both strong design-based principles of adult learning and can be deployed across systems. While a shortage of time for training and professional development has often been a challenge in DSP work, now more than ever the focus and awareness of mental health includes people with IDD.

Limitations

The evaluation of the *Mental Health Aspects of IDD Course for Direct Support Professionals* includes a limited number, but promising responses. The course was not originally designed as a study and therefore completion of all surveys is voluntary. Participants had the option of skipping questions which led to sporadic missing data that did not impact overall outcomes reported in this study. While various demographic variables were collected relative to job satisfaction, this study specifically explored the relationships between reported previous training in IDD-MH (Yes or No) and job satisfaction. Additional testing may reveal the impact of other variables on job satisfaction.

Lower rates of post-survey responses limited our ability to compare outcomes but provide important insight into the training interests and needs of the DSP workforce. This course is a new offering from the NCSS and with time, additional DSPs will participate. There is also a

clear opportunity to follow up with past participants for a follow-up survey that explores how they continue to use the knowledge and skills learned in the course, which would require additional human subjects approval. It is interesting to note that even with a small (7%) increase between pre- and post scores, overall scores for the multiple-choice knowledge-based questions never exceeded 80%. Two hypotheses have emerged regarding the relatively low percentage of improvement from pre- to post-survey. The first is that the framing of the questions enables the participant to rather easily infer the correct answer. The second hypothesis is that participants can easily seek the answers online which undermines the integrity of administering multiple-choice questions. Further exploration is needed to determine the best utilization of this data. Additionally, most participants in the course hailed from states where START programs currently or previously existed or where training initiatives have previously been led by NCSS. Due to these connections, this DSP audience may be primed to receive and engage with this content more actively. As result, the findings from this study are not generalizable to a broader population of DSPs. However, the qualitative data captured during the evaluation indicate that DSPs deeply care about their work and desire to improve their knowledge and skills, which is consistent with other research conducted about DSPs (Crane & Havercamp; 2020; Friedman, 2021; Pettingell et al., 2021). The pre and post survey data was not linked and therefore chi square analyses that would have identified potential correlations between variables were not conducted. The only questions asked both pre and post were the knowledge-based questions.

Implications

Research exploring various applications of DSP training and learning reveals the act of offering professional development can have a positive impact on DSP and services for people supported (Crane & Havercamp, 2020; Friedman, 2021). Yet beyond employer investments in

training there are additional factors at play at the individual DSP level. Crane & Havercamp (2020) examined motivation and resilience in DSPs. They identified DSPs who found personal value in their work and had protective factors against stress and burnout. High-quality, value-based training can provide enhancements to developing protective factors. More research is needed to understand the how and why of resiliency in DSPs as a professional population and what support or training employers can provide to enhance it. The present study sought to understand how the alignment of content, design, and values could be leveraged to create meaningful training for DSPs and revealed protective factors against burnout and stress. Open-ended survey feedback paired with high levels of formal education infers that many DSP supervisors attended this training in order to share what they learned with their staff. This may reflect a top-down solution to the ongoing juxtaposition between valuing training and time constraints faced by DSPs amidst a workforce crisis. It presents an interesting opportunity for a train-the-trainer model specifically designed for supervisors. Additional research that moves beyond the present descriptive analysis is a clear next step, including exploration of the long-term impact on people with IDD-MH and the DSPs themselves.

Pre-, post-, and training evaluation outcomes have already lead to changes in the curriculum. The introduction of a co-facilitator with lived experience of IDD-MH during the most recent cohort in September 2022 was one such change. The co-facilitator took part in all aspects of course delivery including pre- and intersession planning meetings and post-course reviews. Participants offered positive feedback regarding the value of their role on the facilitator team. This was aptly summarized by one participant's post-survey feedback, "So great to put things in [the] context of lived experience."

Conclusion

Historically, knowledge of the mental health needs for people with IDD were ignored, excluded, and misunderstood, but today education and training increasingly recognize that mental health impacts *all* people, including those with IDD. Interactive DSP training that incorporates content informed by those with lived experience ("Nothing about us, without us"), align or teach professional values and competencies (e.g., NADSP, NADD, NCSS), provide opportunities for dialogue and processing, and are replicable across small and large service systems (i.e., local, state, national) demonstrate a resilient and timely approach to DSP workforce training needs. Even small investments in training can result in lasting impact for both DSPs and people supported. *The Mental Health Aspects of IDD Course for Direct Support Professionals* seeks to improve the knowledge, skills, and practices of DSPs working with people with IDD-MH, while also providing essential investments in DSPs as an approach in securing and stabilizing a critical workforce nationwide.

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Table 1

Session Outline: Mental Health Aspects of IDD Course for Direct Support Professionals

Session 1	**Foundations I: Introduction to the Course & Guiding Principles** • Course overview • Positive psychology & other guiding principles
Session 2	**Foundations II: Overview of Intellectual & Developmental Disabilities (IDD) and Common Vulnerabilities** • Overview of IDD & Autism Spectrum Disorder • Core biopsychosocial vulnerabilities of IDD
Session 3	**Foundations III: Mental Health Aspects of IDD** • Identifying signs and symptoms related to mental health • Overview of the most common mental health diagnoses: Anxiety, depression & trauma • Exploring how core vulnerabilities of IDD impact mental health
Session 4	**Foundations IV: Mental Health Aspects of IDD** • Trauma • Emotional regulation
Session 5	**Therapeutic Interventions I** • Positive identity development • Trauma informed care in action • Promoting wellness
Session 6	**Therapeutic Interventions II** • Emotion recognition & regulation • Relaxation & Stress reduction • Creative expression

Table 2

Self-Rated Ability as Very High/High Pre and Post Training (N=39)

	Pre-Training	Post Training
Demonstrate an understanding of IDD and the presentation of co-occurring mental health conditions		
	54%	97%
Demonstrate a biopsychosocial understanding of a person's strengths and vulnerabilities		
	41%	97%
Apply strengths-based therapeutic practices, interventions and skills to support people		
	46%	95%
Effectively facilitate therapeutic activities		
	51%	92%
Engage in positive and wellness-focused interactions with people, families, and colleagues		
	69%	97%

Table 3

Linear Regression Results

Coefficient	Estimate	Estimate SE	t value	p
(Intercept)	6.5526316	0.8653854	7.571923	1.869778e-11
TrainingUnsure	1.3684211	0.5014776	2.728778	7.511336e-03
TrainingYes	0.8947368	0.3870121	2.311909	2.283360e-02
`Community-based`	0.1842105	0.8664532	0.212603	8.320694e-01