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Embracing neurodivergent occupations and empowering disabled voices: a knowledge translation tool to support neurodiversity-affirming occupational therapy practice and challenge ableism within the profession

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Doctoral Project

EMBRACING NEURODIVERGENT OCCUPATIONS AND EMPOWERING DISABLED VOICES: A KNOWLEDGE TRANSLATION TOOL TO SUPPORT NEURODIVERSITY-AFFIRMING OCCUPATIONAL THERAPY PRACTICE AND CHALLENGE ABLEISM WITH THE PROFESSION

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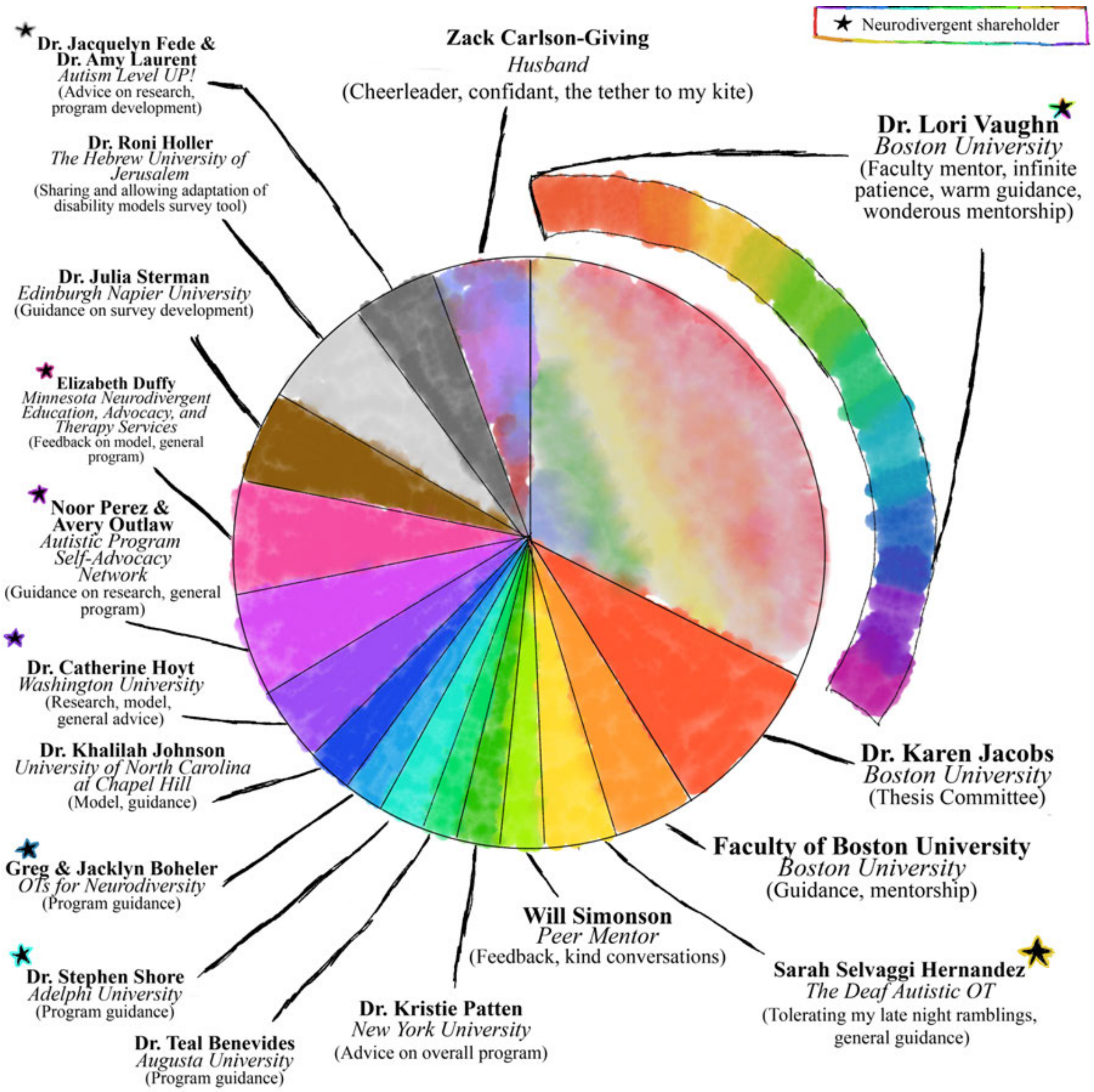
DEDICATION

To the brave disabled advocates who fought and created a platform for disability studies and disability justice to infiltrate occupational therapy and occupational science — this work is for you.

Within an endless spring of gratitude, thank you. The future is disabled, and my goodness, it is beautiful.

Let us take this home.

ACKNOWLEDGMENTS



EMBRACING NEURODIVERGENT OCCUPATIONS AND EMPOWERING DISABLED VOICES: A KNOWLEDGE TRANSLATION TOOL TO SUPPORT NEURODIVERSITY-AFFIRMING OCCUPATIONAL THERAPY PRACTICE AND CHALLENGE ABLEISM WITH THE PROFESSION

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ABSTRACT

Neurodivergent occupations are ways of living and embodying life that speaks true for their neurotype. Examples include autistic play, ADHDer concepts of attention, and sensory processing differences. Though the neurodiversity movement is beginning to infiltrate health care services, neurodiversity-affirming practices within occupational therapy remains lacking. Neurodivergent occupations continue to be pathologized within occupational therapy, evident within the profession's education, and all aspects of the occupational therapy process, such as assessment, treatment, and outcomes. Neurotypicality remains to be the benchmark for functioning within occupational therapy, much of which is secondary to the dominating medical model of disability and ableism proliferating the profession. These factors lead to OTPs creating occupational marginalization when attempting to support neurodivergent individuals, with neurodivergent OTPs pleading for the profession to reflect and modify current conceptualizations of occupational therapy.

The proposed program, *Embracing Neurodivergent Occupations*, aims to answer this call. *Embracing Neurodivergent Occupations* is a knowledge translation tool incorporating tenets of disability justice, community-defined evidence practice, and lived-experience informed practice. The program intends to be an example of community-based participatory research (CBPR), with the program's creation incorporating neurodivergent OTPs, scholars, and advocates from around the world for a holistic view on neurodivergent ways of living. Components of the *Embracing Neurodivergent Occupations* will include: (a) the first neurodiversity-affirming occupational therapy model (EMPOWER Model), (b) conversations on models of disablement and rehabilitation, (c) health and well-being priorities designated by autistic individuals, (d) steps for completing neurodiversity-affirming evaluations, (e) neurodiversity-affirming service and practitioner characteristics, and (f) a grading of commonly utilized occupational therapy programs and resources and their level of being neurodiversity-affirming. *Embracing Neurodivergent Occupations* has three phases: (1) an introductory workshop with OTPs within this author's current work setting, (2) a website translating the program into a multimedia resource hub, and (3) morphing the introductory workshop into online modules. *Embracing Neurodivergent Occupations* aspires to support the profession's ability to be anti-ableist, provide neurodiversity-affirming services through all aspects of the occupational therapy process, and ultimately empower neurodivergent occupational participation and well-being.

Land Acknowledgement

This research and program's creation was conducted on the ancestral lands of the Wahpekute and Očhéthi Šakówiŋ, currently occupied by the municipality of Buffalo, Minnesota. This author lives on Wahpekute and Očhéthi Šakówiŋ territory, and this author acknowledges the oppressive forces impacting Indigenous people and recognizes the colonial influences remaining within today's society and healthcare structures (which this author has benefited from as a white individual). This author aims to move beyond land acknowledgement[1] by continuing to advocate against Indigenous oppression and amplify Indigenous occupations within Western-focused occupational frameworks.

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[1] Consider examining the Indigenous land you reside on by visiting https://native-land.ca/ and reflect on how you can advocate beyond land acknowledgements at https://nativegov.org/news/beyond-land-acknowledgment-guide/

PREFACE

Excerpts from *The Axioms of Inequality* by Bryden Carlson-Giving

I

I’m on the edge of a precipice,
looking down into the abyss   of myself.
It is breathtaking, because
it belongs to no one else.

II

I see tree roots turn into
kingdoms. Vibrant strings gift
a technicolor uproar, and I am
a mobile orchestra.

III

One day, we are going to look back and wonder
how did we survive that, survive ~~you.~~

IV

Somewhere, there is a place where the viperous shadows
cannot touch. Paper airplanes morph into stars,
where Crip[2] worlds   are not just dreams. Can it be here?
Will you be there?

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[2] *Crip* is a reclaimed slur by disabled individuals. Crip has been transformed in a way that resembles disability pride unapologetically, and by taking back the word, disabled individuals can empower future generations of disabled individuals with the word (another example is how queer individuals reclaimed the word “Queer”) (Kafai, 2023; Kuppers, 2014; Lew, 2021).

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LIST OF ABBREVIATIONS

AOTA	American Occupational Therapy Association
ASAN	Autistic Self-Advocacy Network
ATDP	Attitudes Toward Disabled Persons Scale
CBPR	Community-Based Participatory Research
CDEP	Community-Defined Evidence Practice
COTAD	Coalition of Occupational Therapy Advocates for Diversity
DA-IAT	Disability Attitudes Implicit Association Test
DS	Disability Studies
EBP	Evidence-Based Practice
EBPI	Evidence-Based Practice Implementation Scale
ICF-CY	International Classification of Functioning, Disability, and Health: Child and Youth Version
IDEIA	Individuals of Disabilities Education Improvement Act
LEIP	Lived Experience-Informed Practice
MOTA	Minnesota Occupational Therapy Association
NCLB	No Child Left Behind Act
NIH	National Institutes of Health
OTP	Occupational Therapy Practitioner
OTPF-4	Occupational Therapy Practice Framework – Fourth Edition
SBP	Strengths-Based Practice
SSD	Single-Subject Design

TNC	Therapist Neurodiversity Collective
WHO	World Health Organization

A Note on Language and Privilege

Throughout this work, identity-first language will be utilized when describing autistic individuals to validate and honor the wishes of the autistic community (Bottema-Beutel et al., 2021; Brown, 2020; Kenny et al., 2016; Taboas et al., 2022). This shift in language honors autism as a culture and recognizes autism a vital part of an autistic individual's identity. Additionally, this extends to utilizing identity-first language when describing disabled people instead of person-first language in support with the disability studies (DS) approach to viewing ableism and disability (Harrison et al., 2021). When in doubt, please ask the communities the language they prefer.

Sterman et al.'s study (2022) illustrates the importance of illuminating the identities of authors in relation to neurodivergence and recognizing privilege. This author is a white, cis-gender, queer, disabled, neurodivergent, and allistic occupational therapy practitioner (OTP). This author acknowledges that they have utilized strategies that are not recognized as autistic-affirming in the past, and will not recommend or utilize these services as they continue to learn and listen to autistic voices concerning healthcare services. This author recognizes they have been wrong in the past, especially concerning language and promoting ableist therapeutic approaches (Giving, 2018). This author also acknowledges intricate intersectionality exists regarding neurodivergence with other identities, such as BIPOC, sexual orientation, and Blind and Deaf communities, recognizing our privilege within this complex and oppressing system.

CHAPTER ONE – Introduction

The neurodiversity movement is a social justice movement led by neurodivergent individuals embracing differences in executive, mental, or neurologic function as valid forms of human diversity (ASAN, n.d.; Dallman et al., 2022). Examples of neurodivergent neurotypes are autism, dyslexia, depression, schizophrenia, attention deficit hyperactivity disorder (ADHD), and synesthesia (Dallman et al., 2022). Neurodiversity incorporates all neurotypes, including those who are neurotypical, and differences in neurology influence human beings to participate in life and experience the world in enormously diverse and beautiful ways (Dallman et al., 2022). It has been proposed that supporting neurodivergent clients in their ability to participate in life in these distinct performances is an ethical mandate for occupational therapy practitioners (Dallman et al., 2022). There is no “correct way” to embody and perform through life, and enhancing how the individual defines meaning in life deserves to be recognized and validated (Dallman et al., 2022).

Healthcare has an extensive history of pathologizing and misconceptualizing identities and individuals who experience and participate in life that deviate from the norm prior to welcoming them (e.g., queerness), and the profession of occupational therapy is no different (Dallman et al., 2022; Wood & Davidson, 2020). Though occupational therapy practitioners (OTPs) have much to offer in supporting the occupational participation neurodivergent individuals and the neurodiversity movement, the profession struggles with implementing best practices, including those supported by neurodiversity-affirming research and maximizing incorporation of neurodivergent perspectives (ASAN, n.d.; Taylor, 2022). Additionally, many OTPs report challenges with knowledge translation when supporting neurodivergent children and youth (Ashburner et al., 2014; Novak & Honan, 2019). Healthcare research typically lags in implementation by fifteen to twenty years, which is an entire childhood for children (Novak et al., 2019).

Why These Problems Matter & Explanation

Research-informed services are more cost-effective than non-research informed approaches (Gillen et al., 2017; Steinbrenner et al., 2020). The primary goal of knowledge translation is to use research evidence to decrease the use of ineffective healthcare practices and instead utilize effective strategies (Baker & Tickle-Degnen, 2014; Law & MacDermind, 2014). Though knowledge translation is an essential part of occupational therapy practice, the profession needs improvement regarding the implementation of evidence-based research into practice. OTPs have reported they do not always have the support and information needed to implement research-informed techniques (Upton et al., 2014). Additionally, a substantial number of practitioners hold negative perceptions of research, such as knowledge translation being too complicated and too demanding (Upton et al., 2014). Occupational therapy practitioners working with autistic students have historically relied more on clinical experience and colleagues rather than research evidence (Ashburner et al., 2014). A barrier, such as practitioners reporting they do not have the time or skills to search and critically appraise articles (Upton et al., 2014), likely leads to the higher reliance on clinical experience.

The proposed program created within this doctoral project is the *Embracing Neurodivergent Occupations and Empowering Disabled Voices: A Knowledge Translation Tool to Support Neurodiversity-Affirming Occupational Therapy Practice and Challenge Ableism Within the Profession*. *Embracing Neurodivergent Occupations* will be a knowledge translation tool, and the mission of the program is to support the utilization of best practices by occupational therapy practitioners supporting neurodivergent children and youth, and challenge ableism within the profession. Best practices for supporting the autistic community can be defined as strategies that incorporate the following characteristics: a) effective knowledge translation (Ashburner et al., 2014); b) including and amplifying autistic voices (ASAN, n.d.; Benevides et al., 2020; Monahan et al., 2021); and c) promoting disability justice (Yao et al., 2022). Additional long-term goals of *Embracing Neurodivergent Occupations* are to reduce stigmatization of autism, facilitate increased acceptance and activism of neurodiversity, and promote the occupational therapy profession's ability to target autistic health and well-being priorities. In turn, OTPs may report more confidence in addressing the occupational participation of neurodivergent students. The scope of this problem lies far beyond pediatrics. If occupational therapy practice addressing the occupational performance of neurodivergent students continues to be saturated with the utilization of non-affirming techniques, the profession runs the risk of losing credibility with the autistic community and other neurodivergent communities.

If the goal of the profession is to continue to provide services with the autistic community, it is essential OTPs reflect on their current practices to ensure the processes not only honor neurodivergent identities but amplify their voices. A recent qualitative study found autistic children feel lonely, unaccepted, misunderstood, and isolated within the education setting (Goodall, 2018). Some examples included having a lack of understanding of their behaviors, not providing alternatives to fit their sensory preferences or needs, and expecting them to learn just like their peers (Goodall, 2018). With occupational therapy practitioners being primary providers for neurodivergent children and youth within the educational setting and in the community, it is likely these challenges are reinforced within practice. Pellicano et al. (2014) reported the priorities of the autistic community have not been comprehensively sought and addressed within the United States regarding research and practice. When OTPs do not incorporate affirming research that emphasizes the lived experiences of neurodivergent individuals into their practice, there is increased likelihood OTPs embody micro-aggressive therapeutic practices and promote occupational marginalization (Dallman et al., 2022). That is, by prioritizing neurotypical occupations or emphasizing participation in life needs to appear neurotypical, OTPs are reducing the opportunity for neurodivergent individuals to participate in life as deemed meaningful by them and thus, their quality of life (Dallman et al., 2022). The long-term objective of *Embracing Neurodivergent Occupations* is to invite and collaborate with neurodivergent shareholders to examine how commonly utilized occupational therapy services with neurodivergent children and youth match the community's priorities.

A Note on Autistic and Neurodivergent Occupations

Taylor (2022), an autistic OTP, eloquently described how much of the occupational science literature historically defined occupations emphasizing social and cultural norms which suppress minority perspectives, including the autistic community. The dominance of aiming for neurotypicality within healthcare has limited the occupational therapy profession's ability to reflect on how ableism has morphed into what constitutes a healthy occupation (Taylor, 2022). The profession's prioritizing of neurotypicality often leads to OTPs inadvertently creating occupational marginalization. A form of occupational injustice, occupational marginalization is the inability of an individual to participate in occupations due to being viewed as different from a larger or dominant population (Durocher et al., 2013). Autistic characteristics (e.g., self-stimulatory behaviors) have been frequently conceptualized by non-autistic individuals often as pathological deficiencies (Grinker et al., 2020; Taylor, 2022). Within occupational therapy, autistic behaviors are often not considered occupations which contributes to creating and supporting ableism within the profession (Kiepek et al., 2014; Taylor, 2022).

Ableism is a form of systemic oppression that is deeply intertwined with racism, and it exists within occupational therapy and occupational science (Mahipaul, 2022; Yao et al., 2022). Ableism is defined as:

> A system that places value on people's bodies and minds based on societally construed ideas of normality, intelligence, excellence, desirability, and productivity. These constructed ideas are deeply rooted in anti-Blackness,

> eugenics, misogyny, colonialism, imperialism, and capitalism. (Lewis, 2019, graphic)

Prioritizing neurotypical outcomes or providing occupational therapy services aimed to make a neurodivergent individual be more neurotypical, whether it be remediating sensory processing differences or attempting to promote skill development with the least number of accommodations as possible, are ableist micro-aggressions. Ableism is entrenched within occupational therapy and occupational science, and only by deconstructing ableism within the profession can we promote more inclusive and justice-focused occupational therapy practice (Yao et al., 2022).

Kiepek et al. (2014) described how occupational science focuses on the health-enhancing nature of occupation and has completed limited work investigating occupations within the realm of human experience, risking occupational science to indirectly marginalize occupations that deviate from the norm or are deemed "socially unacceptable." The limited scope of what is researched within occupational science may promote the dominance of abled narratives in defining occupations (Kiepek et al., 2014; Taylor, 2022). In alignment with disability scholars and activities, this author advocates autistic and neurodivergent ways of being are occupations, such as autistic stims, and normalizing differences in social participation, sensory processing, and occupational engagement (Taylor, 2022). By incorporating autistic behaviors and neurodivergent ways of living into occupational frameworks and occupational science, occupational therapy can better honor and affirm neurodivergent identities, diminish ableist assumptions and eliminate prioritization of neurotypicality (Taylor, 2022).

CHAPTER TWO – Project Theoretical and Evidence Base

The Problem

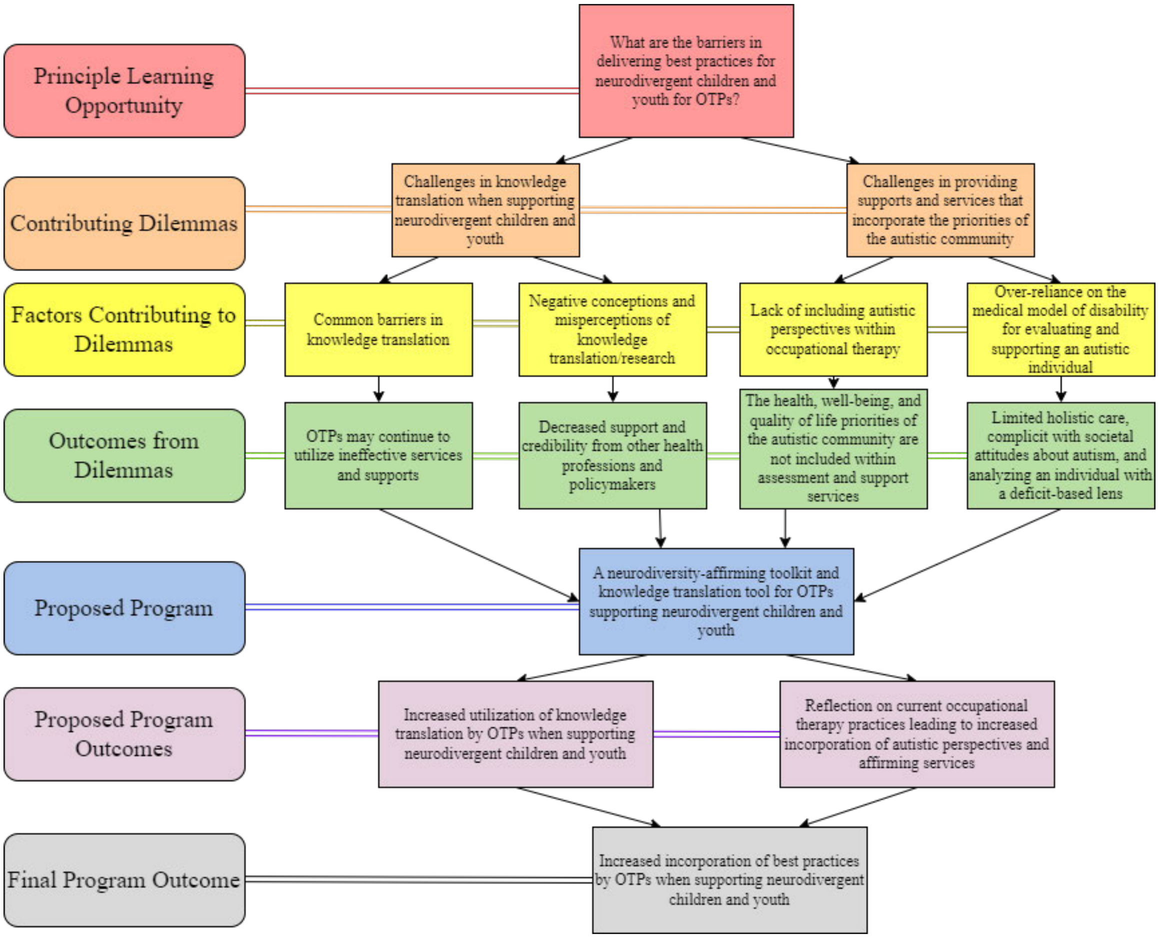
The goal of *Embracing Neurodivergent Occupations* is to promote the utilization of neurodiversity-affirming techniques by OTPs supporting neurodivergent children and youth. The explanatory model (Figure 2.1; see Appendix A for larger visual) examines the barriers in delivering best practices (neurodiversity-affirming) for autistic children and youth by OTPs. The explanatory model follows two pathways, with the first being in participating in knowledge translation when working with autistic children. Practitioners have reported challenges in implementing research findings, mentioning barriers of lack of time and decreased ability to search and critically appraise articles (Novak et al., 2019; Upton et al., 2014). This contributing factor can lead OTPs to utilize ineffective services, ultimately impacting reimbursement from payers (Ashburner et al., 2014). Additionally, challenges in implementing research-informed strategies can impact the quality of care practitioners provide and decrease the impact the profession can make in achieving health outcomes of autistic children and youth (Ashburner et al., 2014; Novak et al., 2019).

A secondary contributing factor impacting knowledge translation are negative perceptions and misconceptions of research, such as it being too complicated or undervaluing practitioner creativity or experience (Upton et al., 2014). An outcome secondary to negative perceptions of knowledge translation includes decreased support and credibility from other health professions and policymakers. If occupational therapy is deemed to be a low-quality service and continues to receive criticism for their service choices when working with neurodivergent children and youth, health professions may no longer recommend occupational therapy as a skilled service (Ashburner et al., 2014). Furthermore, payers and governmental agencies may reduce reimbursement of occupational therapy services due to insurance agencies requiring rehabilitation services to be research-informed. For example, in pediatric practice, the 2001 No Child Left Behind Act (NCLB), the Individuals of Disabilities Education Improvement Act (IDEIA, 2004), and ongoing Medicare initiatives and payers (CMS, 2017) require supports and services serving children to be evidence-based. *Embracing Neurodivergent Occupations* targeting this specific dilemma is a knowledge translation tool, which may lead to increased utilization of the research-informed and neurodiversity-affirming strategies by supporting practitioners in “skipping” the searching and critically appraising journal articles and illustrating the supports and services in an easily accessible format (Novak et al., 2019).

The second contributing dilemma to implementing best practices for autistic children and youth by OTPs are challenges in providing methods that incorporate the priorities of the autistic community and that honor their identity (Shore & Benevides, 2020). Factors contributing to this dilemma include the lack of inclusion of autistic perspectives in occupational therapy practice and the overreliance on the medical model for evaluating and treating an autistic child (Shore et al., 2020). The contributing factors may lead occupational therapy practitioners to assess and provide supports that do not incorporate the quality of life, health, and wellbeing priorities of the autistic community (Shore et al., 2020). Additionally, the profession may facilitate strategies that do not foster self-determination and a positive sense of identity when working with autistic children and youth (Shore et al., 2020). When practitioners rely on the medical model for evaluating and treating autistic children and youth, this can lead to services focusing on analyzing an autistic child through a “deficit” lens, ultimately impacting the provision of client-centered care (Bottema-Beutel, 2021; Shore & Benevides, 2020). A project in providing the opportunity for the autistic community to share their insight and fully disclose their thoughts on occupational therapy practice may help the profession reflect on current practice and better provide autistic identity-affirming services. By combining affirming research with assessment and service supports validating autistic identity, the profession can better address the health priorities and outcomes of autistic children and youth.

Figure 2.1

Explanatory Model



The Power of Language with an Introduction to Selected Models

Language in models and theories are impactful ways for how OTPs view autism and perpetuate ideologies concerning their health and well-being (Bottema-Beutel et al., 2021). The International Classification of Functioning, Disability, and Health: Child and Youth Version (ICF-CY) and the reformed social model and cultural models of disability are models that assist in elucidating the complex conceptualizations of the needs of autistic individuals when exploring disability justice (Bottema-Beutel, 2021; Castro &

Palikara, 2019). In addition, these models can be used to illustrate the interactions of social, psychological, and biological factors, and outline occupational therapy practice assumptions of autistic children and youth (Bottema-Beutel, 2021; Castro & Palikara, 2019). The ICF-CY visualizes a child's functioning reflecting the dynamic relationship of the environment and their characteristics, an approach consistent with public health initiatives and is often used across disciplines including healthcare and education (Castro & Palikara, 2019; WHO, 2007). Current conceptions of the reformed social model and the cultural model of disability recognize individual contributions within the context of a disabling society while validating autism as a neurological difference and a disability (Bottema-Beutel, 2021). Scholars advocate for the increased utilization of the reformed social model and cultural models of disability, which focus on the participation in activities while addressing the contexts and environment impacting participation, comparable to the activities, participation, and environmental aspects of the ICF-CY (Shore & Benevides, 2020). Contrastingly, neurodivergent scholars have outlined how much of current healthcare services supporting autistic children and youth are entrenched within the medical model of disability (e.g., improving sensory processing function, improving social communication, reducing "atypical" motor skills), resembling the body functions and structures of the ICF-CY (Shore & Benevides, 2020).

Interaction of the Models Concerning Occupational Therapy Practice

While a diagnosis can help practitioners anticipate possible challenges to occupational performance related to body structures (medical model), other factors such as the environment, societal attitudes, and demographics (reformed social model and cultural model) also impact occupational performance (Cramm et al., 2012; Shore & Benevides, 2020). Scholars have reported occupational therapy remains embedded within the medical model of disability, mostly focusing on occupational participation as being due to a deficit in body structures and function (Cramm et al., 2012, Holler et al., 2021). The reformed social model and cultural model of disability do not ignore client factors that may impact occupational performance (e.g., motor pattern differences, sensory processing differences) (Holler et al., 2021). Rather, the reformed social model and cultural model of disability do not allow client factors to overlook contextual, social, and environmental factors that are likely to impact occupational participation (Holler et al., 2021). Holler et al. (2021) shared it is not a simple process, and achieving the right balance integrating both social and medical aspects of disability is necessary for maximizing an individual's occupational participation.

Scholars have also discussed the complex nature of occupational therapy's focus on independence in tasks and how it often conflicts with the reformed social model and cultural model of disability (Holler et al., 2021). Holler et al. reported the reformed social model of disability does not necessarily reject positive aspects of independence, though the term "independence" is often defined as performing tasks without help from others within the profession and is the dominant mindset practitioners have when treating patients (2021). When independence is the leading goal when supporting autistic children and youth, the profession reinforces a false relationship between ability and disability (Holler et al., 2021). In many instances, when working with disabled children and youth, support is invaluable, and children may have greater participation and performance in a meaningful activity when provided with support (Castro & Palikara, 2019).

The medical model of disability is highly prevalent in the American Occupational Therapy Association's (AOTA) research agenda for autism (AOTA, 2017; Shores & Benevides, 2020). Examples of research opportunities prioritized emphasizing the medical model of disability (and the body structures and functions of the ICF-CY) include social stories and peer-mediated services to improve social skills; ASI to improve sleep, adaptive skills and autism features; and sensory processing and sensory-motor services to improve social communication (AOTA, 2017). As noted in Figure 1, overemphasizing the medical model in service provision can lead occupational therapy practitioners to view an autistic child with a "deficit" lens, reducing the opportunity for holistic and client-centered supports and services.

Questions Investigating Explanatory Model Components

The author of *Embracing Neurodivergent Occupation*'s primary goal is identifying the barriers in implementing best practices by occupational therapy practitioners when supporting autistic children and youth. As illustrated within Figure 2.1, the contributing factors impacting the incorporation of best practices for autistic children and youth are barriers in knowledge translation, negative perceptions and misconceptions of knowledge translation, lack of inclusion of autistic perspectives in occupational therapy, and an overreliance on the medical model when treating autistic children and youth. This author conducted a comprehensive literature review investigating the contributing factors as guided by the following research questions:

1. What are the barriers and perceptions of implementing evidence-based practice for occupational therapy practitioners working with autistic children and youth?
2. What are the perspectives, health and wellbeing priorities designated by autistic adults?
3. What are the autistic perspectives regarding current occupational therapy services?
4. To what degree do occupational therapy practitioners utilize models of disablement within pediatric practice?

Barriers and Perceptions of Implementing Knowledge Translation with Autistic Children and Youth

Only one article focused on the EBP process and occupational therapy services for autistic children and youth (Ashburner et al., 2014). This qualitative study identified most practitioners within the survey as not having sufficient time to access and read the literature, not having the skills to read the literature, and not having direct access to the literature when answering clinical questions regarding autistic children and youth (Ashburner et al., 2014). When extending to populations beyond pediatrics, additional studies found OTPs continued to face the barrier of lack of time for searching and critically appraising articles, impacting incorporating the EBP process within clinical decision-making (Krueger et al., 2020; Upton et al., 2014).

A common barrier to knowledge translation found in many studies was the perception of research implementation not always being relevant to clinical practice and that research discourages practitioner experience (Ashburner et al., 2014; Krueger et al., 2020; Restall et al., 2019; Saunders et al., 2019; Upton et al., 2014). Practitioners reported clinical practice guidelines as convenient; however, they felt practice guidelines were not always relevant within their setting (Restall et al., 2019). Evidence indicates negative correlations regarding practitioner utilization of EBP and creativity within practice (Restall et al., 2019; Upton et al., 2014). OTPs were found to view EBP as more unfavorable and requiring too much effort than as a positive and essential facet of practice (Upton et al., 2014). Evidence suggests negative attitudes toward EBP implementation is common within occupational therapy practice (Ashburner et al., 2014; Krueger et al., 2020; Restall et al., 2019; Saunders et al., 2019; Upton et al., 2014; Williams et al., 2015).

It should be noted that barriers to research implementation are not a challenge solely existing within occupational therapy. Obstacles to EBP uptake exist within other health professions, with evidence illustrating widespread confusion and misconceptions of EBP amongst nurses, physicians, and physician assistants (Saunders et al., 2019). A stated challenge to implementing research is practitioners may be contributing to the perception that they are delivering EBP when, in reality, they are providing opinion-based practice (Saunders et al., 2019). Utilizing strategies not supported by evidence at relatively high frequencies was found within the research (Ashburner et al., 2014; Upton et al., 2014). A high frequency of utilizing non-EBP services by practitioners was found by practitioners supporting autistic children and youth (Ashburner et al., 2014), inpatient rehabilitation, outpatient rehabilitation, and pediatric clinics in the United States, Australia, and Europe (Upton et al., 2014).

Organizational challenges to EBP implementation were found in multiple studies (Krueger al., 2020; Williams et al., 2015). Organizational challenges were identified as barriers to research implementation (Krueger al., 2020; Williams et al., 2015). These challenges included staff/management not supporting EBP (Williams et al., 2015), a lack of authority to change practice (Williams et al., 2015), and the level of productivity requirements (Krueger et al., 2020). With regard to productivity standards, the evidence indicated those with less than 70% productivity were more likely to incorporate EBP into their service provision decisions than those with more than 70% productivity requirements (Krueger et al., 2020). Multiple studies advocated for specific supports to promote EBP implementation, such as promoting self-reflection within practice (Krueger et al., 2020), having someone at a site championing evidence-based practice (Restall et al., 2019), and having the evidence determinations readily available and accessible within the workplace (Williams et al., 2015).

Health and Well-being Priorities of the Autistic Community

The available literature provides evidence regarding the health and well-being priorities of the autistic community from a variety of perspectives, including autistic individuals (Benevides et al., 2020; Lam et al., 2020; Pfeiffer et al., 2017; Warner et al., 2019); parents of autistic individuals (Coussens et al., 2020); and combined groups of shareholders, including autistic individuals, clinicians, researchers, and managers (Roche et al., 2020; Warner et al., 2019). Mental health priorities were a primary theme found in multiple studies (Benevides et al., 2020; Lam et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020). Evidence suggests autistic adults prioritized quality of life, social well-being outcomes, and reducing societal barriers and discrimination (Benevides et al., 2020). Additional outcomes identified by the research were sleep participation, anxiety, depression, and interpersonal relationships (Benevides et al., 2020).

Literature examining research priorities designated by shareholders (including autistic individuals) identified physical health, well-being, and mental health priorities (Roche et al., 2020). Research priorities identified by autistic shareholders focused mainly on applied research designed to improve the daily lives of individuals on the autism spectrum rather than on basic science research (e.g., the biological causes of autism) (Roche et al., 2020). Autistic individuals and parents of autistic children identified decreasing barriers existing within their natural environments, such as accessibility to modifications and accommodations within the learning and work settings (Benevides et al., 2020; Coussens et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020).

Social participation as a well-being priority was identified within the evidence, conflicting with the dominant mainstream portrayal of autistic individuals not interested in social engagement (Benevides et al., 2020; Lam et al., 2020; Pfeiffer et al., 2017). Autistic individuals value close relationships, often describing their families and friends as vital aspects of their lives (Benevides et al., 2020; Lam et al., 2020; Pfeiffer et al., 2017). Autistic adults identified misconceptions and misunderstandings from the neurotypical population regarding their interests and their desire for social interactions and relationships (Benevides et al., 2020; Lam et al., 2020; Pfeiffer et al., 2017). It is important to note only one study examined the physical health priorities designated by autistic individuals, and perspectives were gathered with researchers and caregivers within a multi shareholder format, demonstrating limited research examining the physical health and well-being outcomes deemed important by autistic individuals (Warner et al., 2019). The limited literature found the following to be physical health and wellbeing priorities by autistic individuals, caregivers, and researchers supporting autistic individuals, included: measurement of pain; social determinants of health; healthcare self-advocacy; well-being; autism-friendly services; a toolkit to improve health and well-being; annual health checks; personalized healthcare; residential care in older age; and sexual development (Warner et al., 2019).

Differences were found when comparing the perspectives of the autistic community when asking autistic individuals themselves versus parents/caregivers of autistic individuals and researchers (Roche et al., 2020; Warner et al., 2019). Parents, clinicians, and researchers prioritized the early identification of autism (including a focus on the early signs of autism and identifying genetic components) more than autistic individuals (Roche et al., 2020; Warner et al., 2019). In contrast, autistic individuals prioritized the development of skills and improving the public awareness and inclusion of the autistic community (Roche et al., 2020; Warner et al., 2019). Parents of autistic children valued therapy targeting improving their autistic child’s self-esteem and confidence over services targeting general mastery of motor abilities, such as kicking a ball (Coussens et al., 2020; Pfeiffer et al., 2017).

Autistic Perspectives on Rehabilitation Services

The initial literature search revealed no research examining autistic perspectives on occupational therapy services, with the investigation expanded to incorporate rehabilitation services, revealing evidence examining autistic input regarding social communication and social skill services. Autistic adults expressed strengths and weaknesses regarding social communication services. Many autistic individuals found social communication services minimally effective or unnecessary. Instead, autistic individuals advocated for real-world practice in situations where communication differences are honored, and understanding by neurotypicals are present (Monahan et al., 2021; Santhanam et al., 2021). Autistic adults have expressed support in social participation completed in a neurodiversity-affirming manner can improve autistic health and well-being priorities, such as anxiety, coping skills, and self-efficacy (Monahan et al., 2021; Morgan et al., 2014; Oswald et al., 2018).

In addition to the limited inclusion of autistic perspectives in OT service delivery, evidence suggests autistic individuals are rarely invited into designing supports and services targeting social participation (Monahan et al., 2021). Social communication supports included criterion-referenced assessments measuring the quality of socialization (e.g., number of times an individual is invited to social outings) and memorization of social skill rules (Gantman et al., 2012; Laugeson et al., 2015; McVey et al., 2016; Monahan et al., 2021). It is essential to note criterion-referenced assessments excel at measuring memorization of social rules and cues, but not whether the utilization of these rules has any meaningful impact on the individual's social relationships (Monahan et al., 2021). The limited inclusion of autistic individuals extends to the goal-setting process (Hodgetts et al., 2017). The available literature evidence suggests autistic adolescents are rarely active participants in the goal-setting process even though autistic adolescents reported wanting to be active members in creating goals for their plans of care (Hodgetts et al., 2017). Barriers cited by clinicians, including OTPs, were limited time and large caseloads, prohibiting time spent involving autistic adolescents setting goals for their plans of care (Hodgetts et al., 2017).

The literature provided evidence elucidating services of interest of the autistic community (Benevides et al., 2020). Autistic individuals reported interest in cognitive-behavioral services, mindfulness, trauma-informed services, and animal-assisted therapy (Benevides et al., 2020). The literature also revealed autistic adults advocated against specific services including applied behavioral analysis (ABA); traditional behavioral modification techniques (e.g., reinforcement, token economies); behavioral feeding services; and compliance-based techniques (ASAN, n.d.). The literature also suggests autistic input is rarely considered in the creation of autism-related services used by rehabilitation professionals (ASAN, n.d.). It should be decided by the autistic community how services target their support needs, how “success” is measured within assessments, and have their priorities reflected within the creation and application of autism-related services (ASAN, n.d.). While there has been research investigating the effects of healthcare services with autistic individuals, most of them do not examine the effect of the strategies on the autistic individual’s overall experience during the study or their mental wellbeing (ASAN, n.d.). Though there is a significant amount of non-scholarly writing reporting the perspectives of autistic individuals and how many healthcare services cause harm, there has been little inclusion of their perspectives within published research (ASAN, n.d.).

Utilization of Models of Disablement by Occupational Therapy Practitioners

No articles were found examining the cultural model of disability and its utilization by OTPs, and when the literature search was expanded to rehabilitation and healthcare, there were still no peer-reviewed studies applying the cultural model of disability. Secondary to the inability to locate studies applying the cultural model of disability within rehabilitation, the remainder of the search focused on the utilization of the medical model and reformed social model of disability by OTPs.

The medical model of disability has been demonstrated to be the primary model of disablement utilized by OTPs (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021). The literature evidence suggests practitioners endorse the reformed social model of disability within the client involvement dimension of practice, though they utilize the medical model of disability within service and support selection (Holler et al., 2021). OTPs acknowledge the value of integrating the social model of disability into practice; however, practitioners are often compelled to target outcomes established within the medical model (Heffron et al., 2019; Holler et al., 2021). Systemic barriers played a significant role in utilizing the medical model versus the social model of disability (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021). These systemic barriers included reimbursement and insurance dictating how services are provided to clients, documentation requiring practitioners to highlight deficits and medicalizing the patient (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021). Regarding work settings, it was found that the medical model of disability was lower in home-based therapy compared to hospital and community clinics (Holler et al., 2021). Though the social model of disability is underutilized within occupational therapy, the model has been demonstrated to reveal occupational injustices impacting parent engagement in caregiving for their children with disabilities within marginalized communities (Rabaey et al., 2021).

Two studies examined occupational therapy students and their understanding of disability utilizing the Disability Attitudes Implicit Association Test (DA-IAT) (Friedman & VanPuymbrouck, 2021; VanPuymbrouck & Friedman, 2020). VanPuymbrouck et al.'s initial study (2020) examined perceptions of disability of occupational therapy students beginning their occupational therapy programs. Occupational therapy students were found to hold moderate prejudice towards persons with disabilities (VanPuymbrouck et al., 2020). A longitudinal study continued this project, examining if occupational therapy education programs impacted students' perceptions of disability, resulting in a significantly low change in disability attitudes comparing students' attitudes when entering and leaving the program (Friedman et al., 2021).

Conclusion

Though OTPs have much to offer in supporting the occupational participation of autistic children and youth, the profession struggles in implementing best practices within plans of care, which are knowledge translation efforts emphasizing the lived experience of autistic individuals (ASAN, n.d.; Ashburner et al., 2014). OTPs continue to face extensive barriers in knowledge translation due to a lack of time, confidence, and skills in appraising and applying the literature and misconceptions of research (Ashburner et al., 2014; Krueger et al., 2020; Restall et al., 2019; Saunders et al., 2019; Upton et al., 2014; Williams et al., 2015). Although the autistic community has advocated for services embedded within the reformed social and cultural models of disability and have shared their health and well-being priorities, evidence suggests the medical model of disability continues to be the dominant model of disablement utilized by the occupational therapy profession (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021; VanPuymbrouck & Friedman, 2020).

Despite the evidence found addressing the research questions, limitations exist. No research studies examined how OTPs incorporated models of disablement when supporting autistic children and youth and no studies were found examining the perceptions of autistic individuals on services utilized by OTPs. Limitations regarding the quality, rigor, and designs of the studies included: use of convenience sampling (Friedman et al., 2021; Heffron et al., 2020; Holler et al., 2021), possibility of self-selection bias (Friedman et al., 2021; VanPuymbrouck et al., 2020), majority of participants were white and women though this is representative of the occupational therapy profession (VanPuymbrouck et al., 2020), language barriers (Rabaey et al., 2021), researcher bias (VanPuymbrouck et al., 2020), and attrition (Friedman et al., 2021). By incorporating the reformed social and cultural models of disability, knowledge translation methods, and amplifying the autistic lived experience, the profession can provide more meaningful and identity-affirming services with autistic children and youth.

CHAPTER THREE – Overview of Current Approaches and Methods

Introduction

The previous chapter synthesized the barriers and perceptions experienced by occupational therapy practitioners (OTPs) when implementing evidence-based practice (EBP) with neurodivergent children and youth (Ashburner et al., 2014). Additionally, there is a significant lack of autistic perspectives in the development of autism-related services, including strategies used by OTPs (Monahan et al., 2021). The medical model of disability continues to be the dominant model of disablement utilized by OTPs in adult rehabilitation settings (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021; Upton et al., 2014). Currently, little is known about the degree OTPs utilize models of disablement within assessment and service provision supporting neurodivergent children and youth. These significant barriers need to be addressed to support occupational therapy's ability to provide client-centered and validating services with the autistic community.

This investigator completed an exploration of the literature examining previous attempts to support the implementation of EBP, incorporate autistic perspectives within healthcare service creation, the incorporation of the social model and cultural model of disability within the profession, and how OTPs have advocated for disability justice within the literature. Though occupational therapy has recent research addressing some of these topics (Benevides et al., 2020; Lam et al., 2020; Pfeiffer et al., 2017), the exploration of the research questions is a novel query of interest for the field, which resulted in limited articles found. The search was then expanded to other disciplines.

Incorporated disciplines and journals included allied health professions and journals led by autistic individuals, with databases including PubMed, CINAHL, PsycInfo, and an additional search within Google Scholar to examine any missed relevant literature. Reasons for selecting the databases include the following: PubMed is hosted by the National Institutes of Health (NIH) with one of the largest health science journal entries and with extensive international reach, CINAHL due to the database being a comprehensive source for allied health professions, and PsycInfo for containing numerous articles relating to the psychological and related science, including occupational therapy (San José State University Library, 2022). The research questions investigating what researchers have completed previously to address the barriers mentioned above are as follows:

1. What factors contribute to the utilization of research evidence in occupational therapy practice?
2. What are effective methods for the dissemination of evidence to healthcare practitioners?
3. What methods are used to garner the perspectives of the autistic community concerning healthcare services in research?
4. In what ways has the reformed social model and cultural model of disability been utilized in rehabilitation and what are effective strategies for incorporating the reformed social model of disability into pediatric practice?

5. How has occupational therapy incorporated disability justice when supporting disabled individuals?

Factors Supporting the Utilization of Research Evidence Within Occupational Therapy Practice

The initial literature search focused on studies investigating the supporting factors influencing pediatric OTPs implementing evidence into practice. No articles were located specifically examining personal and contextual factors supporting OTPs and their ability to implement evidence into their practice when supporting pediatric clients. When extending the search beyond pediatric occupational therapy, numerous personal and systemic factors were illustrated within the evidence to increase the utilization of evidence by OTPs (Juckett et al., 2020; Krueger et al., 2020; Mallidou et al., 2018; Pellerin et al., 2019; Thomas et al., 2020; Upton et al., 2014).

Personal factors illustrated within the literature supporting positive attitudes toward research and implementation of evidence within practice included educational attainment, location of practice, knowledge, and beliefs concerning research (Juckett et al., 2020; Pellerin et al., 2019; Thomas et al., 2020; Upton et al., 2014). OTPs with higher educational attainment (e.g., master's degree vs. a bachelor's degree) were more likely to incorporate research into practice (Krueger et al., 2020; Upton et al., 2014). Practitioners with a doctorate had the highest research utilization frequency, supporting the hypothesis that advanced degrees better prepare practitioners to incorporate research into practice (Krueger et al., 2020; Upton et al., 2014). Practice location was a compelling facilitator of research implementation, with practitioners working in academic hospital-based and urban settings reporting a higher frequency of research utilization than those in rural areas and other clinical settings (Upton et al., 2014). One service characteristic mentioned within the research to increase the likelihood of the practitioner's ability to incorporate research was adaptability of the service (Pellerin et al., 2019). Guidelines and assessments that could be readily adapted, tailored or refined into clinical practice were extensively more incorporated into practice than tools that could not be customized to match workplace needs (Pellerin et al., 2019).

Personality characteristics were found that positively correlated with knowledge translation with the traits being flexibility, positivity, pragmatism, proactive, persuasiveness, creativity (Mallidou et al., 2018), open-mindedness, self-sufficiency (Mallidou et al., 2018; Pellerin et al., 2019), and reflection (Krueger et al., 2020). Practitioners demonstrating high levels of equity, respect, inclusivity, and cultural competence within their practice were more likely to participate in knowledge translation activities (Mallidou et al., 2018).

Contextual and environmental factors were elucidated within the research that supported EBP implementation (Juckett et al., 2020; Krueger et al., 2020; Pellerin et al., 2019; Thomas et al., 2020). The workplace climate and environment were demonstrated as facilitators for research implementation and interprofessional collaboration and reflection within small groups in a non-judgmental work environment promoted the implementation of EBP (Pellerin et al., 2019). Positive leadership and engagement by managers positively influenced practitioners' incorporation of research, likely due to the ability of the managers to help overcome organizational barriers (Juckett et al., 2020;

Pellerin et al., 2019; Thomas et al., 2020). If clinical practice guidelines available at the work site resonated with the values and norms presented by the practitioner, the guidelines were more incorporated into practice (Pellerin et al., 2019). The Evidence-Based Practice Implementation Scale (EBPI), a subjective scale examining practitioners' incorporation of the EBP process, was utilized within one study with occupational therapy practitioners (Krueger et al., 2020). Practitioners having productivity standards of 70% scored higher on the EBPI than practitioners with productivity levels of 79 - 84%, demonstrating productivity levels can significantly ($p = .01$) impact research incorporation (Krueger et al., 2020). OTPs who had access to full-text articles within their workplace also scored significantly ($p = .006$) higher on the EBPI compared to those not having access to full-text articles (Krueger et al., 2020). The final contextual characteristic influencing research incorporation found within the literature was patient preference (Juckett et al., 2020). OTPs were more likely to incorporate an evidence-based services if patients demonstrated a strong interest and engagement with the service (Juckett et al., 2020).

Effective Methods for Disseminating Evidence Within Healthcare Settings

Knowledge translation is defined as the dynamic process of synthesizing evidence followed by dissemination into practice to improve individuals' well-being and health, ultimately making the healthcare system more effective (Romney et al., 2021). Rehabilitation literature often lags behind nursing and medical literature (Romney et al., 2021). A literature review was completed to understand how research-informed practices are best disseminated into settings that work with and support neurodivergent children and youth. One international, integrative review examined knowledge translation specific to occupational therapy (Myers et al., 2017) and four articles examined knowledge translation regarding including healthcare professions beyond occupational therapy (Cahill et al., 2020; Jones et al., 2015; Moore et al., 2018; Romney et al., 2021; Sarkies et al., 2021).

When examining the literature regarding workshops and continuing education efforts focusing on knowledge translation for OTPs, variable evidence exists supporting improvements in knowledge translation (Buchanan et al., 2014; Dunleavy, 2015; Jeong et al., 2016). One study found a continuing education webinar increased the awareness of research-informed practices for participants (Jeong et al., 2016), whereas in two studies, there were no changes in knowledge translation behaviors after a workshop for practitioners was implemented (Dunleavy, 2015; Jeong et al., 2016). OTPs participating in a six-month journal club demonstrated significantly ($p < 0.02$) increased skills in critically appraising articles, though research uptake (e.g., integrating knowledge translation skills into daily practice) remained unchanged (Myers et al., 2017). Collaboration training between researchers, shareholders, and OTPs to solve a clinical or community problem increased participation in journal clubs and confidence in knowledge translation for practitioners (Myers et al., 2017). When examining OTPs and knowledge translation, the evidence suggests that multi-component services were the most effective at modifying and improving knowledge translation, such as incorporating active learning strategies within education and targeting behavior change (Jones et al., 2015; Myers et al., 2017).

Evidence was found illustrating effective, interdisciplinary knowledge translation strategies amongst the allied health professions, including OTPs, speech-language pathologists, and physical therapists (Cahill et al., 2020; Jones et al., 2015; Moore et al., 2018; Romney et al., 2021; Sarkies et al., 2021). The most common knowledge translation strategies found within the evidence for rehabilitation were education and ongoing training (Jones et al., 2015; Romney et al., 2021). Education strategies to promote knowledge translation within rehabilitation without additional components, such as feedback from a manager, demonstrate an inconsistent effect on knowledge translation (Cahill et al., 2020; Jones et al., 2015; Romney et al., 2021). Implementation strategies tailored to target identified barriers also resulted in an inconsistent effect (Cahill et al., 2020). One study reported no changes in knowledge translation when barriers impacting knowledge translation were addressed (Cahill et al., 2020), whereas other studies noted an increase (statistical significance not reported) in knowledge translation for rehabilitation professionals (Romney et al., 2021). One systematic review conducted by Cochrane Rehabilitation, a non-profit evidence review organization, found no supporting evidence that knowledge translation strategies promote the uptake of research evidence (Cahill et al., 2020). Though there remains inconclusive evidence about which strategies are the most effective, Cochrane Rehabilitation did counter that research dissemination strategies can play an essential role in knowledge translation within healthcare (Cahill et al., 2020). One randomized controlled trial sampling Australian and New Zealand hospitals found dissemination of written evidence-based practice guidelines and access to a webinar-based knowledge broker did not impact hospital length of stay or impact routine implementing of practice recommendations (Sarkies et al., 2021).

Regarding the research examining workshops and continuing education efforts focusing on research implementation for OTPs, variable evidence exists supporting improvements in knowledge translation (Buchanan et al., 2014; Jeong et al., 2016). One study found that a continuing education webinar increased the awareness of research-informed practices for participants (Jeong et al., 2016), whereas, in two studies, there were no changes in knowledge translation behaviors after a workshop for OTPs (Dunleavy, 2015; Jeong et al., 2016). Collaboration training between researchers, shareholders, and OTPs to solve a clinical or community problem increased participation in journal clubs and confidence in knowledge translation for OTPs (Myers et al., 2017). Research also suggests when training focused on implementing research evidence in real-world settings, such as creating action-based plans as a team and creating collaborative goals to implement a fall prevention program, OTPs demonstrated the ability to modify their practice patterns to incorporate research evidence more frequently (Myers et al., 2017). When examining OTPs and knowledge translation, the evidence suggests that multi-component strategies were the most effective at modifying and improving knowledge translation, such as incorporating active learning strategies within education and targeting behavior change (Jones et al., 2015; Myers et al., 2017). Examples of multi-component strategies include educational meetings and material, audit and feedback, mapping strategies to target environmental barriers, and having a knowledge translation champion (Jones et al., 2015).

Measurement of knowledge translation strategies most frequently occurred on the individual provider level, such as utilizing questionnaires and chart audits (e.g., reviewing documentation of OTPs to examine incorporation of evidence-based strategies). Though chart audits can provide documented use of clinical practice, details of how the audits were exactly being performed were lacking within the studies, limiting replicability of the strategy of chart audits to promote knowledge translation into practice (Jones et al., 2015). Given sample sizes were low within the included studies, direct methods demonstrated the most accurate measure of clinical practice change regarding knowledge translation. One study implemented the Battery of Rehabilitation Assessments and Interventions, a knowledge translation strategy, and found a significant increase in the use of research-informed practices with outcome measures ($p = .001$), use research evidence to select strategies ($p = .01$), and understanding on how to apply evidence ($p = .003$) immediately following techniques (Moore et al., 2018). When outcomes were re-measured three years later, no significant effects were found regarding the use of research evidence for outcome measures ($p = .065$) and selecting strategies ($p = .075$) (Moore et al., 2018). Understanding how to apply evidence into practice continued to hold a significant effect ($p = .01$) with OTPs three years following the strategies (Moore et al., 2018). Evidence reported using the same language to describe the activities and roles of practitioners supporting knowledge translation efforts may help researchers and clinicians better examine the effectiveness of knowledge translation strategies (Romney et al., 2021). Overall, evidence suggests utilizing multi-component strategies for knowledge translation (e.g., providing a continuing education and providing workplace supports) to be the most effective approach in knowledge translation (Jones et al., 2015; Myers et al., 2017). Other strategies with emerging evidence supporting implementation of evidence within healthcare settings include the Battery of Rehabilitation Assessments and Interventions (Moore et al., 2018), facilitating collaborative goal-setting and action-based planning revolving real-world cases (Myers et al., 2017), and journal clubs (Myers et al., 2017).

Methods to Gather Autistic Perspectives Concerning Healthcare Services

Research has demonstrated autistic individuals are rarely invited into the creation of autism-related services, with the efficacy of evidence-based services often called into question due to rarely targeting outcomes deemed meaningful by autistic individuals themselves (ASAN, n.d.). Ultimately, it should be up to the autistic individuals to define what the "success" of n service looks like, highlighting that including autistic perspectives in support and assessment creation is vital for quality health service delivery (ASAN, n.d.). Research has illustrated autistic individuals report higher quality of life outcomes and an increased sense of autistic identity when their perspectives are included within healthcare service delivery (ASAN, n.d.; Bottema-Beutel et al., 2021; Murthi et al., 2023). The initial literature review search focusing on methods to gather autistic perspectives on occupational therapy services resulted in one study (Sterman et al., 2022). The search expanded to healthcare services, resulting in four studies meeting inclusion criteria (Doherty et al., 2022; Nicolaidis et al., 2019; Nicolaidis et al., 2020; Tesfaye et al., 2019).

Two studies followed an ethnographic approach, with one study gathering data from public pages of autistic advocates on social media (Sterman et al., 2022) and the other reviewing previous collaborative efforts conducting participatory research with autistic individuals (Nicolaidis et al., 2019). Data collection via ethnographic methods illustrated fruitful information, allowing autistic individuals to share personal insight into healthcare services (Nicolaidis et al., 2019; Sterman et al., 2022). By exploring autistic perspectives with social media data, natural conversations between autistic individuals using the communication form of text (which is often a preferred method of autistic communication) were included (Sterman et al., 2022). Social media as a platform for research also incorporated international autistic individuals, intermittently speaking and non-speaking autistic individuals, who may find traditional interviews inhibiting their participation (Sterman et al., 2022). Social media was found to be a helpful recruitment tool for convenience sampling of autistic individuals (Doherty et al., 2022; Sterman et al., 2022).

The research identified surveys as an efficient method to garner autistic perspectives and integrate them into research (Doherty et al., 2022; Nicolaidis et al., 2019; Nicolaidis et al., 2020). Surveys were even more effective when created with accessibility features, such as simplifying language or vocabulary, adding hotlinks to provide examples or clarification, or providing visuals to increase the clarity of response options (Nicolaidis et al., 2020). Common survey aspects making the survey inaccessible were reported in the literature, including Likert scales that have imprecise options, confusing terms or complex sentence structures, and anxiety around answering items contextually based due to a variance in how they would respond depending on different situations (Nicolaidis et al., 2020). Likert scales were found to receive a mixed response with autistic individuals due to their inclusion of ambiguous terms such as deciding between “some of the time” and “little of the time” (Nicolaidis et al., 2019).

Community-based participatory research (CBPR) is defined as all members recognized as equal partners throughout every phase of the project or research (Nicolaidis et al., 2020). CBPR tactics, such inviting autistic individuals to share their insight into various phases of the research project, were found in four studies (Doherty et al., 2022; Nicolaidis et al., 2019; Nicolaidis et al., 2020; Sterman et al., 2022). One study did consult with parents of autistic children at the beginning of their research project (Tesfaye et al., 2019). Different variations of CBPR were described within the literature, such as a consultative model in which autistic individuals provide input throughout the research but are not directly immersed in the research (Nicolaidis et al., 2020). Being transparent about goals and being open about how autistic individuals are involved was highlighted as a vital aspect of CBPR to help avoid tokenizing autistic stakeholders (Nicolaidis et al., 2020). When research projects erroneously label their work as CBPR has demonstrated adverse effects on relationships with autistic individuals, such as unmet expectations, frustration, wasted resources, and reduction of trust (Nicolaidis et al., 2020). It is essential to note that Tesfaye’s (2019) scoping review found many studies (e.g., Cussen et al., 2012) investigating the first-hand accounts of disabled individuals that either non-speaking autistic individuals or children with communication differences were excluded from participation. When children with communication differences or non-speaking autistic individuals were included within the study, their perspectives often represented the minority (Batorowicz et al., 2014). In some studies where children whose primary method of communication was non-speaking, their parents or caregivers were proxies to share their experiences for them (Kirk, 2008) or interpret their communication (Evans et al., 2007).

Strategies to Incorporate the Reformed Social Model of Disability into Practice

The previous chapter illustrated the medical model of disability is the dominant model of disablement utilized by occupational therapy practitioners across various practice settings (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021). The autistic community has advocated for healthcare professionals, including occupational therapy, to incorporate more of the reformed social model of disability when supporting their health and well-being priorities (ASAN, n.d.; Benevides et al., 2020; Bottema-Beutel et al., 2021). Incorporating the reformed social model of disability is in alignment with best practices regarding occupational justice and disability studies (DS) (Harrison et al., 2021; Holler et al., 2021; Sterman et al., 2022), and it is paramount that the occupational therapy profession utilizes tenets of the reformed social model and cultural model of disability into practice. The following literature review describes the evidence for strategies trialed to integrate the reformed social model of disability into practice (no articles examining the incorporation of cultural model were found). The initial search of examining incorporating tenets of the reformed social model of disability into occupational therapy practice revealed limited results, leading to expanding the search to healthcare.

Two studies were found examining the impact of utilizing the World Health Organization's (WHO) International Classification of Functioning, Disability, and Health

(ICF) in rehabilitation (Madhi et al., 2018; Schiariti et al., 2018). The ICF provides a comprehensive language for describing health conditions and participation experienced by disabled individuals that can be utilized across disciplines (Madhi et al., 2018; Schiariti et al., 2018). The foundation of the ICF is the bio-psycho-social model as an attempt to merge the medical model and reformed social model of disability (Madhi et al., 2018; Schiariti et al., 2018). Scholars have outlined the aspects of the ICF that highlight a focus on the reformed social model of disability including activities, participation, and the environment (Shore et al., 2020). Evidence suggests incorporating the ICF may support healthcare professionals' ability to integrate tenets of the reformed social model of disability indirectly by placing an emphasis on adapting the environment (Madhi et al., 2018; Schiariti et al., 2018). The ICF places an emphasis on examining environmental influences regarding functioning, and evidence suggests modifying the environment (a pillar of the reformed social model) not only makes rehabilitation more holistic but also less stigmatizing and more inclusive for disabled individuals (Madhi et al., 2018). The ICF has been shown to complement a strengths-based approach when supporting autistic children and youth by striking a balance between assessing individual strengths and abilities and functional challenges (Madhi et al., 2018).

Another strategy to promote the incorporation of the reformed social model of disability into healthcare is within collegiate education (Bogart et al., 2022; Friedman et al., 2021). Both studies examined if disability attitudes and models can be changed for students, and both utilized instruments to measure change. Bogart et al.'s study (2022) utilized the Attitudes Toward Disabled Persons Scale (ATDP) and Friedman et al.'s study

(2021) incorporated the Symbolic Ableism Scale and the Disability Attitudes Implicit Association Test (DAI-AT). Additional differences include Bogart et al.'s study (2022) investigating attitudes with psychology graduates and measuring change at the beginning and at the of the 10-week course with a focus on models of disablement. Friedman et al. (2022) examined the impact of occupational therapy education on disability attitudes at the beginning and end of their occupational therapy program. Differences in effectiveness were found, with findings suggesting occupational therapy programs did not modify occupational therapy students' attitudes towards disability ($p = .45$) (Friedman et al., 2022) while Bogart et al.'s study (2022) found significant changes ($p < .001$) following the DS course.

Evidence suggests incorporating the reformed social model of disability into interviews with adolescents who have a disabled parent can elucidate challenges of marginalization and empowerment (Hutchinson et al., 2020). Embedding the reformed social model of disability into discussions has been found to amplify the lived experiences of adolescents with disabled family members, and their ability to advocate for the needs of their family members (Hutchinson et al., 2020). Including the reformed social model of disability into mental health services has been found to improve the self-efficacy and emotional well-being of disabled families while highlighting society's significant contribution to marginalizing and disempowering individuals (Hutchinson et al., 2020). It is important to note statistical analyses were not completed within Hutchinson et al.'s study to examine significance (2022).

Occupational Therapy and Disability Justice

Only three peer-reviewed published articles could be found examining disability relating to occupational justice, with one qualitative study (Chichaya et al., 2020), one call to action for the profession (Harrison et al., 2021), and a reflection writing piece examining ableism within the profession (Yao et al., 2022). Two of the three articles explicitly stated disability justice (Harrison et al., 2021; Yao et al., 2022). All three articles emphasized it is the responsibility of the profession to identify barriers to occupational performance and to center disabled voices within all aspects of healthcare service delivery (Chichaya et al., 2020; Harrison et al., 2021; Yao et al., 2022). Enhancing participation in occupations that are meaningful to the individual is their right, no matter how uncommon or niche the occupation, and OTPs can support such performance through supporting occupational justice within their practice (Chichaya et al., 2020; Harrison et al., 2021; Yao et al., 2022).

The qualitative study completed by Chichaya et al. (2020) incorporated three shareholder groups, including disabled individuals, decision-makers, and OTPs. One of the barriers to occupational participation mentioned was disabled individuals are self-limiting, and this was a theme found by policymakers and OTPs, but not disabled individuals (Chichaya et al., 2020). Two articles highlighted how ableism within the profession damages disabled individuals secondary to ableism perceiving disability as an inherently negative characteristic, and these attitudes dominating the profession result in prejudicing, discriminating, and oppressing disabled individuals (Harrison et al., 2021; Yao et al., 2022). One article outlined how various forms of ableism appear throughout the occupational therapy process, including proposed practices for more inclusive and disability-just occupational therapy practice (Yao et al., 2022). All three articles emphasized eliminating oppression of disabled individuals, and disabled individuals themselves needed to be front and center regarding transformation for an occupationally-just society (Chichaya et al., 2020; Harrison et al., 2021; Yao et al., 2022). No articles elaborated on how to empower neurodivergent children and youth with discussions relating to specific practice items, such as assessment tools and therapy techniques.

Conclusion

Best practice for the autistic community can be described as healthcare services that contain qualities of being research-informed, include and amplify autistic voices, and embed tenets of the reformed social model of disability. The autistic community has advocated for healthcare professionals to reflect on current practices to ensure services are autistic-affirming and are meaningful (ASAN, n.d.). Mechanisms frequently mentioned that are autistic-affirming are incorporating the reformed social model of disability into practice (ASAN, n.d.; Benevides et al., 2020; Bottema-Beutel et al., 2021) and amplifying autistic perspectives in healthcare service creation and implementation. OTPs can maximize provision of best practices when supporting autistic children and youth using effective knowledge translation methods.

Supporting practitioners' level of flexibility, reflection, and equity in practice may support their participation in knowledge translation (Mallidou et al., 2018) and implementing multi-component strategies, such as reducing workplace barriers with training in appraising research and may support knowledge translation for OTPs (Jones et al., 2015). Creating adaptable knowledge translation supports meaningful to the workplace may improve practitioners’ ability to use best practices when supporting neurodivergent children and youth (Pellerin et al., 2019). By gathering autistic perspectives through accessible surveys, occupational therapy practitioners can modify service provision and knowledge translation resources to be more autistic-affirming. To further enhance accessibility of the reformed social model of disability into practice, OTPs can integrate the ICF while highlighting environmental and contextual factors impacting the occupational participation of autistic children and youth (Madhi et al., 2018; Schiariti et al., 2018). An accessible knowledge translation toolkit that illustrates the occupational therapy process utilizing a neurodiversity-affirming lens and incorporates autistic voices into its creation may support the profession’s ability to target the health and well-being priorities of the autistic community using best practices. Additionally, categorizing the strategies by ICF designation may indirectly promote the absorption of the reformed social model of disability into practice.

CHAPTER FOUR – Description of the Proposed Program

Introduction

The author's proposed program is the *Embracing Neurodivergent Occupations and Empowering Disabled Voices: A Knowledge Translation Tool to Support Neurodiversity-Affirming Occupational Therapy Practice and Challenge Ableism Within the Profession* program. The program is a toolkit, and the mission of the program is to promote the utilization of best practices by OTPs supporting neurodivergent children and youth. Best practices for supporting the autistic community can be defined as services that incorporate the following characteristics: a) effective knowledge translation (Ashburner et al., 2014); b) including and amplifying autistic voices (ASAN, n.d.; Benevides et al., 2020; Monahan et al., 2021); and c) embedding tenets of disability justice (Sins Invalid, 2019). Additional long-term goals of the proposed program are to reduce stigmatization of autism, facilitate increased acceptance and activism of neurodiversity, and promote the occupational therapy profession's ability to target autistic health and well-being priorities.

Problems Addressed by Program

Though OTPs have much to offer in supporting the occupational participation of autistic children and youth, the profession struggles with implementing best practices within plans of care, including those supported by neurodiversity-affirming research and maximizing incorporation of autistic perspectives (ASAN, n.d.; Ashburner et al., 2014). The two problems addressed by the proposed program are (1) challenges in knowledge translation by pediatric OTPs; and (2) selecting services that are neurodiversity-affirming and embrace disability justice.

Challenges in Knowledge Translation

With increased awareness of pediatric disabilities and access to screenings, it is not surprising occupational therapy services have seen a dramatic increase in models, techniques, research, and funding for studying pediatric occupational therapy (Ashburner et al., 2014; Novak et al., 2019). With the increasing number of strategies at the profession's disposal, it remains a challenge for pediatric OTPs to stay up to date with the research, and barriers exist impacting research implementation (Upton et al., 2014). Barriers impacting occupational therapy practitioners' knowledge translation include a lack of time, confidence, and skills in appraising and applying the literature, low locus of control for change, and misconceptions of research evidence (Ashburner et al., 2014; Krueger et al., 2020; Restall et al., 2019; Saunders et al., 2019; Upton et al., 2014; Williams et al., 2015). Research suggests OTPs often embody negative perceptions of research evidence or find knowledge translation not a critical aspect of providing occupational therapy services (Ashburner et al., 2014; Krueger et al., 2020; Restall et al., 2019; Saunders et al., 2019; Upton et al., 2014; Williams et al., 2015). Though research implementation is a challenge for many health professions, evidence has illustrated the occupational therapy profession often has greater difficulty disseminating research compared to other rehabilitation professions (Saunders et al., 2019).

Previous efforts to support research implementation within rehabilitation have been explored within the literature (Cahill et al., 2020; Jones et al., 2015; Moore et al., 2018; Myers et al., 2017; Romney et al., 2021; Sarkies et al., 2021). Evidence suggests knowledge translation programs are most effective when incorporating multiple components, such as hosting a continuing education workshop, receiving manager or team feedback on the application of skills, and having an identified "champion" supporting dissemination efforts at a site (Jones et al., 2015; Myers et al., 2017). Additionally, the level of a practitioner's reflection skills (Krueger et al., 2020) and the adaptability and relevancy of the knowledge translation tool significantly correlated with research utilization within practice (Pellerin et al., 2019). Incorporating a multi-component knowledge translation tool that encourages reflective practice will be essential to the success of the program.

Lack of Inclusion Regarding Autistic Voices

Research illustrates autistic individuals are rarely – if ever – incorporated into the creation of healthcare services intended for utilization with the autistic community, thus limiting the meaningfulness of the healthcare services as deemed by the autistic individual (ASAN, n.d.; Monahan et al., 2021). Given that, for much of current health science research autistic experiences were not incorporated, practitioners need to question the validity and meaningfulness of current evidence-based practices (EBP). It is crucial to note that this author advocates for responsible practices that are consistent with research; it is an ethical mandate to provide research-informed strategies to protect autistic clients and their families from being exploited and ensure they receive the high-quality care they deserve. However, autistic voices are not included in how evidence-based practices are defined, such as the outcomes being investigated and how "effectiveness" is measured (Dwyer, 2020). There is a plethora of outcomes to measure service effectiveness, but without the inclusion of autistic voices, it is difficult to determine whether the right outcomes are being measured (Dwyer, 2020). Most of the research measuring the effectiveness of autism-related services defines such effectiveness as the reduction of autistic characteristics, such as more “normalized” sensory processing, modified social participation to resemble those of a neurotypical individual, and reduced stimming (ASAN, n.d.). When examining the research, OTPs need to critically reflect on what is being embodied as “evidence,” and without the inclusion of autistic individuals, the trustworthiness of the evidence decreases (ASAN, n.d.). The need to reflect on the trustworthiness of autism research extends to occupational therapy and occupational science.

Autistic individuals are mostly absent from the occupational therapy and occupational science literature examining the effectiveness of autism-related services (Taylor, 2022). Additionally, there is a literature gap examining occupational therapy service trends supporting autistic children and youth, with no research articles found examining the degree to which OTPs target the health and well-being priorities as designated by autistic individuals. An ethnographic study examined pediatric occupational therapy practices in Australia when supporting autistic children and youth (Ashburner et al., 2014). The authors found OTPs frequently aimed to address the remediation of sensory processing differences and underlying body components rather than participation-focused goals (Ashburner et al., 2014), resembling more of a medical model of disability approach to therapy.

Neurodivergent scholars have outlined how much of current healthcare service methods serving autistic children and youth use the medical model of disability, including occupational therapy (Bottema-Beutel et al., 2020; Cramm et al., 2012; Holler et al., 2021; Shore et al., 2020). The medical model of disability is the predominant model of disablement embedded within occupational therapy, often implemented as improving sensory processing function, improving social communication, and reducing “atypical” motor skills (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021; Shore et al., 2020). Research has highlighted when the medical model of disability is heavily incorporated into healthcare services, the practices can lead to increased masking behaviors (Bottema-Beutel et al., 2021) and decreased quality of life (Shore et al., 2020). When OTPs do not utilize techniques that are neurodiversity-affirming and/or promote disability justice, this can lead to decreased quality and meaningful care provided with neurodivergent children and youth. Given there is a lack of literature examining autistic or neurodivergent perspectives on occupational therapy strategies (and general healthcare services), incorporating autistic perspectives into the creation of the program will be crucial to support autistic identity and authentic autistic well-being.

Intended Beneficiaries

The primary shareholders impacted by the program are OTPs and neurodivergent children and youth. Additional shareholders include the families of neurodivergent clients and students supported by OTPs, autistic/neurodivergent adults, healthcare service payers, insurance companies, managerial staff, and disability advocates. Specific shareholder organizations likely to be interested in the program evaluation results are this author’s current place of employment (Minnetonka Public School District), the American

Occupational Therapy Association (AOTA), the Coalition of Occupational Therapy Advocates for Diversity (COTAD), the Therapist Neurodiversity Collective (TNC), and the Autistic Self-Advocacy Network (ASAN). Specific to the program evaluation, the primary shareholder will be the OTPs attending the workshop educating them on how to apply the program within their practice.

Research Study Completed to Inform Program

Introduction

Given the limited research examining models of disablement within pediatric occupational therapy practice, a mixed-methods research study was completed to examine the utilization of the medical model and reformed social model of disability by OTPs supporting autistic children and youth. Additional questions included investigating the frequency of methods used by OTPs when supporting autistic children and youth, knowledge of autistic perspectives, and evaluation methods. Strategies with a high reported frequency amongst practitioners (50% and above) will be included within the final program (specifically the grading of neurodiversity-affirming characteristics) to support the programs relevancy to OTPs. By focusing on strategies and supports often used by practitioners, the program aims to increase its relatability to OTPs and therefore be more likely to be utilized in practice.

Methods

A survey consisting of 33 questions was developed to investigate the research questions posed by the research study, containing Likert-scale, multiple choice, and a logic question. Formation of questions was guided by autistic OTPs and autistic academics to ensure the research study was in alignment with autistic priorities and as an example of community-based participatory research (CBPR), specifically a consultative model (Nicolaidis et al., 2019). For example, if a practitioner reported "no" to "Question #1: Have you in the past or do you currently work with autistic children and youth in your occupational therapy practice," the remaining questions within the survey were not visible to the participant. The aim of the logic question was to ensure the survey was being completed by occupational therapy practitioners who have experience supporting autistic children and youth. See Appendix B for the complete survey.

The survey procedures were approved by the Institutional Review Board (IRB) of Boston University (IRB #6430X) and consent to participate was required to advance the survey past the consent form page (see Appendix C for IRB application). The survey design applied was selected due to its ability to allow for effective data collection from a large sample (Forsyth & Kvis, 2017) (see Appendix D for survey flyer). The survey was created using Qualtrics, a web-based software that can be used to conduct survey research and analyze survey data (California State University - Long Beach, 2015). An electronic web-based survey was administered due to the following advantages: they can be completed at the respondent's convenience, administration of the survey can incorporate features paper questionnaires cannot (checkboxes, logic questions), and data can be directly imported for analysis (Dillman et al., 2014; Forsyth & Kvis, 2017). Best practice regarding the format of the questionnaire was incorporated to allow for the reading of the questions, recording answers, and instructions in a manner that was as simple as possible (Dillman et al., 2014; Forsyth & Kvis, 2017). With the permission of the authors, adaptations of questions from the Orientation toward Disability Scale were included within the survey due to its ability to discern differences from the focus of service and client participation (Holler et al., 2021). Adaptations were made due to original instrument questions focusing on physical rehabilitation settings (e.g., hospitals), with the changes emphasizing pediatric occupational therapy practices (Holler et al., 2021). Comments were provided as an option following the selection of an answer to allow the opportunity for respondents to share valuable insight regarding their reasoning for their responses.

The survey was posted within various social media groups housing pediatric OTPs both within the United States and practicing internationally, resulting in a total of 616 participants though not every participant answered each question. Inclusion criteria included: (a) either be an occupational therapist or occupational therapy assistant and (b) have worked with or currently support autistic children and youth. The survey remained open and active from April 2022 to August 2022, with follow-up reminders posted within the same social media groups as the initial posting. Participants' entries were anonymous, and the survey results were analyzed using descriptive statistics within Qualtrics to answer the research questions. For the purposes of this doctoral project, only data shared regarding the service approaches and a brief summary of the models of disablement questions will be included. This author aims to publish the study's data following completion of the doctoral program with a more thorough analysis.

Results – Strategies Used by Occupational Therapy Practitioners

The survey was completed by 616 OTPs, though not every participant completed every question of the survey. Of 600 responses, 100% of participants reported they have experience supporting autistic children and youth within their occupational therapy practice. OTPs were asked to select their frequently utilized strategies when supporting the occupational participation of autistic children and youth, with respondents allowed to select multiple strategies. The top 10 strategies reported to be utilized by respondents when supporting autistic children and youth were sensory diets (*n* = 464, 80.3%), visual supports (*n* = 443, 76.6%), weight items not including weighted vests (*n* = 427, 73.9%), Zones of Regulation (*n* = 420, 72.7%), parent education and coaching (*n* = 419, 72.5%), environmental modifications to the learning environment such as adapted seating and modified lighting (*n* = 393, 68.0%), the Handwriting Without Tears (HWT) or Learning Without Tears (LWT) protocol (*n* = 390, 67.5%), social stories (*n* = 355, 61.4%), task analysis (*n* = 334, 57.8%), and weighted vests (*n* = 49.8%). See Table 1 for a complete list of the strategies and their frequencies. Practitioners were provided the opportunity to write-in a strategy if the strategy was not within the selection of options, with 15.1% (*n* = 87) of respondents providing alternate strategies. Written-in strategies included a form of interoception (e.g., interoception awareness, the Interoception Curriculum), mindfulness, Sensory Attachment Intervention, SEA Bridge Affirming Social-Emotional Curriculum, Autism Level Up! Resources, Size Matters Handwriting Program, assistive technology, adaptive equipment, Pivotal Response Training, ADLs, play-based therapy, executive functioning training, pre-vocational activities, Learn Play Thrive Approach to Autism, Strengths-based Approaches, Ready Bodies Learning Minds, Chikly lymphatic drainage massage, Baral Visceral manipulation, Teacher/Staff Education and Coaching, Ross Greene's CPS Model, Trauma-Informed Care, Superflex, WeThinkers, motor learning theories, Reciprocal Imitation Training, Star Program, Interactive Metronome, aquatic therapy, myofascial release, BalVisX, MeMoves, reflex integration, Size of the Problem, Quick Shifts, nature therapy, Every Moment Counts Program, and First Strokes Handwriting program. Table 4.1 demonstrates the number of OTPs recorded for every strategy included within the study. This author aims to ensure the top 50% of techniques utilized by OTPs are included within the program, specifically the completed grading of strategies used by OTPs resource.

Table 4.1
The Number of Practitioners Who Utilize a Specified Technique

Strategies and Supports	**Amount of Practitioners Who Utilize the Strategy (%, *n*)**
Sensory Diets	80.3% (*n* = 464)
Visual Supports	76.6% (*n* = 443)
Weighted Items (not including weighted vests, such as a weighted blanket)	73.9% (*n* = 427)
Zones of Regulation	72.7% (*n* = 420)
Parent Education and Coaching	72.5% (*n* = 419)
Environmental Modifications to the Learning Environment (e.g., adapted seating, modified lighting)	68.0% (*n* = 393)
Handwriting Without Tears / Learning Without Tears (HWT/LWT)	67.5% (*n* = 390)
Social Stories	61.4% (*n* = 355)
Task Analysis	57.8% (*n* = 334)
Weighted Vests	49.8% (*n* = 288)
Yoga	49.7% (*n* = 287)

Developmental, Individual-differences, and Relationship-based (DIR) Floortime Model	47.8% (*n* = 276)
Behavioral Modification Techniques (e.g., reinforcement, discrete trial training, token economies)	46.0% (*n* = 266)
Ayres’ Sensory Integration (ASI)	45.3% (*n* = 262)
Food Chaining	40.1% (*n* = 232)
Lifeskills Training	39.4% (*n* = 228)
Wilbarger Deep Pressure Protocol	39.4% (*n* = 228)
ALERT Program	37.5% (*n* = 217)
Social Skills Training	37.5% (*n* = 217)
Cognitive Behavioral Instructional Strategies (e.g., journaling, reflection, examining thoughts and emotions)	36.0% (*n* = 208)
Sequential-Oral-Sensory (SOS) Approach to Feeding	35.1% (*n* = 203)
Sensory Stories	34.4% (*n* = 199)
Behavioral/Perceptual Vision Therapy (e.g., eye exercises to improve visual processing and visual perception)	32.0% (*n* = 185)
Social Thinking	30.3% (*n* = 175)
Videomodeling	28.2% (*n* = 163)
Therapeutic Listening	27.0% (*n* = 156)
Group Service Delivery Models (e.g., group therapy)	26.1% (*n* = 151)
Brain Gym	22.5% (*n* = 130)
Peer-Based Instruction and Supports	20.9% (*n* = 121)
Technology-based services and supports (e.g., computer programs, virtual reality)	18.9% (*n* = 109)
Astronaut Training	17.5% (*n* = 101)
Cognitive Orientation to daily Occupational Performance (CO-OP) Model	16.4% (*n* = 95)
Applied Behavioral Analysis (ABA)	15.9% (*n* = 92)
Structured Teaching	15.4% (*n* = 89)
Other	15.1% (*n* = 87)
Art Therapy	13.7% (*n* = 79)
Whole-School and Emotional Learning Programs	12.3% (*n* = 71)
Treatment and Education of Autistic and Related Communicated Handicapped Children (TEACCH)	8.8% (*n* = 51)
Masgutova Neurosensorimotor Reflex Integration (MNRI)	8.5% (*n* = 51)

Social Communication, Emotional Regulation, and Transactional Supports (SCERTS) Model	7.6% (*n* = 44)
Integrated Listening Systems (iLs)	6.7% (*n* = 39)
Play Project	6.7% (*n* = 39)
Rhythmic Movement Training (RMT)	6.7% (*n* = 39)
Animal-Assisted Activities and Occupations (e.g., Equine-Assisted Therapy, Hippotherapy)	5.7% (*n* = 33)
The Listening Program (TLP)	5.7% (*n* = 33)
Aromatherapy	5.2% (*n* = 30)
Massage Therapy	4.2% (*n* = 24)
Health Promotion Programming	3.1% (*n* = 18)
Early Start Denver Model (ESDM)	2.8% (*n* = 16)
Brain Balance	2.4% (*n* = 14)
Craniosacral Therapy	1.9% (*n* = 11)
Auditory Integration Training (AIT)	1.6% (*n* = 9)
Qigong Massage	0.3% (*n* = 2
Tomatis Method	0.2% (*n* = 1)

Results - Models of Disablement Questions Summary

This author included Likert scale questions to assess how OTPs utilize the medical model and reformed social models of disability when support autistic children and youth. Additionally, this author included the option for participants to share comments to elaborate their answers if they would like to provide more context for their responses. If readers would like a preview of the survey data, please see Appendix E for the graphics utilized for the AOTA 2023 Conference presentation. Overall, OTPs overwhelmingly agreed that an aspect of practice includes removing societal barriers, such as reducing neurotypical expectations and challenging societal attitudes, though differences were stated by participants regarding the capacity the profession should challenge societal barriers. For example, participants mentioned that it should not be a job requirement to target societal barriers, that it places the client at a disadvantage when the profession removes barriers because removing barriers does not teach clients to function in the outside world, and removing societal barriers is not appropriate for every client. Differing perspectives shared that that neurotypical expectation is an unfair burden placed on neurodivergent learners, and that the profession should stop working to make neurodivergent learners neurotypical. This author advocates that it is an ableist component of therapy to emphasize neurotypical norms for autistic (and neurodivergent) individuals. Autistic/neurodivergent individuals will never be non-disabled, and it is absolutely critical our profession targets removing societal barriers. This program aims to provide the tools for OTPs to feel confident in empowering neurodivergent individuals and challenging ableism with the profession and society. Emphasizing neurotypical norms can significantly impact quality of life of autistic individuals, with the pressure to conform shown to promote negative mental health (Benevides et al., 2020; Lever & Geurts, 2016).

Most OTPs reported they felt that they knew the health and well-being priorities identified by the autistic community, with a few reasons including they were a certified autism specialist, are beginning to see lived experiences of autistic individuals within the literature, or they attempt to seek this information autistic individuals by following their social media accounts. Many participants reported they do not they there is anything universal within the autistic community, and that their patient's priorities take precedent before a "group's" priority. Though a majority of OTPs felt they knew the health and well-being priorities identified by the autistic community, this isn't often demonstrated in practice (e.g., heavy reliance on standardized assessments, targeting of body structural components, using programs advocated against by the autistic community).

Assessment Segment of the OT Process. Though assessing societal and social barriers is seen as an important part of the assessment process, OTPs are unsure how to collect this information or face barriers within the workplace. It was reported OTPs experience difficulty in writing strengths-based evaluation reports and still getting coverage secondary to private health insurance companies often requiring at least one standardized assessment. And finally, though goal-setting by OTPs is often reported to be based on the child and family priorities, bottom-up and deficit-based assessments are most commonly utilized (conflicting with autistic community priorities).

Service Provision Segment of the OT Process. Much of service provision remains improving body structural factors, though many autistic individuals have shared wanting more support in adapting the task and/or environment in addition to accruing desired skills to support their well-being (AARC, 2019; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020; Warner et al., 2019). Many of the top utilized approaches are heavily embedded with the medical model of disability, are often used in a non-affirming way, or have been advocated against by the autistic community, including Social Stories, traditional behavioral modification techniques, ASI, and DIR Floortime. The survey data will inform many aspects of the completed program to address the challenges and barriers reported by OTPs in promoting neurodiversity-affirming practices with neurodivergent individuals.

Models and Theories Guiding the Program

Disability Justice

There are three models and theories guiding the program, with the first being disability justice. Disability justice is a term coined by Sins Invalid, a collective started by disabled queer women of color, aims to secure the rights of disabled individuals by authenticating the complex intersectionality experienced by disabled individuals who identify to additional marginalized communities (Sins Invalid, 2019). Sins Invalid mention how the US Disability Rights Movement recognized basic civil rights for many disabled individuals, however the movement has left many significant challenges (Sins Invalid, 2019). These challenges are illustrated by Sins Invalid:

> And, like many movements, it *(the US Disability Rights Movement)* it is a product of its time and left us with some 'cliff-hangers' that have yet to be resolved.
>
> - Disability rights is based in a single-issue identity, focusing exclusively on disability at the expense of other intersections of race, gender, sexuality, age, immigration statues, religion, etc.
> - Its *(the US Disability Rights Movement)* leadership has historically centered white experiences and doesn't address the ways white disabled people can still wield privilege.
> - It centers people with mobility impairments, marginalizing other types of disability and/or impairment. (Sins Invalid, 2019, p. 13)

Sins Invalid further shares how, even though disabled individuals acquiring rights is a radical change in history, does not address the foundational cause of oppression, which is ableism (2019). Ableism perceives disability as a negative aspect of human identity and ultimately needs to be healed, eliminated, or ameliorated (Sins Invalid, 2019; Yao et al., 2022). To challenge ableism and empower disabled individuals through the disability justice movement, Sins Invalid (2019) has created the following 10 principles of disability justice (please see Appendix F for descriptions of each principle):

1. Intersectionality
2. Leadership of those most impacted
3. Anti-capitalist politics
4. Cross-movement solidarity
5. Recognizing wholeness
6. Sustainability
7. Commitment to cross-disability solidarity
8. Interdependence
9. Collective access
10. Collective liberation

Given ableism proliferates within the occupational therapy profession (Yao et al., 2022), it is essential the principles of disability justice inform the program and to reduce occupational marginalization. Inclusive and justice-focused practices will be emphasized throughout the project to illustrate how occupational therapy can ally with and amplify the disability justice movement.

An Alternative to Evidence-Based Practice

EBP has been a component of occupational therapy practice for the past 20 years, with the profession advocating for increased implementation of published research to provide best practices (Bertram & Kerm, 2019; Cramm et al., 2013; Myers et al., 2017). EBP has been described as applying the best research evidence combined with clinical expertise and client values when making decisions to improve the care of patients (Sackett et al., 2000). Misperceptions that applying research findings do not value the creativity of practitioners or the practitioner-client relationship became popularized, further obscuring how knowledge translation is prioritized by practitioners (Bertram et al., 2019; Parrish, 2018). Problems with EBP escalate when accounting for the lived experiences of marginalized communities (ASAN, n.d.; Tawa, 2020; Taylor, 2022). Much of EBP does not include the voices of clients within healthcare service decision-making and research creation, which has been a critical concern raised by the autistic community (ASAN, n.d.).

The Autistic Self-Advocacy Network (ASAN) is a grassroots organization run for autistic individuals led by autistic individuals (ASAN, 2022). ASAN advocates for disability rights, and to make the world more inclusive for the autistic community (ASAN, 2022). ASAN published a paper sharing ethical concerns with many of the strategies deemed “evidence-based” with autistic clients (ASAN, n.d.). ASAN has justifiably identified many of the studies investigating services and supports for autistic individuals as “ethically dubious” (ASAN, n.d., p. 6). Often EBP and general research is misconstrued for disabled individuals. When EBP is embedded the medical model of disability, EBP fixates on outcomes such as reducing or eliminating disability without much examination of accommodation and supports (ASAN, n.d.). The perceived rewards are seen as much greater than the potential harm through the perspectives of non-disabled practitioners and researchers, clouding the application of EBP (ASAN, n.d.). For review of standards created by ASAN to identify and support ethical healthcare service delivery for autistic individuals, please see Appendix G.

The Therapist Neurodiversity Collective (TNC) is an international organization focused on neurodiversity-affirming therapy, education, and advocacy (TNC, 2022a). To help support practitioners wanting to provide neurodiversity-affirming services incorporating EBP, the TNC has provided a position paper outlining such services, entitled as "empathetic and respectful therapy" (TNC, 2022b). Specific points illustrated within the TNC's model of empathetic and respectful therapy include: perspective taking (diversity in social intelligence and the double empathy problem for all), strengths-based assessment and reporting, sensory integration without expectations for tolerance or extinction, unrestricted AAC as an alternative or as a replacement for speech for everyone, practitioners learn directly from neurodivergent individuals, and intrinsic motivation/interest-led sessions (TNC, 2022b) (see Figure 4.1 for TNC's model). Clinical examples provided by the TNC of empathetic and respectful occupational therapy include: assessing the home and/or work environment and recommending adaptations to fit needs and improve independence, assessing sensory profile and sensory processing differences to inform accommodations and identifying strategies to alleviate sensory distress/trauma, and help develop self-regulation on client's terms (TNC, 2022b). The

TNC has stated the following regarding the EBP process:

> We take a research framework from developmental and relationship-based therapy models, use our knowledge of client and caregiver perspectives (no goals for masking, eye contact, whole body listening, appearing neurotypical, etc.) and apply our clinical background to implement therapy practices which are respectful, culturally competent, trauma-sensitive, and empathetic. (2022b, TNC on EBP section)

If the profession does not highlight neurodivergent shareholders in determining the outcomes measured and what should be considered effective, the profession may not know the time, money, and resources being used to conduct neurodivergent-related research is actually meaningful to neurodivergent individuals. The profession may only target the wrong outcomes, but could be indirectly supporting an ableist agenda within healthcare service delivery. Highlighting the need to reconsider what is defined as EBP secondary to neurodivergent individuals not determining the effectiveness of the healthcare services will be an essential component of the program.

Figure 4.1 – *TNC` s Model of Empathetic and Respectful Therapy*

Therapists do not train autistic people to mimic neurotypical social skills.
Everyone learns different styles of social communication by neurotype.
"Social Skills Standards" are subjective and not evidence based.

Perspective Taking: Diversity in Social Intelligence & The Double Empathy Problem for All

Strength-based Assessment & Reporting

Focus on strengths, not "deficits"
Respect for social communication differences (monotropism, eye contact avoidance, tone, autistic play).
Goals for compliance are not therapy goals, and these types of goals benefit someone other than the client.

When sensory differences are not well accommodated, this can have a negative impact on client wellbeing, emotional regulation, attention and concentration, and attainment. It is imperative that therapists advocate for sensorily comfortable environments for their clients.

Sensory Integration without expectations for Tolerance or "Extinction"

Empathetic & Respectful Therapy

Unrestricted AAC as alternative or as a replacement of Speech for Everyone

Selective Mutism
Apraxia
Autistic People
Stutterers
Sensory Overwhelm/Overload
Burnout
Meltdown
Personal Preference
Cognitive injuries such as TBI
Developmental delays
Intellectual disability
Person with degenerative disease

ABA Free
Positive reinforcement free
Seclusion & Restraint Free

Intrinsic Motivation
Interest-led sessions
Body autonomy
Presume Competence
Honor "no" & "stop"

Therapists learn directly from Neurodivergent people, including acquired neurodivergence

Client perspective is 1/3 of evidence based practice.
Autistic people are "Autism Experts"

Therapist Neurodiversity Collective International
· Therapy · Advocacy · Education ·
Established January [illegible]

The most important thing is that any therapy should help neurodivergent people get what they want and need, not what therapists think they need ("cure" or "normalize" or appear "less autistic"). Good therapies focus on helping neurodivergent people figure out their goals, and work with clients and students to achieve them.

Empathetic and respectful therapists are advocates for equitable inclusion, and unrestricted access to supports, modifications, and accommodations. They respect co-agency, ensuring diversity in learning by actively seeking to align their understanding with that of their clients and tailoring support to meet the specific ways in which each client learns.

Adapted from Autistic Self Advocacy Network Position Statements:
https://autisticadvocacy.org/about-asan/position-statements/

therapistndc.org

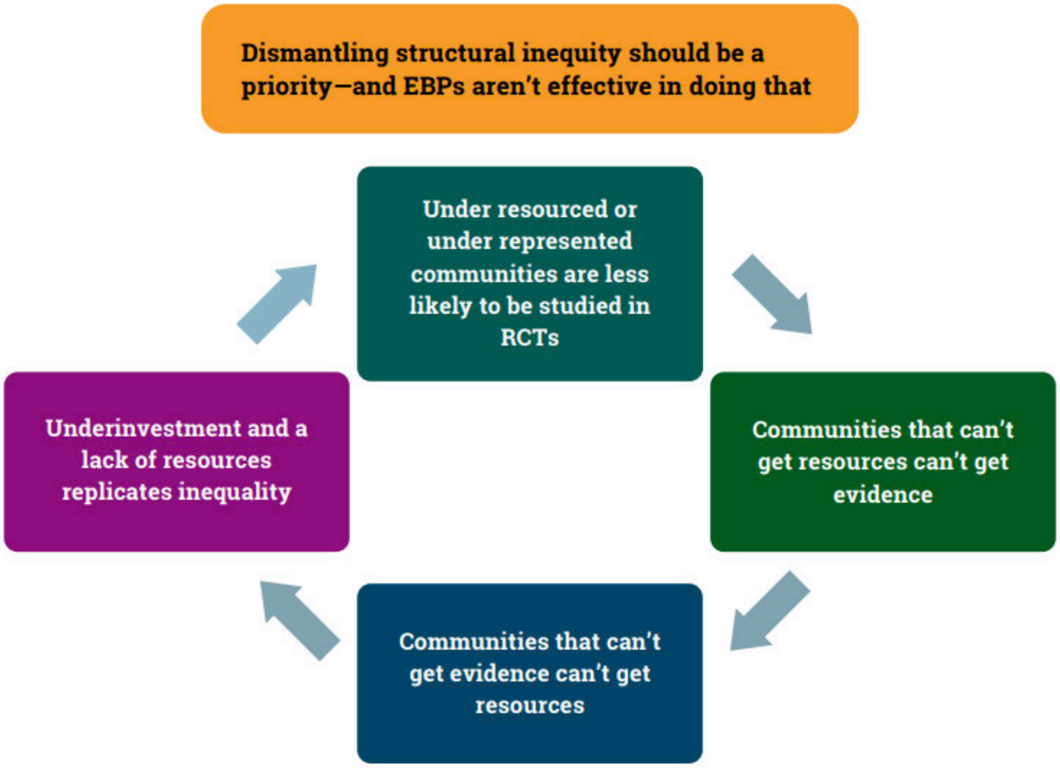
Note. Created by the Therapist Neurodiversity Collective (TNC), 2022b, para. 2.

Community-Defined Evidence-Based Practice (CDEP) and Lived Experience Informed Practice

Given the current evidence-based practice process often highlights research evidence as the foundation of practice and much of healthcare research has ableist tendencies or does not include neurodivergent individuals in their creation, this calls to question the meaningfulness of published research (ASAN, n.d.; Taylor et al., 2022). Removing societal inequities should be a priority of healthcare researchers, and EBP is significantly limited in its ability to do so due to a) under-represented or marginalized communities often not included within healthcare research or are under-resourced, b) communities with limited or no resources or unable to acquire evidence, c) communities that are unable to get evidence are unable to get resources, and d) lack of resources and underinvestment replicates inequity (Tawa, 2020, p. 3) (see Figure 4.2 for depiction of EBP and social inequities).

Figure 4.2

Depiction of How EBP Can Perpetuate Health Inequities



Note. Taken from Tawa, 2020, p. 3.

The utilization of EBP without incorporation of community shareholder perspectives is immensely evident within the occupational therapy literature, contributing to the EBP and health inequity cycle. A recent knowledge translation article published within the *Australian Journal of Occupational Therapy*, endorsed numerous techniques that have been advocated by neurodivergent individuals, including social skills training, applied behavioral analysis, behavioral approaches to feeding, and token economies (Novak et al., 2019). Recent literature reviews published within the *American Journal of*

Occupational Therapy regarding neurodivergent occupations emphasized strategies advocated against by the neurodiversity community, including social skills training or neurotypical social skills (Bernier et al., 2022; Le, Rodrigues, & Hess, 2021), reduction of autistic characteristics (Altoff et al., 2019), and parent coaching to improve sensory processing challenges (Porter et al., 2023). It should be noted no inclusion of neurodivergent shareholders was mentioned in any of these literature reviews.

Most notably, the American Occupational Therapy Association (AOTA) published a position statement defining the role of occupational therapy supporting autistic individuals across the life span (AOTA, 2022). Given this article is an official document of AOTA and has strong potential to influence OTPs, it is necessary to review the article for potential ableist messages. There is a plethora of problematic features of the article (AOTA, 2022):

- The article advocates that there is not a clear consensus regarding preferred language and autism, emphasizing person on the spectrum instead of identity-first language. This is in conflict with the autistic community, with there being a clear consensus by the autistic community for identity-first language (ASAN, n.d.; Bottema-Beutel et al., 2020; Kenny et al., 2016).
- The article incorporates the ableist diagnosis criteria of autism within the *Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition* and utilizing medicalized language without discussing how society

dehumanizes, marginalizes, oppresses, and misunderstands autistic lived experiences.

- The article includes techniques identified as being evidence-based that have been advocated against by the autistic community, including antecedent-based interventions, reinforcement, response interruption and redirection, and social skills training (ASAN, n.d.)
- The article lists outcomes that can be targeted by OTPs that have been identified as ableist or having ableist connotations by the autistic community, such as challenging behavior, social communication, and joint attention.
- The article provides ableist examples of how OTPs support occupations, such as:
    - “ADLs – tolerating the sensory aspects of grooming activities” (p. 2)
    - “Play – identifying a range of play interests” (p. 2)
    - “Play – exploring and participating in a variety of play activities” (p. 2)
    - “Social participation – understanding social nuances during social and leisure interactions with others *(no mention of respect for differences in social participation amongst autistic individuals)”* (p. 3)

- The case studies emphasize neurotypical norms or neurotypical occupations:
    - Goal targeting neurotypical skills, such as increased neurotypical joint attention and social skills
    - Inclusion of traditional behavioral modification techniques
    - The autistic adult case example (Sanjaya) has the autistic adult mention that she would like to experience “intimacy like neurotypicals do,” exhibiting internalized ableism by the faux case example (p. 14). For the support approach, there is no discussion on the faux OTP’s part to explore or validate how many autistic individuals experience intimacy differently than neurotypicals, or empowering the Sanjaya’s neurotypical partner to understand Sanjaya’s perspective regarding intimacy.
- There is no mention of neurodiversity or challenging the medical model of disability within the article.
- There is no mention of autistic OTPs or shareholders advising the article.

These examples of peer-reviewed published research about neurodivergent individuals without neurodivergent shareholders clearly emphasize the problems of EBP secondary to incorporating lived experiences not being a requirement for EBP, which promotes occupational marginalization created by OTPs and occupational therapy researchers. This author proposes an alternative approach to EBP, a merging of community-defined evidence practice (CDEP) and lived experience informed practice (LEIP), or

CDEP+LEIP.

CDEP is defined as a set of practices that have yielded a positive consensus within a community over time and/or successful application of practices developed with significant community input (CDEP Integration Advisory Group, 2021; Martinez et al., 2010; National Latino Behavioral Health Association & National Network to Eliminate Disparities, 2009). Though the practices may or may not have been researched, CDEPs have been accepted as a validated practice by the community the practice is intending to serve (National et al., 2009). CDEP originated within the National Latinx Network, aimed to close the gap between culturally and community-relevant practices and EBP secondary to EBPs historically not designed with or standardized appropriately for populations of color (Martinez et al., 2010). Due to EBP often procuring research with racist and ableist tendencies, CDEP was designed to support and highlight the voices of marginalized communities (CDEP Integration Advisory Group, 2021). CDEP emphasizes that communities are the experts on what is meaningful and important, with common facets of CDEP including an emphasis on lived experience, community collaboration, and cultural competence (CDEP Integration Advisory Group, 2021; National et al., 2009).

First proposed by Wise (2023), a queer and disabled advocate, LEIP emphasizes lived experience as the foundation for practice. Research and clinical experience are still components, however lived experience is prioritized due to much of the healthcare research utilized with neurodivergent individuals not aligning with lived experience or reflecting what the community is saying/prioritizing (Wise, 2023). Utilizing research evidence to inform practice is optional if the research does not validate lived experience, and though EBP does consider client circumstances and values, EBP is often utilized in practice where research evidence or clinical experience are the foundations of practice, with lived experiences rarely incorporated (Wise, 2023). With LEIP, clinical decisions prioritize lived experience of the individual and the impacted communities over research evidence and clinical experience (Wise, 2023). CDEP+LEIP can support best practice utilization by OTPs with autistic children and youth (see Figure 4.3 for a visualization of CDEP+LEIP). This author advocates practitioners to consider utilizing CDEP+LEIP to ensure they prioritize the lived experiences of their neurodivergent clients, which will be a focus of the program.

Figure 4.3

Community-Defined Evidence Practice Merged with the Lived Experience Informed Practice (LEIP) Model as an Alternative to Evidence-Based Practice

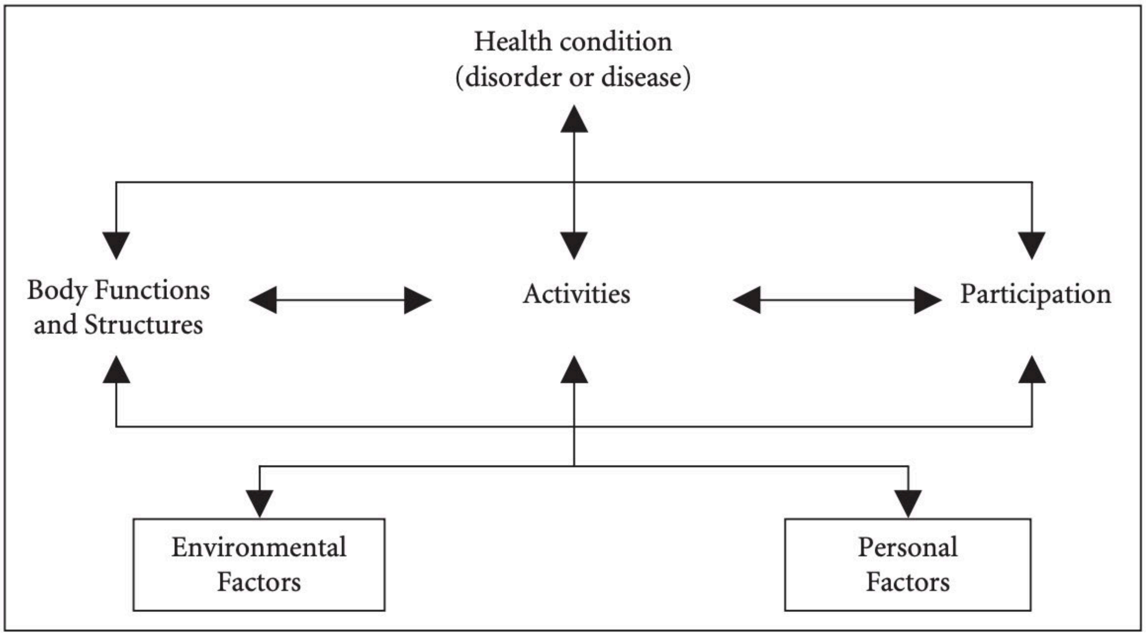
Note. Adapted from CDEP Integration Advisory Group, 2021; Martinez et al., 2010; National Latino Behavioral Health Association & National Network to Eliminate Disparities, 2009; Wise, 2023.

International Classification of Functioning, Disability, and Health - Children and Youth Version (ICF-CY)

The final model guiding the program is the World Health Organization’s (WHO) International Classification of Functioning and Disability - Children and Youth Version (ICF-CY; WHO, 2007, p. 17) (see Figure 4.4). The ICF-CY shares the basis of its model with the International Classification of Functioning, Disability, and Health (ICF), proposing a spectrum of disability (Cramm et al., 2012; WHO, 2007). The ICF-CY serves to offer a definition and language of functioning and disability that can be utilized amongst health professionals and policy-makers (Law et al., 2017; WHO, 2007). Historically, healthcare systems focused on the impairment aspect of disability without consideration of the environment, making disability synonymous with medical conditions (Cramm et al., 2012; Law et al., 2017). The ICF-CY serves to broaden the scope of disability to not only contextual characteristics but also activity and participation (Law et al., 2017; WHO, 2007). The ICF-CY attempts to integrate aspects of the medical and social models of disability into a biopsychosocial modal, illuminating disability as the complex interaction of an individual’s environment, health condition, and personal factors influencing their daily life (WHO, 2007). Ultimately, the ICF-CY serves as a framework to support a practitioner’s analysis of disability and to advocate consideration of context and how it impacts health (WHO, 2007).

Figure 4.4

The International Classification of Functioning, Disability and Health (ICF) - Children and Youth Version



Note. From WHO, 2007, p. 17.

Research has demonstrated a strong parallel between the ICF-CY and occupational therapy practice and models due to the occupational therapy profession recognizing the interaction of task, person, and environment impacting occupational performance (Cramm et al., 2012; Maritz et al., 2018). Law et al. (2017) elaborated on the importance of placing an emphasis on the person-environment interaction within strategy and measurement to best address occupational performance in a client-centered way. Person-environment challenges are addressed within the ICF-CY domains of activity, participation, and environment (Law et al., 2017). Law et al. (2017) illustrated how when practitioners do not focus on occupational performance in assessment and support services, contributions of the occupational therapy profession are not definitive. Novak et al. (2019) elaborated occupation-based frameworks emphasize strategies that improve functional activity performance and participation (e.g., top-down) over impairment-based strategies, which focus on improving specific physiological structures and their functions of the body impacting occupational performance (e.g., bottom-up). The authors also stated services that are top-down are typically easier to embed into a family's routines due to their nature for directly targeting a meaningful activity, increasing the level of family-centered care provided by the practitioner (Novak et al., 2019). It has been posited that the ICF-CY can help support the profession of occupational therapy, which is still deeply entrenched within the medical model of disability, and better address a child's occupational performance holistically (Carlsson, 2009; Cramm et al., 2012).

Though the ICF-CY is widely utilized, there have been emerging critiques encouraging refinement of the model (Mitra & Shakespeare, 2019). The first criticism is, within the ICF-CY model, environmental and personal factors are not connected to the individual's health condition (Mitra et al., 2019). This concern is secondary to research demonstrating social determinants of health (environmental and personal factors) are clearly linked to explaining health conditions, and with the current ICF-CY model, there is an insinuation that this relationship either does not exist or is not at the forefront when understanding an individual's lived experience and disability (Mitra et al., 2019). Advocates for updating the ICF-CY model suggest clearly linking all components of the model to each other, having participation (lived experience) as a central element, or modifying the ICF-CY to incorporate more of a transactional approach illustrating how the components overlap (Castro et al., 2019). Castro et al. in response to the various proposed ICF updates presented their own form of the model, a 3D representation clearly illustrating the abstract nature of how the components are connected, with each sphere visualizing a component can be modifiable in size pending on its impact to functioning (2019). A final criticism is the ICF-CY/ICF models can be easily misconstrued to lead individuals to believe an individual's disability significantly arises from the health condition itself due to how the ICF-CY is visualized, resulting in a practitioner to subconsciously focus on the health condition instead of participation (Watson et al., 2020).

Critiques aside, Watson et al. eloquently described how the ICF/ICF-CY models have strong potential in recognizing the person-environment interaction for disability, health, and functioning across disciplines, and is the most research-informed tool operationalizing this dynamic interaction (2020). The ICF-CY is a scientifically validated tool, can be used to support data collection used to motivate progressive change in emphasizing environmental barriers to health (Watson et al., 2020) and is an approach consistent with public health initiatives (Castro & Palikara, 2019; WHO, 2007). Scholars advocate for the increased utilization of the reformed social model of disability, which focuses on participation in activities while addressing the contexts and environment impacting participation, is comparable to the activities, participation, and environmental aspects of the ICF-CY (Shore & Benevides, 2020).

ICF-CY domains (WHO, 2007) will be incorporated within *Empowering Neurodivergent Occupations* to promote the feasibility of the program as an interdisciplinary resource and support the decision-making of an intervention. For example, if an OTP wants to utilize a strategy that is top-down or that embraces tenets of the cultural model of disability, the OTP would select a technique within the ICF-CY domains of environmental factors, activities, or participation. *Empowering Neurodivergent Occupations* aims to promote strategies resting within the activities, participation, and environmental domains of the ICF-CY. Practitioners also need to note that, though treatment methods applying concepts of the cultural model into rehabilitation should be emphasized, it is ultimately up to the neurodivergent individual and their perspective. For example, within visualization there are few treatment strategies completely advocated against and should not be considered, such as social skills training. However, there may be times when a neurodivergent individual may advocate wanting to learn about neurotypical social skills as a means for safety (Boheler & Boheler, personal communication, January 24, 2023), resembling an application of the cultural model of disability. *Empowering Neurodivergent Occupations* is meant to support reflective thinking of the practitioner and as a flexible guide; neurodivergent individuals are the experts, should be treated as such, and their lived experience and opinions are always the primary source of information.

Proposed Program: Embracing Neurodivergent Occupations and Empowering Disabled Voices: A Knowledge Translation Tool to Support Neurodiversity-Affirming Occupational Therapy Practice and Challenge Ableism Within the Profession

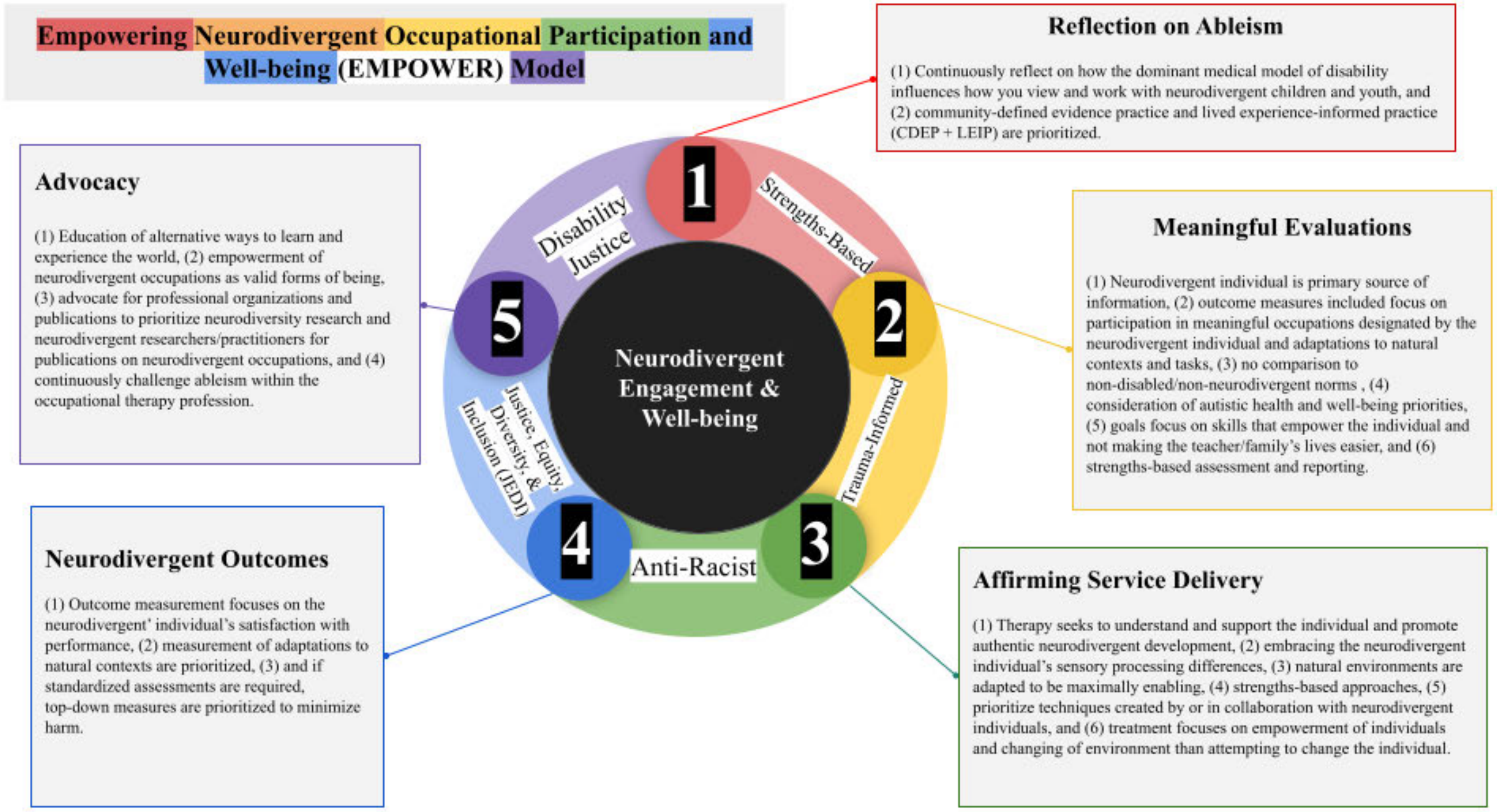
The proposed program, *Embracing Neurodivergent Occupations*, is a knowledge translation tool emphasizing neurodivergent lived experiences and support occupational therapy's ability to reflect on current practices and challenge ableist approaches within the profession. The neurodiversity-affirming toolkit will incorporate best practices regarding knowledge translation strategies to surpass the 15-to-20-year research implementation gap, and will include neurodivergent OTPs throughout the program's creation to maximize the diverse lived experiences of the neurodiversity community. The proposed program will begin as a workshop for this author's current place of employment, and then will become a resource hub website with online modules to promote accessibility for OTPs around the world. There are a plethora of components comprising *Embracing Neurodivergent Occupations*, which are illustrated throughout this chapter.

The Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model

The first component *Embracing Neurodivergent Occupations* will be introducing the first known neurodiversity-affirming occupational therapy model, the Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) model (as seen in Figure 4.5; see Appendix H for larger model).

Figure 4.5

The Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model



Reflection on Ableism

(1) Continuously reflect on how the dominant medical model of disability influences how you view and work with neurodivergent children and youth, and (2) community-defined evidence practice and lived experience-informed practice (CDEP + LEIP) are prioritized.

Meaningful Evaluations

(1) Neurodivergent individual is primary source of information, (2) outcome measures included focus on participation in meaningful occupations designated by the neurodivergent individual and adaptations to natural contexts and tasks, (3) no comparison to non-disabled/non-neurodivergent norms , (4) consideration of autistic health and well-being priorities, (5) goals focus on skills that empower the individual and not making the teacher/family's lives easier, and (6) strengths-based assessment and reporting.

Affirming Service Delivery

(1) Therapy seeks to understand and support the individual and promote authentic neurodivergent development, (2) embracing the neurodivergent individual's sensory processing differences, (3) natural environments are adapted to be maximally enabling, (4) strengths-based approaches, (5) prioritize techniques created by or in collaboration with neurodivergent individuals, and (6) treatment focuses on empowerment of individuals and changing of environment than attempting to change the individual.

Neurodivergent Outcomes

(1) Outcome measurement focuses on the neurodivergent' individual's satisfaction with performance, (2) measurement of adaptations to natural contexts are prioritized, (3) and if standardized assessments are required, top-down measures are prioritized to minimize harm.

Advocacy

(1) Education of alternative ways to learn and experience the world, (2) empowerment of neurodivergent occupations as valid forms of being, (3) advocate for professional organizations and publications to prioritize neurodiversity research and neurodivergent researchers/practitioners for publications on neurodivergent occupations, and (4) continuously challenge ableism within the occupational therapy profession.

The EMPOWER model was initially conceptualized by this author with feedback from international disabled OTPs and academics. The model was inspired by common themes found within disability advocate and neurodiversity-affirming literature (which are detailed in Appendix I). The cycle incorporates the following steps:

1. Reflection on ableism (Bottema-Beutel et al., 2021; Mahipaul, 2022; Marnell, 2023; Patten, 2023; Pellicano & den Houting, 2022)
2. Meaningful evaluations (Dorsey et al., 2022; Harvey, n.d.; Law et al., 2017; Marnell, 2023; Proctor et al., 2020; Roberts, 2023)
3. Affirming service delivery (ASAN, n.d.; Harvey, n.d.; Holler et al., 2021; Marnell, 2023; Shore et al., 2020; TNC, 2022b)
4. Neurodivergent outcomes (AARC, 2019; ASAN, n.d.; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020 Marnell, 2023; Patten, 2022; Pfeiffer et al., 2017; Roche et al., 2020; TNC, 2022b; Warner et al., 2019)
5. Advocacy (Le et al., 2021; Murthi et al., 2023; Patten, 2022)

Within the EMPOWER model there are five underlying frameworks including:

1. Strengths-based approaches (de Schipper et al., 2016; Dunn, 2017; Huntley et al., 2019; Marnell, 2023; Murthi et al., 2023; Patten, 2022)
2. Trauma-informed care (Rumball, 2022; TNC, 2022b)
3. Anti-racist approaches (Aylward et al., 2021; Doyle, 2020; Johnson et al., 2020; Lavalley et al., 2020; Pooley, 2020; Sterman et al., 2021)

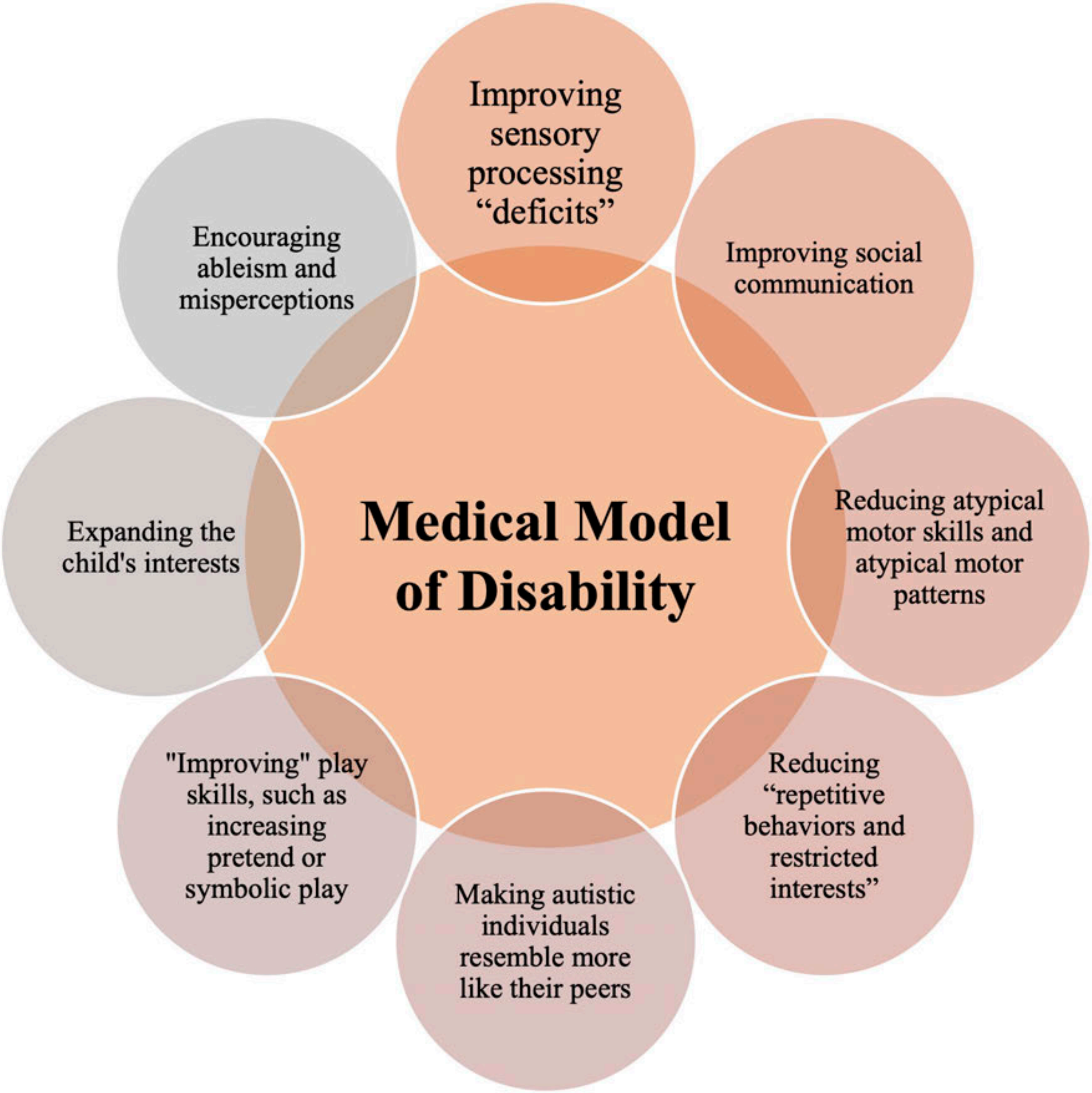
4. Justice, equity, diversity, and inclusion (JEDI) principles (Gibson, 2020; Khan, 2021; Ryan et al., 2020; Sterman et al., 2021; Taff et al., 2017; UNC School of Medicine, 2023; Zafran et al., 2022)
5. Disability justice (Sins Invalid, 2019; Waldschmidt, 2018; Twardowski, 2022; Yao et al., 2022)

A Conversation on Models of Disablement

This component of the program will focus on providing OTPs the tools to reflect on models of disablement, promote reflection on how the profession views disability, and incorporate disability studies (DS) into their practice. DS is described as an interdisciplinary field aimed to elucidate how disabled individuals are a marginalized community with their own culture and experiences of systematic oppression (Harrison et al., 2021; Siebers, 2008). The most recent call for change for occupational therapy to integrate DS within the profession emphasized how infusing DS into the profession can better align the profession with the priorities of the disability community (Harrison et al., 2021). This program aims to support this call for change, with incorporating a discussion on models of disablement and practical applications of three different models of disablement to support this reflection. Please review Appendix J for a thorough discussion on models of disablement and their application to occupational therapy practice. Figure 4.6 visualizes occupational therapy exemplifying the medical model of disability, and Figure 4.7 illustrates occupational therapy practices influenced by the EMPOWER model (resembling the reformed social model and cultural models of disability.

Figure 4.6

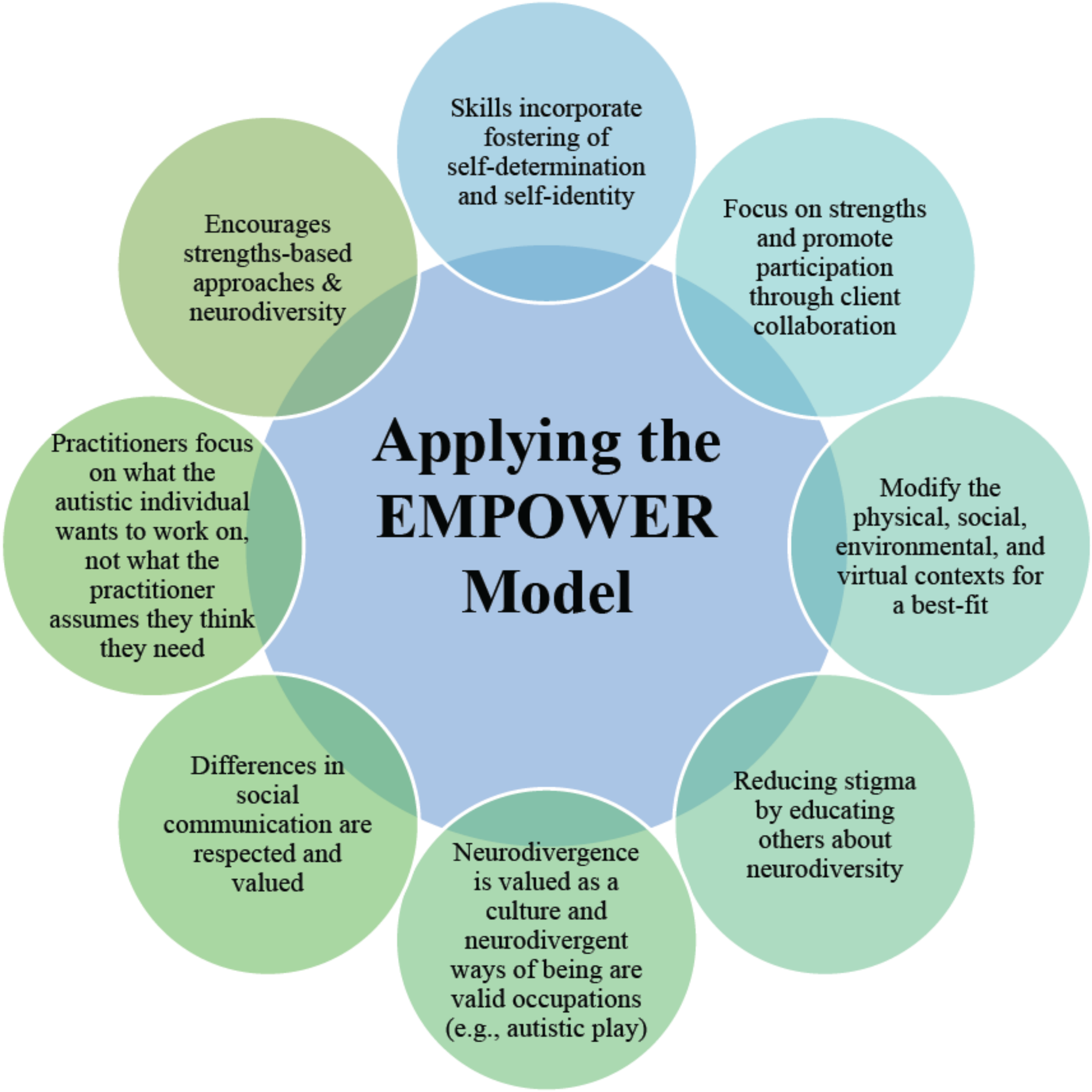
Applying the Medical Model of Disability within Occupational Therapy Practice



Note. Adapted from AARC, 2020; ASAN, n.d.; Shore et al., 2020; TNC, 2022

Figure 4.7

Applying the EMPOWER Model within Occupational Therapy Practice



Note. Examples inspired by AARC, 2020; ASAN, n.d.; Shore et al., 2020; TNC, 2022

Health and Well-being Priorities Identified by the Autistic Community

The next component of the toolkit will be education on what autistic individuals have identified as their health and well-being priorities to support collaboration. For example, identified health and well-being priorities are: positive quality of life; reduction of societal barriers and discrimination; social participation and relationships; mental health (Benevides et al., 2020); pain, including modifying existing measures to better serve autistic individuals (Warner et al., 2019); accessibility to modifications and accommodations within the home, learning and work environments (Benevides et al., 2020; Coussens et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020); self-esteem; and self-advocacy skills (Warner et al., 2019). The Australian Autism Research Council (AARC), a research effort with autistic shareholders at the forefront, identified the following as broad themes advocated by their participants: autistic inclusion to all aspects of autism research and knowledge translation, a strengths-based and neurodiversity framework of autism, recognition of the diversity within the autistic community, society accepting responsibility to accommodate the autistic community, promoting the agency of autistic individuals, and improving the validation of autistic ways-of-being (AARC, 2020). By keeping these health and well-being priorities in mind as a practitioner, practitioners may have more opportunity to reflect on their own practices and how they deliver supports and services within the context of these priorities when working with autistic individuals. Table 4.2 visualizes health and well-being priorities identified by autistic individuals within the literature. This author aims to expand the foci to other neurodivergent communities as the program develops over time.

Table 4.2

Autistic Health and Well-being Priorities

Physical Health	Mental Health	Activities & Participation	Environmental & Contextual Factors
▪ Pain (including modifying how we currently measure pain to better serve autistic individuals)	▪ Anxiety and depression ▪ Perception and acceptance of self ▪ Positive mental health ▪ Stress reduction and management ▪ Self-esteem ▪ Trauma-informed care	▪ Academic well-being ▪ Autism-friendly healthcare and healthcare access ▪ Autistic inclusion in research and knowledge translation ▪ Connection and recognition ▪ Financial/vocational skills ▪ Focus on everyday/meaningful activities instead of discrete skills ▪ Honoring autistic occupations (e.g., autistic play, promoting engagement in special interests) ▪ Positive quality-of-life ▪ Relationships and social participation ▪ Self-advocacy skills ▪ Sexuality and sexual participation ▪ Sleep ▪ Spirituality ▪ Strengths-based assessments	▪ Accessibility to environmental supports in home, learning, and work environments ▪ Community acceptance and empowerment ▪ Reduction of societal barriers and discrimination ▪ Respect for sensory processing differences instead of sensory tolerance or attempting to change how the body processes stimuli

Note. Adapted from AARC, 2019; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020; Warner et al., 2019

Neurodiversity-Affirming and Meaningful Evaluations

Given the medical model of disability is the dominant framework in, not only society at large but also the education of healthcare professionals (including occupational therapy), evaluation reports and goals are often written highlighting the individual's deficits or emphasizing neurotypical norms (Dorsey & Miles, 2022). Additionally, standardized assessments often compare disabled/neurodivergent individuals to non-disabled individuals often making neurotypicality or being non-disabled an implicit goal of therapy, and to prove a deviation from the norms and labeling that deviation as a deficit is the opposite of neurodiversity-affirming care (Dorsey et al., 2022). OTPs are encouraged to reflect on the assessment tools being utilized when assessing neurodivergent individuals. OTPs should ponder how meaningful the data is when comparing disabled children to non-disabled children, and for what outcome. Neurodivergent children will never be neurotypical, and the profession needs to no longer have neurotypicality be the benchmark for functioning, especially since standardized assessments are created to locate deficits in an individual (Proctor et al., 2020). For example, many common occupational therapy assessment tools are standardized or criterion-based for neurotypical function which inadvertently emphasize neurotypical motor skills and sensory processing patterns, including the Beery-Buktenica Developmental Test of Visual-Motor Integration - 6th Edition (Beery-VMI), the Peabody Developmental Motor Scales - 2nd Edition (PDMS-2), the Bruininks-Oseretsky Test of Motor Proficiency - 2nd Edition (BOT-2), Sensory Integration and Praxis Test (SIPT) and the Sensory Processing Measure - 2nd Edition (SPM-2) (Law et al., 2017). Additionally, most standardized and criterion-based assessments focus on body structural components, which naturally emphasize the medical model of disability. This author has spent years billing insurance companies with no denials without utilizing standardized measurement tools secondary to these tools not accurately portraying the child, their abilities, or aligning with the child and family's values.

Standardized assessment tools are not required for school-based services as deemed by the Individuals of Disabilities Education Improvement Act (IDEIA) (Individuals of Disabilities Education Improvement Act, 2004). Additionally, OTPs should challenge insurance companies requiring a standardized assessment and advocate for a focus on decreased occupational participation as a means for requiring therapy. Though challenging insurance companies dictating coverage requiring a standardized assessment may not always be successful, it is a critical component in advocating for affirming evaluations and the OTP's role as an advocate for the neurodivergent community. Assessment tools that highlight lived experiences, addressing the environment, and meaningful participation include the Sensory Profile-2 (SP-2), the Young Child - Participation and Environment Measure (YC-PEM), the Participation and Environment Measure - Children and Youth Version (PEM-CY), the Perceived Efficacy of Goal Setting System (PEGS), the Canadian Occupational Performance Measure (COPM), the Children's Assessment of Participation and Enjoyment (CAPE), the Clifton Strengths Explorer, the Child Occupational Self-Assessment (COSA), the Pediatric Interest Profile (PIP), and the Visual Activity Sort. For assessment tools specific for quality of life, explore the Child Self Questionnaire (AUQUEI), and the Role Checklist. Please see Appendix K for a table describing the tools.

As previously mentioned, language has power and that includes goal-writing (Bottema-Beutel et al., 2021). Goals are a chance to empower individuals, validate neurodiversity, and ultimately maximize the disabled individual’s health and well-being. One method for writing neurodiversity-affirming goals is by being strengths-based, with the disabled lived experience being a core component and a collaborator as much as possible. Strengths-based goal-writing often include the following components: honoring the disabled experience is rich and complex; valuing communication differences; embracing the child’s interests, values, and strengths; presuming competence; and incorporating supports as a means of protecting the child (Dorsey et al., 2022). Dorsey et al. (2022) mentioned the importance of incorporating the accommodations directly into the goal so the individual has what they need to be ready to learn and participate. Various neurodivergent advocates have highlighted that in some capacity, goals should aim to target the individual’s self-advocacy, ability to utilize supports/accommodations, and social participation (as defined by the individual) (Dorsey, 2022; Harvey, n.d.; Roberts, 2023). Goals should be designated by the individual themselves, include development and empowerment of their identity, target mental health (e.g., sensory and emotional regulation needs), and/or quality of life (Dorsey, 2022; Harvey, n.d.; Roberts, 2023). By incorporating any of these areas into the individual’s plan of care, practitioners are already targeting the health and well-being priorities designated by the neurodivergent communities (Dorsey, 2022; Harvey, n.d.; Roberts, 2023). Appendix L provides examples of ableist and affirming therapy goals to support the practitioner’s ability to write neurodiversity-affirming goals.

To make an evaluation strengths-based, it is essential the client has the opportunity to exercise their self-determination, decide how they want to experience and play in the world, and make decisions for themselves (Proctor et al., 2020). When writing evaluation reports, it is vital to remember parents read the reports and if the reports are laden with deficit-based language, families internalize these deficits and may even begin to view their child as these deficits (Proctor et al., 2020). Research has shown that the language practitioners utilize within reports impacts the child-family relationship; language in reports matter (Proctor et al., 2020). Scott Tomchek, a guest on Meg Proctor's *Learn Play Thrive* podcast illustrates the work-around regarding insurance and the myth that strengths-based evaluations are not billable:

> Instead, we make the deficits and listing all the deficits the main event, when in fact it's that clinical decision making that we have to do, and the number of occupations that we're addressing during that evaluation as the main event. And so, that detailed occupational history, how we're gathering our information, what strengths the individual has, how we can use those strengths and preferences for our intervention, really contributes to the complexity of how we should be documenting what occupations are meaningful for that individual, which ones are not a preferred occupation, but you know we all have to engage in some personal hygiene activities. That's kind of a societal norm. And so, how we document that complexity is really the key for reimbursement purposes. It's not the number of deficits that we're documenting. (Proctor et al., 2020, 14:53)

Proctor et al. (2020) illustrated the following principles to support strengths-based goal-writing:

1. **Be Descriptive ->** Practitioners can write evaluations using descriptive language, not diagnostic language. Instead of “Johnny’s play was restrictive and repetitive” say “Johnny enjoyed playing with cars and liked to watch the wheels spin.” Be descriptive without judgment.
2. **Be Neutral ->** Quantitative measures can be a useful tool in evaluations, but they do not need to be used to highlight or diagnose deficits. Instead of “Johnny demonstrated deficits in sorting at the four-year-old level,” try “he was able to sort two colors. When we went to three colors, he was unable to sort four of the five items.”
3. **Skip the “But” ->** Instead of “here is what they can do BUT here is what they can’t do,” try “here’s what they can do. Here is what we gave them, and here is how they responded.” For example, instead of this: “she is able to hold scissors to snip paper but requires moderate assistance to cut a straight line.” Try this: “she can hold her scissors correctly and snip paper independently. When given a highlighted straight line, she is able to cut it when the therapist helps hold the paper.”
4. **Put the Scores Last ->** Instead of putting norm-referenced scores first, move them to the end of the report. These will sit better within the context of all of the descriptive, strengths-based facts you’ve given already. They should not be the main source of information highlighting the individual.
5. **Writing Strengths-Based Goals ->** When you write your goals, focus on enhancing the strengths of the person rather than remediating their deficits. And

> don’t forget to write goals in collaboration with the client and the family. Your goals should focus on the child’s authentic, meaningful participation in daily life. (Proctor, 2022).

Most importantly, remember no one builds their lives around remediated “deficits” (Patten, 2022)!

Autistic and Neurodiversity-Affirming Service Delivery Characteristics

A component of *Embracing Neurodivergent Occupations* will summarize neurodiversity-affirming service delivery characteristics described by neurodivergent researchers and organizations. This component aims to support a practitioner’s ability to adapt a program or resource as needed to be more neurodiversity-affirming or when wanting to quantify the potential of a treatment strategy to be used in a neurodiversity-affirming manner. This author also hopes that, since practitioners can utilize affirming programs in ableist ways, this component can serve as a self-reflection tool to ensure OTPs challenge their ableism and modify their practice as needed. The non-exhaustive compiled list of affirming characteristics (practitioner and program) are:

- No inclusion of ABA or traditional behavioral techniques, such as token economies, reinforcement (positive and negative), and pivotal response training (ASAN, n.d.; TNC, 2022b)
- Consider providing a sensory assessment for every neurodivergent individual OTPs support (Marnell, 2023)
- This author advocates for OTPs to consider the Sensory Profile assessments due to the supporting frameworks incorporating strengths-

based applications and recognizing sensory processing differences as valid forms of human diversity

- Research has illustrated that more than 95% of autistic children and youth have sensory processing differences, and empowering individuals and their families to understand their sensory processing difference is paramount for their health and well-being (Ben Sasson et al., 2019)
- Lived experience is prioritized (Wise, 2023b)
- Autistic traits themselves are not targets for intervention (ASAN, n.d.; TNC, 2022b)
- The service targets improving the autistic individual’s quality of life by increasing access and opportunities to self-determination, communication, self-advocacy, or other goals identified as priorities by the autistic individual (ASAN, n.d.; Wise, 2023b)
- If the autistic individual cannot make their goals clear, goals should be created based on the team’s best clinical judgment of what will best allow the individual to lead a self-determined life (ASAN, n.d.)
- Trauma-informed approaches (ASAN, n.d.; TNC, 2022b)
- Appreciating and empowering neurodivergent differences (Harvey, n.d.; TNC, 2022b; Wise, 2023b)
- Strengths-based approaches, such as incorporating or aligning activities with the learner’s interests and encouraging personal autonomy (Harvey, n.d.; Huntley et al., 2019)

- Respecting autonomy; no hand-over-hand or touching the individual's body without consent and the individual has the right to say no (Dallman et al., 2022; Wise, 2023b)
- Cultural competency, cultural humility, and intersectionality (ASAN, n.d.; Wise, 2023b)
- Provision/inclusion of robust method of communication and unrestricted access AAC; all forms of communication are honored (ASAN, n.d.; TNC, 2022b; Dallman et al., 2022; Wise, 2023b)
- Robust method of communication entails allowing the individual to communicate anything they need in the most effective way possible (e.g., if speech is not an effective method, augmentative and alternative communication [AAC] should be provided) (ASAN, n.d.)
- Strength-based assessment and reporting (e.g., respect for social communication differences, validates autistic play) (ASAN, n.d.; TNC, 2022b)
- Acknowledge, celebrate, and encourage what an individual can do and what they excel at, such as integrating their interests into intervention to support the meaningfulness of the intervention (ASAN, n.d.)
- Rejecting neuronormativity as the threshold or goal for functioning (Marnell, 2023; Wise, 2023b). Comparing the function and skills of neurodivergent individuals to neurotypical individuals in no way serves neurodivergent individuals (Marnell, 2023)

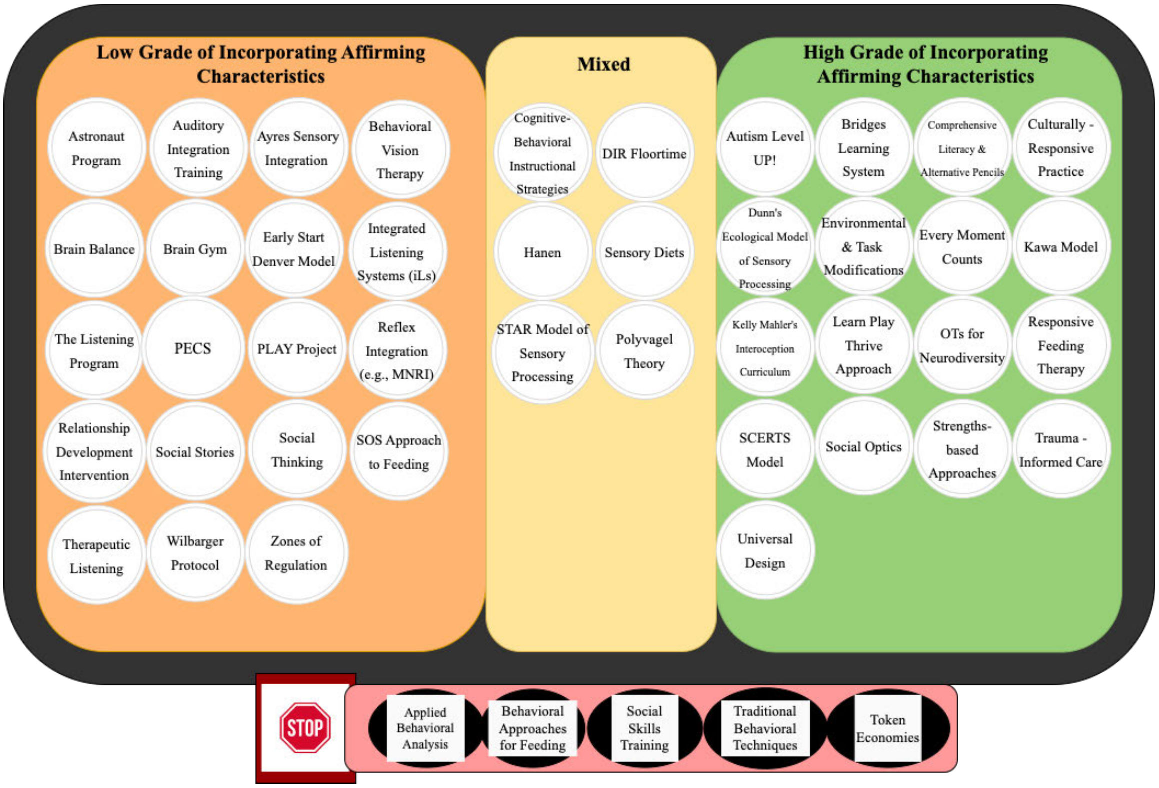
- Sensory processing differences are validated without expectations for tolerance, extinction, or expecting to modify how they process sensory information (TNC, 2022b)
- Environmental and task accommodations are provided in line with the individual's sensory processing differences (ASAN, n.d.; TNC, 2022b)
- Presuming competence (a disabled individual has the capacity to understand and learn) and respecting bodily autonomy (refraining from hand-over-hand prompting, asking permission first prior to touching their body) (ASAN, n.d.; Harvey, n.d; TNC, 2022b; Wise, 2023b)
- Respect how the individual stims and only consider providing an alternative if the stim is dangerous or causes pain (Kapp et al., 2019; Marnell, 2023)
- Stims are regulatory, and it is an absolute notion to assume a repetitive action or a behavior experienced by an individual is not functional.
- If social participation is targeted, emphasis is placed on recognizing diversity in social intelligence, such as the double empathy problem for all (ASAN, n.d.; Harvey, n.d.; TNC, 2022b)
- Everyone learns different styles of social communication by neurotype (ASAN, n.d.; TNC, 2022b)
- No promotion of masking or camouflaging autistic traits in any way (ASAN, n.d.; TNC, 2022b)

Grade of OT Services, Resources and Affirming Characteristics

The next component of *Embracing Neurodivergent Occupations* will be illustrating occupational therapy techniques and resources regarding the level of "always acceptable" and "never acceptable" treatment characteristics as described by neurodivergent individuals (see Appendix G). Additional considerations for grade designation include how the creators of the program defined the technique, which outcomes the authors/creators are targeting within their research (e.g., autistic characteristics, neurotypical joint attention), emphasizing the targeting of neurotypical norms as outcomes, how the program incorporates neurodiversity-affirming treatment characteristics autistic/neurodivergent shareholder involvement, addressing the need to target environmental barriers, emphasizing self-determination and skill building on the client's terms, and frequency of ableist language within their promoted research and website. In summary, the program will be examined by how the technique and its creators not only honor neurodivergent identity but empower neurodivergent occupations. Figure 4.8 demonstrates a blueprint of what the component may look like (see Appendix M for an enlargement of the figure). In the completed *Embracing Neurodivergent Occupation's* website, explanations for grades for all techniques will be provided. See the discussion below for the Play Project and Appendix N for the grade given to Ayres' Sensory Integration (ASI).

Figure 4.8

Visualization of Graded Techniques and Supports Utilized by OTPs Level of Neurodiversity-Affirming Application



Note. Please note the grading is not a final determination and may be changed. Current grades were made with available resources (literature, creator's websites, how neurodivergent individuals discussed their trainings).

The PLAY Project is a parent-implemented strategy that is promoted as an early intensive intervention program for autistic children and youth (Solomon et al., 2014). Though the PLAY Project emphasizes a play-based relationship between the caregiver and the child, that does not mean the PLAY Project is free from promoting ableist and potentially harmful practices. The PLAY Project's research often highlights neurotypical outcomes as goals, such as "reducing autism severity," and aiming to achieve neurotypical play skills and social communication skills (Solomon et al., 2014; Solomon, 2016). There is no mention of including autistic individuals within intervention research, and during promotional talks about the PLAY Project, Dr. Solomon highlights "you don't have to teach typical children to be that social. And children with autism who don't get intervention tend to have a poor natural developmental course if you leave them alone. Thus the importance of intensive intervention" (personal communication, January 3rd, 2023). As previously mentioned, just because a service is play-based or the child appears to be enjoying treatment does not lessen its potential to negatively impact a child's well-being. By focusing on neurotypical norms and focusing on "reducing autistic severity," the PLAY Project may inadvertently increase the likelihood the child learns to mask and promote a negative autistic self-identity, which has been shown to negatively impact an autistic individual's quality of life (ASAN, n.d.).

As previously mentioned, neurodiversity and autistic-affirming therapy need to assess aspects of the environment and culture that may be impacting participation or what strengths-based supports a learner may benefit from to participate (ASAN, n.d.; TNC, 2022b). If an intervention strategy focuses on targeting a skill of a child without any consideration of modifying the environment or providing support or attempts to "normalize" the child in any way, this will align the strategy to have a low grade of applying neurodiversity-affirming principles.

Resources for Programs and Application for Supporting Neurodiversity-Affirming Practice

To support an OTP's ability to apply *Embracing Neurodivergent Occupations* within clinical practice, an overview of the resources and programs that have a high grade of being neurodiversity-affirming will be explored. As mentioned previously, applied principles of neurodiversity-affirming practice include: created by or in collaboration with a neurodivergent individual; outcomes target empowerment, positive quality-of-life, and focusing on strengths when teaching new skills prioritized by the individual and not neurotypical norms (Holler et al., 2021; Shore et al., 2020); target modifying the environment to enhance participation (Holler et al., 2021; Shore et al., 2020); reduction of neurodiversity stigma and reduced contextual barriers (Holler et al., 2021; Shore et al., 2020); assessment and goal-setting is based primarily on the client's priorities and preferences (Holler al., 2021); and services emphasize the OTPF-4 (AOTA, 2020) intervention approaches of create/promote (health promotion), maintain, modify (compensation, adaptation), and prevention (reduced risk of impacts negatively impacting quality of life) (Shore et al., 2020). Within Appendix O, strategies and resources that have a high grade of being neurodiversity-affirming, such as Autism Level UP!, OTs for Neurodiversity, Every Moment Counts, and the Learn Play Thrive Approach are described. Creators of these strategies have graciously offered permission for this author to include visuals outlining the tools within Appendix O. This author strongly encourages readers interested in these tools (many of them free) to explore the websites provided to access the tools to support the creators. For a more holistic review of the strategies, this author plans to send out surveys to neurodivergent OTPs to provide their feedback on the resources and this author will adjust the grading as needed. In the website phase of the program, every high graded program or resource will have an overview, the occupations primarily addressed as defined by the OTPF-4, and ICF-CY classifications.

Resources for Parents

An essential component of *Embracing Neurodivergent Occupations* will be resources for parents and caregivers to support empowering of neurodivergent children and youth. Given how healthcare service delivery can be provided in varying ways, ableist or not, it may be helpful for caregivers to know what questions they can ask their practitioner to discern how neurodiversity-affirming they are in practice. These questions are included within Appendix P.

Application of Embracing Neurodivergent Occupations

Figure 4.8 below describes a case scenario of how *Embracing Neurodivergent Occupations* can be utilized by an OTP.

Figure 4.9

Case Scenario for Embracing Neurodivergent Occupations

An occupational therapy practitioner is supporting a seven-year-old autistic child, Sora. Parents report Sora has sensory processing patterns concerning auditory input while at school and at social functions, making it more challenging for them to regulate their energy throughout their day. Sora's mother reports they experience challenges within the classroom environment, such as "having a hard time understanding their peers" and "they do frequently cover their ears" during group activities. When reviewing *Embracing Neurodivergent Occupations*, the OTP examines which affirming assessment tools are most likely to garner information regarding Sora's participation in daily life. The OTP selects the Child Sensory Profile-2 (SP-2) to learn more about Sora's sensory processing patterns, and the Perceived Efficacy of Goal Setting System (PEGS) to examine what Sora would like to identify as their meaningful goals. Based on the results from the SP-2, the OTP learned Sora has hypersensitivity to auditory input, both seeking and avoiding auditory input much more than their peers. When the OTP conversed with Sora, they shared that they often get distressed during assemblies and lunchtime at school, and they want to participate in these functions. Sora also shared that they get distracted easily during work time by extraneous noises, such as their peers' clicking of their writing utensils and hearing the scratching noises of writing. The OTP learns Sora enjoys making noises or humming their favorite songs as their go-to regulatory strategy, and dreams of producing music someday. When the OTP reviewed the PEGS with Sora, Sora prioritized wanting to be more confident in themself, spend more time with their peers outside of school, learn what to do when they begin to get distracted by their peers' clicking of their pens and pencils, and learn what they can do when they feel dysregulated at home and at school. The OTP supported Sora's sharing of their priorities with their family, with family supporting Sora's priorities for occupational therapy services.

When examining *Embracing Neurodivergent Occupations*, the OTP selected programming and strategies targeting the occupations prioritized by Sora, including emotional health promotion and maintenance, friendships, and formal educational participation emphasizing self-advocacy, education, and environmental modifications. The OTP locates methods within Autism Level Up! and OTs for Neurodiversity, collaborating with Sora to identify tools that are most meaningful to them. Sora ultimately selects to create their own version of the Energy Meter (Autism Level UP!) incorporating their interest of the videogame *Kingdom Hearts*, the Regulator for the Classroom (Autism Level Up!) to identify aspects of the classroom environment that are supporting and inhibiting their regulation in addition to identifying meaningful regulatory strategies, and the Neurodivergent Identity Workbook (OTs for Neurodiversity) to validate and empower Sora's neurodivergent identity by recognizing their strengths, special interests, and promoting self-actualization. Using these supports, Sora identifies wanting to trial movement breaks, noise-canceling headphones, and advocating to their teacher to identify a calming space that can be used, not only just by them, but for any student who is experiencing dysregulation. OTP provides this data to Sora's teacher and their family along with the Neurodivergent vs Neurotypical Communication Styles (OTs for Neurodiversity) and the Fidgets are Tools (Autism Level Up!) resources to educate them on differences in communication and how unrestricted access to meaningful fidgets identified by Sora can empower their ability to regulate themself. Sora's teacher loves the idea of creating a "chill spot" for her students, and to further empower Sora and with Sora's permission, supports Sora with the opportunity to be a leader and oversee designing of the regulation space within the classroom. The OTP educates and models to Sora's family how to incorporate Sora's Energy Meter and use the Guide to Providing Problem Solving Support for Neurotypical Partners (Autism Level Up!) to maximize Sora's autonomy while supporting their co-regulation. OTP also utilized resources from OTs for Neurodiversity to educate Sora's teacher and their family regarding neurodivergence and honoring social communication differences. Sora was seen for 16 one-hour sessions once a week, and at the end of the treatment period, Sora reported increased self-esteem and quality-of-life across environmental contexts.

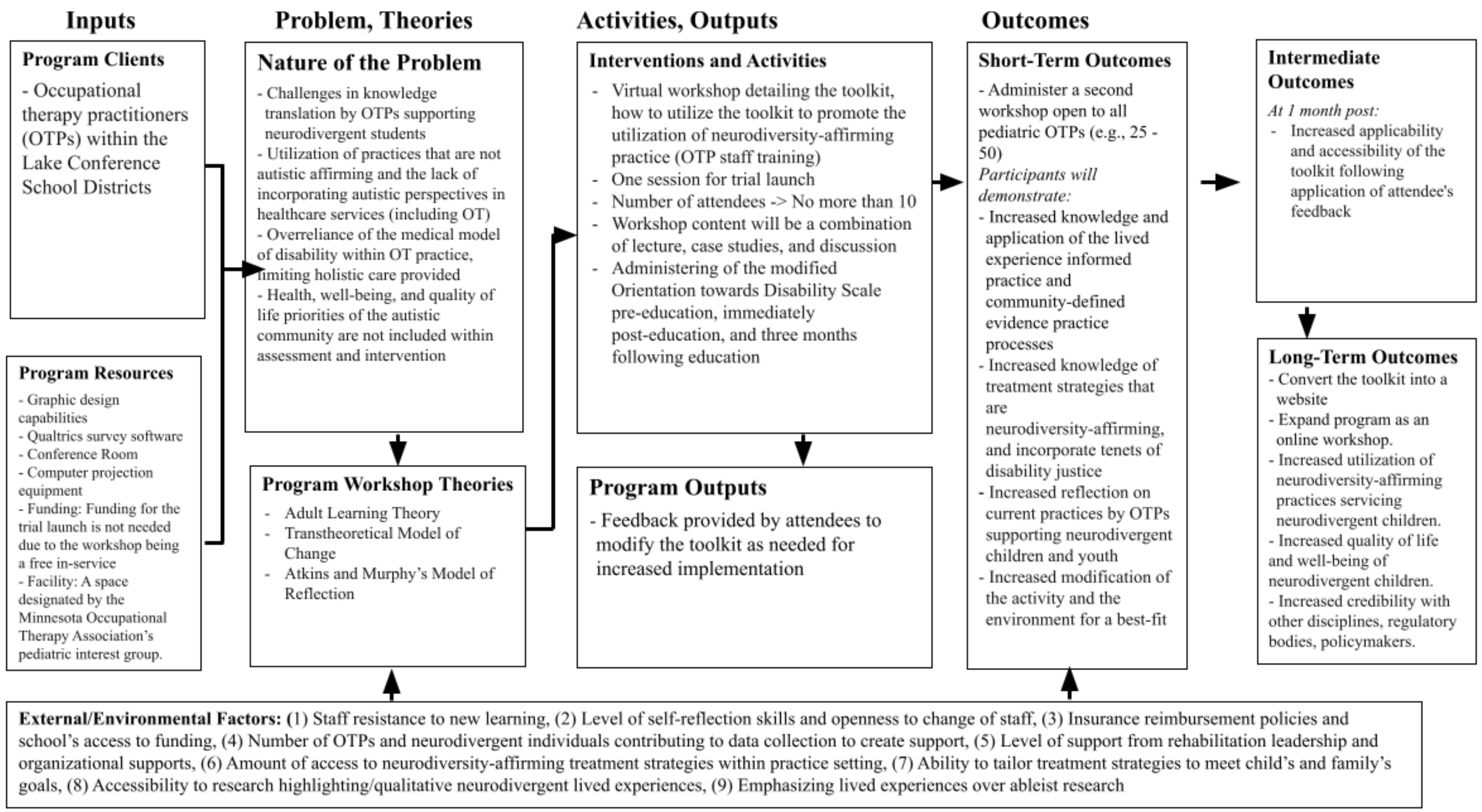
Trial Workshop for Disseminating Program/Knowledge Translation Plan

Embracing Neurodivergent Occupations will initially be implemented as a training workshop with pediatric OTPs within the Lake Conference school districts, which include the districts of Minnetonka, Buffalo, Eden Prairie, Edina, Hopkins, Saint Michael-Albertville, and Wayzata. Details on this program can be viewed below in Figure 4.10 and in larger form in Appendix Q).

Figure 4.10

Embracing Neurodivergent Occupations – *A Trial Launch*

Program title: ***Embracing Neurodivergent Occupations – A Trial Launch***



Inputs

Program Clients

- Occupational therapy practitioners (OTPs) within the Lake Conference School Districts

Program Resources

- Graphic design capabilities
- Qualtrics survey software
- Conference Room
- Computer projection equipment
- Funding: Funding for the trial launch is not needed due to the workshop being a free in-service
- Facility: A space designated by the Minnesota Occupational Therapy Association's pediatric interest group.

Problem, Theories

Nature of the Problem

- Challenges in knowledge translation by OTPs supporting neurodivergent students
- Utilization of practices that are not autistic affirming and the lack of incorporating autistic perspectives in healthcare services (including OT)
- Overreliance of the medical model of disability within OT practice, limiting holistic care provided
- Health, well-being, and quality of life priorities of the autistic community are not included within assessment and intervention

Program Workshop Theories

- Adult Learning Theory
- Transtheoretical Model of Change
- Atkins and Murphy's Model of Reflection

Activities, Outputs

Interventions and Activities

- Virtual workshop detailing the toolkit, how to utilize the toolkit to promote the utilization of neurodiversity-affirming practice (OTP staff training)
- One session for trial launch
- Number of attendees -> No more than 10
- Workshop content will be a combination of lecture, case studies, and discussion
- Administering of the modified Orientation towards Disability Scale pre-education, immediately post-education, and three months following education

Program Outputs

- Feedback provided by attendees to modify the toolkit as needed for increased implementation

Outcomes

Short-Term Outcomes

- Administer a second workshop open to all pediatric OTPs (e.g., 25 - 50)

Participants will demonstrate:

- Increased knowledge and application of the lived experience informed practice and community-defined evidence practice processes
- Increased knowledge of treatment strategies that are neurodiversity-affirming, and incorporate tenets of disability justice
- Increased reflection on current practices by OTPs supporting neurodivergent children and youth
- Increased modification of the activity and the environment for a best-fit

Intermediate Outcomes

At 1 month post:

- Increased applicability and accessibility of the toolkit following application of attendee's feedback

Long-Term Outcomes

- Convert the toolkit into a website
- Expand program as an online workshop.
- Increased utilization of neurodiversity-affirming practices servicing neurodivergent children.
- Increased quality of life and well-being of neurodivergent children.
- Increased credibility with other disciplines, regulatory bodies, policymakers.

External/Environmental Factors: (1) Staff resistance to new learning, (2) Level of self-reflection skills and openness to change of staff, (3) Insurance reimbursement policies and school's access to funding, (4) Number of OTPs and neurodivergent individuals contributing to data collection to create support, (5) Level of support from rehabilitation leadership and organizational supports, (6) Amount of access to neurodiversity-affirming treatment strategies within practice setting, (7) Ability to tailor treatment strategies to meet child's and family's goals, (8) Accessibility to research highlighting/qualitative neurodivergent lived experiences, (9) Emphasizing lived experiences over ableist research

By beginning with a soft-launch of the program, this author can adjust the educational materials as needed prior to a wider dissemination of the program. The participants will complete a survey pre-workshop, immediately post-workshop, and three months post-workshop to measure their perspectives on neurodiversity and application of new skills taught (refer to Appendix R for survey administered pre-, immediately post, and three months post-workshop, and Appendix S for presentation feedback form).

The workshop will be a half-day continuing education opportunity educating the OTPs on how to apply neurodiversity-affirming principles within evaluation and treatment when supporting neurodivergent children and youth. The participants will receive a plethora of resources to begin applying the concepts immediately into practice, such as ASAN's ethical principles and treatment selection guidance (Appendix G), affirming assessment tools (Appendix K), and the visualization of occupational therapy techniques graded on how neurodiversity-affirming they are (Appendix M). The practitioners will have an increased understanding and ability to apply neurodiversity-affirming principles into practice, and further promote the quality of life of neurodivergent children and youth.

The participants will complete a questionnaire (Appendix R) to measure their attitudes and application of neurodiversity-affirming concepts three times: prior to completing the training, immediately post-workshop, and three months following the workshop. By administering the attitudes and application questionnaire three times, this author can measure degree of change at three different time intervals and assess the workshop's ability to make lasting change. Appendix S illustrates the survey administered immediately post-workshop to gather summative evaluation data to improve the workshop.

Potential Barriers and Challenges

The primary barriers for the implementation of the *Embracing Neurodivergent Occupations* rest within the individual level of public health programming, such as the OTPs themselves participating within the workshop. The practitioners' perceptions of neurodiversity may be a barrier itself, with some practitioners citing neurodiversity-affirming practice is solely for "high functioning" individuals and does not translate to disabled individuals requiring significant supports in everyday life (Autism CoP, personal communication, January 1st, 2023). Additional individual-level barriers include the level of reflection and adaptability; whether or not practitioners plan to prioritize diversity, equity, and inclusion with practice; and consideration of qualitative research illustrating neurodivergent perspectives equally, if not more important, than quantitative research. Community-level barriers also exist, such as the practitioners' workplace level of support for promoting neurodiversity-affirming practice, AOTA's and AJOT's prioritization of neurodiversity, and reimbursement by payers for neurodiversity-affirming care.

Embracing Neurodivergent Occupations is an educational initiative and program first offered to OTPs at this author's work setting, requiring time off from work to attend the workshop. To support accessibility of the workshop across the Lake Conference districts, the workshop will be virtual, though not all OTPs may be approved to attend the workshop. The possible barrier of managerial and director support is reduced secondary to this author already beginning to have conversations around the workshop, with the immediate manager and supervisor providing extensive support for the workshop.

Conclusion

It is a moral and human rights imperative for OTPs supporting autistic and neurodivergent children and youth to provide neurodiversity-affirming care (Dallman et al., 2022). *Embracing Neurodivergent Occupations* will be providing the blueprint in supporting OTPs to reflect on their current practices, and modify to validate autistic and neurodivergent identities. The profession of occupational therapy has much to offer when supporting autistic children and youth. However, significant work must occur to critically review current foundations in pediatric occupational therapy practice to better align with autistic values, acknowledge history in emphasizing non-neurodivergent viewpoints and neurodiversity research, and begin to rebuild and trust with the autistic/neurodivergent communities if the profession wants to be seen as a meaningful service by the neurodiversity community. *Embracing Neurodivergent Occupations* aims to support this journey, and support the neurodivergent-affirming world neurodivergent individuals deserve and need to participate meaningfully in everyday life.

CHAPTER FIVE – Program Evaluation Research Plan

Introduction

As mentioned in Chapter 4, there is a gap in the literature incorporating autistic perspectives within occupational therapy service creation, and the medical model of disability is the predominant model of disablement used by OTPs, conflicting with the health and well-being priorities of the autistic community. Program evaluation research is essential for the success of *Embracing Neurodivergent Occupations*, and to ensure the initiative incorporates best practices for knowledge translation and empowering neurodivergent identities with continuous refinement. This chapter will describe the program evaluation plan for the program's workshop.

Practice Scenario and Intended Users

The primary users of *Embracing Neurodivergent Occupations* are OTPs supporting neurodivergent children and youth. Pediatric occupational therapy practice benefits from a resource educating on how to implement neurodiversity-affirming methods across the occupational therapy process, such as evaluation and service provision. OTPs need to critically reflect on current practices to ensure methods align with neurodivergent occupations and identities, and knowing where to start or which resources to explore or start can be challenging to locate, let alone applying the principles within occupational therapy frameworks.

The program theories of the workshop are adult learning theory (Mukhalati & Taylor, 2019), transtheoretical model of change (Jaccard & Jacoby, 2020), and Atkins and Murphy's model of reflection (Koole et al., 2011). Adult learning theory outlines how to design and implement healthcare professional education programs to support an individual's acquisition of skills, knowledge, and attitudes to enact behavior change (Aliakbari et al., 2015; Mukhalati et al., 2019). Throughout the workshop, experiential learning using collaborative approaches will be included to enact behavior change in accordance with adult learning theory. The transtheoretical model of change will be coupled with Atkins and Murphy's model of reflection to support a workshop attendee's transformative learning using discussions to encourage reflection on their assumptions and beliefs. The surveys provided pre- and post-workshop will measure constructs of reflection and gauge any changes regarding the individual's readiness for change secondary to the workshop's influence.

Vision for Evaluation Plan

The program evaluation of the *Embracing Neurodivergent Occupations* will assess the ability of OTPs to utilize the toolkit in daily practice. Anticipated short-term outcomes demonstrated by the program's findings of the pilot launch of the program are increased knowledge and adoption of neurodiversity-affirming methods, and implementing tenets of disability justice into practice. Following adjustments to the program based on feedback provided by attendees at the trial launch, a second workshop with more OTPs (25 – 50 participants) will be conducted. The findings of this larger study will help to support dissemination. The program can serve as an accessible solution for knowledge translation with OTPs, and initial results, if adequate, might be presented at local and state conferences.

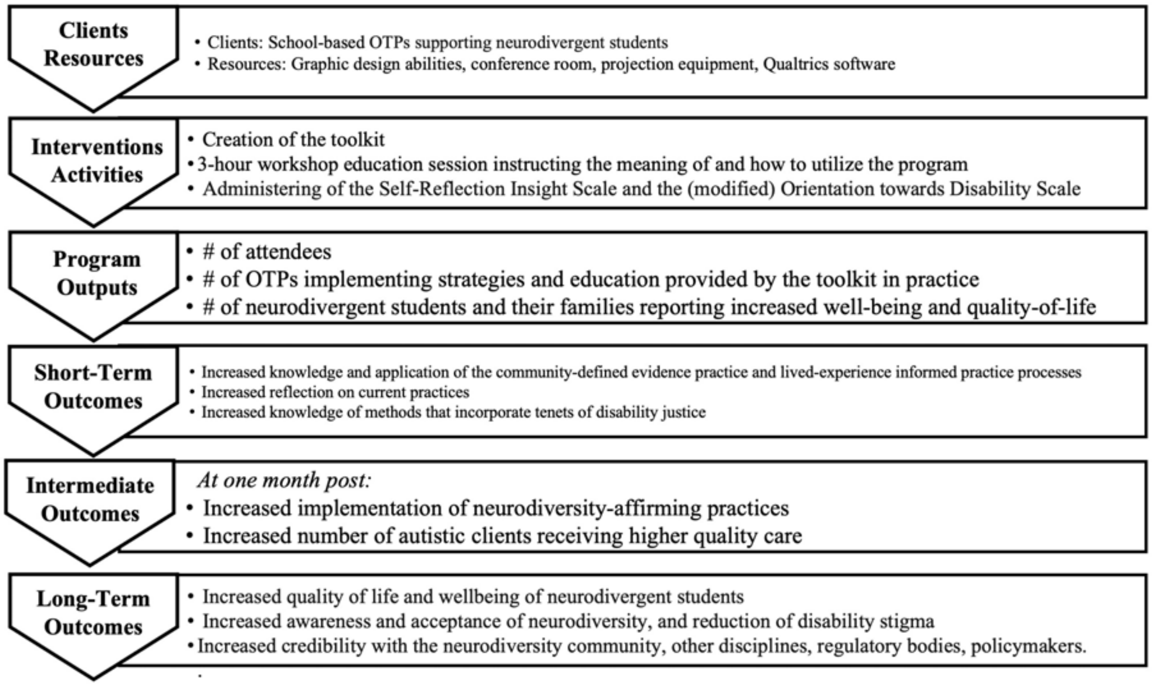
Based on the examination of long-term outcomes, the program may be expanded to other disciplines supporting neurodivergent children and youth, such as speech therapy. Desired long-term clinical outcomes include the increased utilization of best practices supporting neurodivergent children and youth and ultimately, increased quality of life and well-being of neurodivergent children and youth. The occupational therapy profession may also become more neurodiversity-affirming, increasing the profession's credibility and trust with the neurodiversity community.

Engagement of Shareholders

Currently, this author's program development is utilizing a consultative model where neurodivergent individuals and other professionals provide input throughout the project. As evidence for *Embracing Neurodivergent Occupations* is to be showcased when evaluation data are collected, meetings intended to engage shareholders in evaluation planning have been taking place from the inception of developing the program. This author has already completed the initial round of shareholder input by key shareholders, including virtual meetings with autistic OTPs to provide insight on how to phrase dependent variables to ensure they focus on health and well-being outcomes meaningful to the autistic community and that amplify autistic voices. When this author first met with autistic shareholders virtually, a quick summary of the goals of the project and an initial outline of what evaluation research may look like were shared. This author made sure the autistic shareholders knew that the purpose of this project was to amplify their voices and what they deem important for the profession to know due to their voices often not being considered. This author made it explicit that their honest feedback was needed, especially since learning from autistic colleagues that non-autistic colleagues often minimize their opinions or make their lived experiences regarding research inferior. To further encourage shareholder involvement for the program evaluation phase, the shareholders will receive a simplified logic model illustrating the program's resources, activities, and expected outcomes. By providing a logic model, the shareholders have a better understanding of the potential impact of the program and their involvement. See Figure 5.1 of the simplified logic model.

Figure 5.1

Simplified Logic Model of Program



- Clients: School-based OTPs supporting neurodivergent students
- Resources: Graphic design abilities, conference room, projection equipment, Qualtrics software

- Creation of the toolkit
- 3-hour workshop education session instructing the meaning of and how to utilize the program
- Administering of the Self-Reflection Insight Scale and the (modified) Orientation towards Disability Scale

- # of attendees
- # of OTPs implementing strategies and education provided by the toolkit in practice
- # of neurodivergent students and their families reporting increased well-being and quality-of-life

- Increased knowledge and application of the community-defined evidence practice and lived-experience informed practice processes
- Increased reflection on current practices
- Increased knowledge of methods that incorporate tenets of disability justice

At one month post:
- Increased implementation of neurodiversity-affirming practices
- Increased number of autistic clients receiving higher quality care

- Increased quality of life and wellbeing of neurodivergent students
- Increased awareness and acceptance of neurodiversity, and reduction of disability stigma
- Increased credibility with the neurodiversity community, other disciplines, regulatory bodies, policymakers.

A consultative model will continue into the program evaluation research phase. Neurodivergent shareholders will have an opportunity to share insight and feedback into the formative and summative evaluation processes to ensure data collection is meaningful and aligns with autistic health and well-being priorities. Following completion of the workshop, neurodivergent partners will be invited to review the feedback provided by the participants and suggest modifications to the program as needed.

For planning the program evaluation research with OTPs, this author will complete virtual meetings intended to incorporate their perspectives for the *Embracing Neurodivergent Occupations* educational workshop. This is essential for promoting buy-in to a study that will demonstrate the applicability and relevance of the program. Contact with these shareholders has been established via previous networking experiences, and consulting will transition into the pilot launch phase. Procuring support from the special education leaders at the Minnetonka School District will be necessary to support data collection and for OTPs working within the Lake Conference School Districts to participate in the program evaluation research phase.

Eliciting Shareholder Involvement

Due to the dynamic nature of program evaluation and how each shareholder group prioritizes different outcomes, it is essential that different presentation materials are created to highlight the shareholder groups' priorities relating to the program. The three key shareholder groups are OTPs, autistic adults, and the Minnetonka School District's special education leaders. During these virtual meetings, this author will share a brief presentation of the program and how it can support the utilization of best practices when supporting neurodivergent students. The presentation will include an overview of the *Embracing Neurodivergent Occupations* workshop, the theories and models underlying its composition, and the efficacy of the strategies being taught. This author will share the experiences and insight provided by autistic OTPs on the importance of *Embracing*

Neurodivergent Occupations as a means to promote neurodiversity-affirming work within the profession. The simplified logic model will be presented, and a discussion will ensue to plan how to apply the program evaluation results prioritizing the goals relevant to their shareholder group.

Shareholder Group: OTPs

For eliciting shareholder involvement with OTPs, this author plans to hold meetings virtually either with individuals or groups. This author will reach out to already established contacts of those interested in utilizing neurodiversity-affirming practices, and also post in social media groups comprised of school-based OTPs for novel contacts. To solidify buy-in, this author plans to highlight how the program will increase their competencies when supporting neurodivergent students and increasing their confidence as a practitioner. OTPs will provide summative data reflecting change from pre- to post-program, including formative reflections and feedback about program delivery and content.

Shareholder Group: Autistic and Neurodivergent Individuals

Autistic individuals have reported they are rarely (if ever) invited into the creation of autistic healthcare services (ASAN, n.d.). Acquiring trust will be vital for their involvement as a shareholder within the program. This author plans to hold virtual meetings with autistic and neurodivergent shareholders, emphasizing this author's privilege as not being autistic and prioritizing their feedback. As mentioned in Chapter 4, illuminating the identities of authors in relation to neurodivergence and recognizing privilege is important to support establishing trust with shareholders of an oppressed community the individual is not a part of. When sending out initial emails to elicit shareholder involvement, this author plans to incorporate the following to establish trust with autistic partners:

> The research team included one allistic, neurodivergent occupational therapist and one allistic, neurodivergent occupational therapy academic as faculty advisor. These authors acknowledge that they have utilized strategies that are not recognized as autistic-affirming in the past and will not recommend or utilize these services as they continue to learn and listen to autistic voices concerning healthcare services. These authors also acknowledge intricate intersectionality exists regarding neurodivergence with other identities, such as BIPOC, sexual orientation, and Blind and Deaf communities, recognizing our privilege within this complex system.

Ultimately, it should be up to autistic and neurodivergent individuals to define what the “success” of a service looks like; therefore, highlighting and including autistic perspectives throughout the toolkit is vital for the toolkit to be deemed meaningful and successful by the autistic community. Being transparent about goals and being open about how autistic individuals are involved will be highlighted due to this being a vital aspect of community-based participatory research (CBPR) to avoid tokenizing autistic shareholders (Nicolaidis et al., 2020). When research projects erroneously label their work as CBPR, research illustrates this has demonstrated adverse effects on relationships with autistic individuals, such as unmet expectations, frustration, wasted resources, and reduction of trust (Nicolaidis et al., 2020). This author plans to attach a brochure incorporating accessible language and highlighting how the program prioritizes their participation as shareholders. This author plans to apply feedback to the design of the program as needed to ensure the program maximizes autistic-affirming practices.

Shareholder Group: Lake Conference District Leaders

When meeting with the special education leaders within the Lake Conference School Districts (this author's work setting) for the program's trial launch, initial contacts will include information highlighting how the program can improve the academic well-being of neurodivergent students and the cost-effective nature of the program. Additionally, a brochure will be created highlighting how the program will help achieve long-term outcomes with our students and families by equipping our practitioners with best practice strategies as defined by neurodivergent individuals.

Program Evaluation Research Questions by Shareholder Group

To maximize relatability and relevancy amongst the various shareholder groups, program evaluation questions will be customized based on shareholders' interests. Please see Table 5.1 below for the potential research questions posed by each shareholder group illustrating their specific interest in the outcomes of the program.

Table 5.1

Research Questions by Shareholder Groups

Shareholder or Shareholder Group	**Types of Program Evaluation Research Questions**
This author.	**Formative** • What changes need to be made to the program to optimize effectiveness? • To what degree does the program provide OTPs with the knowledge and skills needed to implement disability into practice with neurodivergent students? **Summative** • Will OTPs report an increased self-perceived ability to implement best practices for neurodivergent students? • How can the program efficiently consider new resources and programs wanting to be appraised when grading the program/resources' level of incorporating neurodiversity-affirming characteristics?
Primary intended users: pediatric OTPs	**Formative** • Which approaches were favored by OTPs? • How does the program seem relevant and applicable? • Were practitioners able to implement the toolkit into clinical practice throughout the program? • Was the workshop instruction detailing the program adequate? • Were aspects of the workshop and program more or less useful or effective than others? • Is there anything that should be changed to improve the program content or delivery? **Summative** • Will the practitioners report a higher self-perceived competence in applying the lived experiences of neurodivergent individuals into their practice? • Will practitioners report an increased ability to target the health and well-being priorities as designated by the neurodiversity community? • Will practitioners report an increased ability to provide neurodiversity-affirming care?
Autistic individuals	**Formative** • How autistic-affirming is the toolkit? • Which approaches or techniques emphasized within the toolkit are favored by the autistic community?

	• Is the program conducive to the autistic community's goals for authentic autistic development and well-being? • How effectively does the toolkit represent the autistic perspective? • Are there health and well-being priorities missing from the program? • Are there assessment tools or techniques missing from the toolkit that should be included? **Summative** • Does the toolkit promote the quality of life of the autistic community as defined by them? • Are autistic occupations and ways-of-being emphasized accurately? • Does the toolkit support affirming practices as experienced by autistic individuals seen by an OTP?
Lake Conference Special Education Leaders	**Formative** • Is the program conducive to meeting the Lake Conference Districts' goals? • Did recipients of services informed by the program and their family members report a favorable experience with the support received? • Were any problems or issues reported? **Summative** • Will special education leaders observe an increase in competence in applying knowledge translation with their occupational therapy staff? • Is delivery of the program more costly than other means of delivery? • What were the rates of program withdrawal and what were the reasons for withdrawal?

Research Design

Formative Design

Literature reports indicate that many social programs have challenges demonstrating positive results and this may be due to a lack of formative evaluative techniques incorporated into program evaluation (James Bell Associates, 2016). A reason hypothesized is many programs are not ready for the high-level examination completed by summative evaluations (James Bell Associates, 2016). Given the importance of formative program evaluation methods, an examination of the knowledge translation tool will be included at the early stages of implementation using formative evaluation techniques and to help support the readiness of the program to be evaluated by summative methods. Full-implementation of the program is described as being implemented by OTPs across all of the Lake Conference School Districts.

Formative evaluation efforts will occur with OTPs following the pilot workshop. Semi-structured interviews, virtual focus groups, and surveys with open-ended questions will be conducted to garner their experiences of the program, and to provide feedback regarding the program process (Appendices R and S). Surveys will be administered with neurodivergent healthcare professionals to rate aspects of the tool including how neurodiversity-affirming *Embracing Neurodivergent Occupations* is. Quantitative data includes having the neurodivergent healthcare professionals to rate via a Likert scale and qualitative data will include an option for an open-ended comment section to illustrate their reasoning for their response.

Summative Design

The evaluation research for the pilot launch of *Embracing Neurodivergent Occupations* will follow a one-group pretest and posttest nonexperimental design. The independent variable will be implementation of the program's workshop, and the dependent variables are ability to reflect on current practices, and the utilization of the occupational therapy neurodiversity-affirming process. A pre-test consisting of a multiple-choice knowledge quiz will be completed prior to the workshop and then three-months post workshop. Additional dependent variables that will be measured pre- and post-workshop include knowledge and incorporation of disability justice into practice, and self-perceived competence and confidence in being neurodiversity-affirming.

Methods Introduction

For the soft-launch phase of the program, five to 10 school-based OTPs will be recruited through the Lake Conference School Districts. Inclusion criteria will be prior support of neurodivergent children and youth in the past and/or present. To provide descriptive data about the participants, there will be an intake survey completed by participants to provide insight into their current strategy and frequency, attitudes towards neurodiversity-affirming principles, and the utilization of disability justice within their practice. Then, pre- and post-workshop surveys will be administered to gather formative and summative data.

Confidentiality

Confidentiality will be emphasized by following the IRB's ethical research protocol. Within the surveys, all data is anonymized. Identifiers will not be collected, and data will be stored within Qualtrics, a data-protected survey software. This author will be the only individual with access to the data. For data collection via focus groups, participants will be granted a number and will be requested to mention their number (e.g., "This is participant number one") prior to their response.

Formative Data Collection

Formative data collection with OTPs will take place following the workshop in two parts. The OTPs will have the opportunity to respond to an open-ended survey evaluating their experiences administered via Qualtrics, and a question will be included within the survey asking if they would like to share their email and participate in the second round of formative data collection. The second aspect of formative data collection will be either virtual semi-structured interviews or focus groups to provide the opportunity for participants to expand upon their survey responses.

To measure how neurodiversity-affirming a service is, a future survey containing defined scales will be sent to neurodivergent healthcare practitioners. Best practices regarding accessibility to surveys for neurodivergent individuals will be incorporated. Surveys for neurodivergent shareholders can be more accessible when created with features such as incorporating hotlinks to provide clarification, simplifying the language of the survey, and utilizing visuals to help promote the clarity of the question responses (Nicolaidis et al., 2020). These surveys will also be included with Qualtrics, and participants will be invited via social media postings.

Methods for Formative Data Management and Analysis

Qualitative formative data collection will be through open-ended survey questions, and semi-structured interviews or focus groups. Possible quantitative data will be gathered through scalable rating of satisfaction on the survey. Data from the survey will be analyzed via Qualtrics, and the virtual semi-structured interviews or focus groups will be transcribed and analyzed via the NVivo software. The NVivo software will support analyzing the transcribed data for themes. To increase the rigor of the analysis, this author will invite the OTPs who participated in the semi-structured interviews or focus groups to review a summary of the themes found from the data and provide feedback on accuracy. Survey data compiled from the survey completed by neurodivergent individuals will be managed and analyzed the same way.

Summative Data Collection

Summative data will be collected pre- and three months post an educational service in the form of a one or two-hour workshop with OTPs from the Lake Conference School Districts. The workshop, as the independent variable, will provide an overview of the theoretical basis *Embracing Neurodivergent Occupations* being taught and how to apply it within clinical settings. Participants will receive visual support graphics and handouts to support their implementation following the workshop. The pre- and post-survey will be administered via Qualtrics, utilizing Likert scale and ranked questions as quantitative data to explore any changes in the examined characteristics.

Questions concerning models of disablement will be adapted from the Orientation toward Disability Scale due to its ability to discern differences from the focus of strategies and client participation (Holler et al., 2021). Adaptations will be made to focus on pediatric practice, as the instrument focuses on adult physical rehabilitation, and this author has already received permission from the developers of the instrument to make such adaptations (Holler et al., 2021). The dependent variables are: (1) attitudes and perceptions of neurodiversity-affirming practice, (2) attitudes and perceptions of disability justice, and (3) self-perceived confidence and competence when supporting neurodivergent children and youth. To maximize accessibility of the Likert-scale, this author will include precise options as defined by Nicolaidis et al. (2020), such as 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree.

Methods for Summative Data Management and Analysis

The survey will be managed and analyzed via Qualtrics, as this application has the capability to complete descriptive and higher statistical analyses. Participants will have the option to complete the survey via an electronic tool of their choice, such as a computer, phone, or tablet. Qualtrics is a data-protected software, and only this author will have access. Data analysis will include statistics and analytic processes to assess degree of change from pre- and to post-measurement. Statistical analysis will incorporate repeated-measures t-testing secondary to measuring change of an outcome across two observations (OTPs pre- and post-workshop).

Disseminating the Findings of Program Evaluation Research

Dissemination of findings from the program evaluation research is necessary for the next step, which will be to create a website of the program and transform the trial launched workshop into online modules housed within the website. This author will ensure to carefully connect objective data and findings to the hypothesized conclusions. When sharing the outcomes of the research with the various shareholder groups, it will be critical for this author to modify the mode of delivery and what information is highlighted. By delivering the information in an ideal format and targeting that shareholder group's priorities of the program, this author will increase the chance of a continued implementation. Dissemination to shareholders will contain two parts: (1) an emailed report and (2) a presentation.

For example, this author plans to email the neurodivergent shareholders an executive summary utilizing infographics and brief summaries highlighting how the program may support OTPs in utilizing neurodiversity-affirming strategies. When meeting with neurodivergent shareholders, the presentation will incorporate concise descriptions and highlight visuals illustrating the findings. When disseminating the findings to the occupational therapy staff, they will receive via email an executive summary. A report will be available for practitioners, though the report will be emailed to rehabilitation directors. When presenting the information to the practitioners and special education leaders, this author plans to highlight the lived experiences of practitioners detailing how the workshop has increased their competence when supporting neurodivergent students. Additionally, information related to estimated cost-savings and increased quality of care will be included. Documents emailed to shareholders will be produced in PDF format secondary to PDFs preserving text and visuals accurately (Newcomer et al., 2015). Presentations will incorporate best practices, such as having a six-slide limit, no more than five-lines per slide, handouts will be provided of presentation in black and white, and written information will be topic phrases only. Combining a well-created document with a presentation will support this author in making a lasting impression of the program evaluation findings. To support best practices regarding knowledge translation and to support credibility of *Embracing Neurodivergent Occupations*, this author plans to carry out single-subject design (SSD) protocols with neurodivergent students (see Appendix T for SSD layout).

CHAPTER SIX – Dissemination Plan

Brief Description of Proposed Program

Embracing Neurodivergent Occupations is designed to increase the utilization of affirming techniques by occupational therapy practitioners (OTPs) and support the profession's ability to promote authentic neurodivergent occupational participation. The initial phase of the program is a trial workshop with OTPs at this author's current workplace, the Minnetonka and surrounding school districts within the Lake Conference. The program will be an online training module, defining the components of the toolkit and how to apply the toolkit with case studies. The workshop will include interactive elements to maximize learning and enhance the practitioner's clinical reasoning skills in applying components of the program. Following the evaluation of the program, which includes the initial trial workshop of school-based OTPs and with autistic shareholders, the modified workshop will be disseminated to OTPs beyond the Lake Conference via an online platform and will be submitted for the 2025 American Occupational Therapy Association (AOTA) conference as a workshop course. To increase the accessibility of *Embracing Neurodivergent Occupations*, a long-term dissemination plan of the program is converting it into a website linked to various resources and maximize the reach of social media and social marketing. Social marketing has become an effective tool for influencing behavior change in various sectors around the world (Jaccard et al., 2020).

Integration of Theory

As previously mentioned in Chapter 5, the program theories of the workshop are adult learning theory (Mukhalati & Taylor, 2019), transtheoretical model of change

(Jaccard & Jacoby, 2020), and Atkins and Murphy's model of reflection (Koole et al., 2011). For disseminating the toolkit and the toolkit's website on social media, the health promotion theories of diffusion of innovation (DOI) and social marketing theory will be the foundational frameworks for dissemination. Social marketing theory originated in India in the 1960s, with application of social marketing including planning, execution, and evaluation of a selected program for making behavior change for a particular social cause (Sharma, 2022). Social marketing is recognized less as a theory and more of as an approach, utilizing commercial marketing techniques to influence behavior change in several ways (Sharma, 2022). The National Cancer Institute (2005) has endorsed four steps for implementing social marketing theory, including (1) planning, (2) developing and pretesting the materials and messages, (3) implementing the program, and (4) evaluating the social marketing program and refining as needed. The National Cancer Institute (2005) noted the steps are a continuous, cyclical process. The landscape of social media marketing is expansive, with mass media, social media, personal interaction, networks, and influencers all capable of impacting how OTPs adopt neurodiversity-affirming strategies. Social marketing theory has eight components, which are product, price, place, promotion, publics, partnership, policy, and purse strings (Sharma, 2022). These eight components will be united with constructs of DOI theory.

DOI describes how diffusion (the process of how a new idea is broadcasted across various channels) coupled with innovation (the new idea or practice) in a systematic way can maximize the adoption of a new idea or practice (Sharma, 2022). The origins of DOI theory rest in France, when in the early 1900s Gabriel Tarde, a sociologist, examined what factors support the spreading of new ideas (Sharma, 2022). Though DOI theory has been around for many years and many models examining human behavior decline in use over time, scholars continue to demonstrate a significant interest in the DOI (Sharma, 2022). DOI is compartmentalized into the components of innovation, communication channels, time, and social system (Sharma, 2022). The first component, innovation, describes the type of idea that is meant to be distributed such as incremental innovations (a minor improvement on an idea or service) or breakthrough innovations (a new approach) (Sharma, 2022). Seven attributes exist when considering innovations, such as the perceived relative advantage, compatibility, complexity, demonstrability, clarity of results, costs, reversibility, pervasiveness, and reinvention (Sharma, 2022). The second component of DOI is communication channels, which is how messages are transferred between individuals, such as mass media (television), interpersonal (face-to-face interaction), and interactive (internet) (Sharma, 2022). The third component of DOI is the interval of time it takes for the creation of an idea and when it is adopted (Sharma, 2022). The final component of DOI is social system, and social system is the combination of external influences (e.g., mass media, governmental policies) and internal influences (e.g., social relationships) to promote the dissemination of an idea (Sharma, 2022). Table 6.1 illustrates how social marketing and DOI will be intertwined and applied to the dissemination of the program.

Table 6.1

Integration of Health Promotion Theories into Toolkit Dissemination

DOI Elements	Social Marketing Elements	Application of Theory Elements to Program
Innovation	Product, Price, Purse strings	• Breakthrough innovation and product offering for the target audience to adopt -> The *Embracing Neurodivergent Occupations and Empowering Disabled Voices: A Knowledge Translation Tool to Support Neurodiversity-Affirming Occupational Therapy Practice and Challenge Ableism Within the Profession* program • Increase the perception that the toolkit is advantageous in monetary terms, social terms, and in respect to the autistic community (perceived relative advantage) • The toolkit is consistent with the values of the autistic community and the occupational therapy profession (compatibility) • The toolkit will be simplified to increase chance of adoption (complexity) • Opportunities will be provided to trial the toolkit, and users can utilize the toolkit in whatever capacity they wish (demonstrability) • The cost for access to the toolkit will be free for users and to eliminate financial barriers (cost) • Write grants to fund program
Communication Channels, Social System, Time	Promotion, Place, Publics, Partnership, Policy	• The toolkit will be available online • Involvement of primary and secondary audiences • Use of interpersonal channels for persuasion • Use of mass media to build awareness of the toolkit (e.g., Facebook groups, partnership with autistic and neurodivergent led organizations, Minnetonka School District) • Partnering with advocates for media advocacy • Presenting of the toolkit at occupational therapy and/or pediatric conferences • Pretesting the toolkit's website and content with volunteers, and refining as needed • The amount of time it takes for the toolkit to be disseminated and adopted • Advocating and creating policies to support the utilization of neurodiversity-affirming practices by OTPs

Dissemination Goals

The program will initially be a professional development program for school-based OTPs within the Minnetonka and surrounding school districts, expanding into a website and an online module. The global dissemination goal of the program is to (1) heighten reflection of current practices and challenge ableism within the occupational therapy profession and (2) promote the utilization of neurodiversity-affirming practices by OTPs supporting neurodivergent individuals.

- ***Long-Term Goal:*** The dissemination of the program with OTPs will lead to the increased application of neurodiversity-affirming practices by OTPs supporting neurodivergent students and increase the profession's ability to support authentic neurodivergent occupational participation. *Timeframe – Within 2 Years*
- ***Short-Term Goal #1:*** The program results will inform OTPs of meaningful assessment tools and affirming clinician and healthcare service characteristics when supporting neurodivergent students. *Timeframe – Within 1 Year*
- ***Short-Term Goal #2:*** The program will become an integral component of OTPs within the surrounding school districts and their professional competencies. *Timeframe – Within 1 Year*
- ***Short-Term Goal #3:*** Program results will contribute to a better understanding, acceptance, and empowerment of neurodivergent ways of being. *Timeframe – Within 1 Year*

The dissemination plan outlined below provides information on the target audiences, the key messages for each audience, dissemination activities, and the dissemination budget to support achieving the long-term and short-term goals of the program.

Primary Target Audience: Occupational Therapy Practitioners

The primary target audience for the dissemination program will be OTPs working within the Minnetonka and the remaining districts within the Lake Conference, including the districts of Buffalo, Eden Prairie, Edina, Hopkins, Saint Michael-Albertville, and Wayzata. OTPs may assess the toolkit and incorporate the toolkit into their practice, thereby disseminating the information within their school district. The initial trial workshop will occur during the 2023 – 2024 school year. Table 6.2 depicts the key messages and dissemination activities for the primary audience of OTPs of this program. Dissemination activities will consist of written information, electronic media, and person-to-person contact in the form of conferences.

Table 6.2

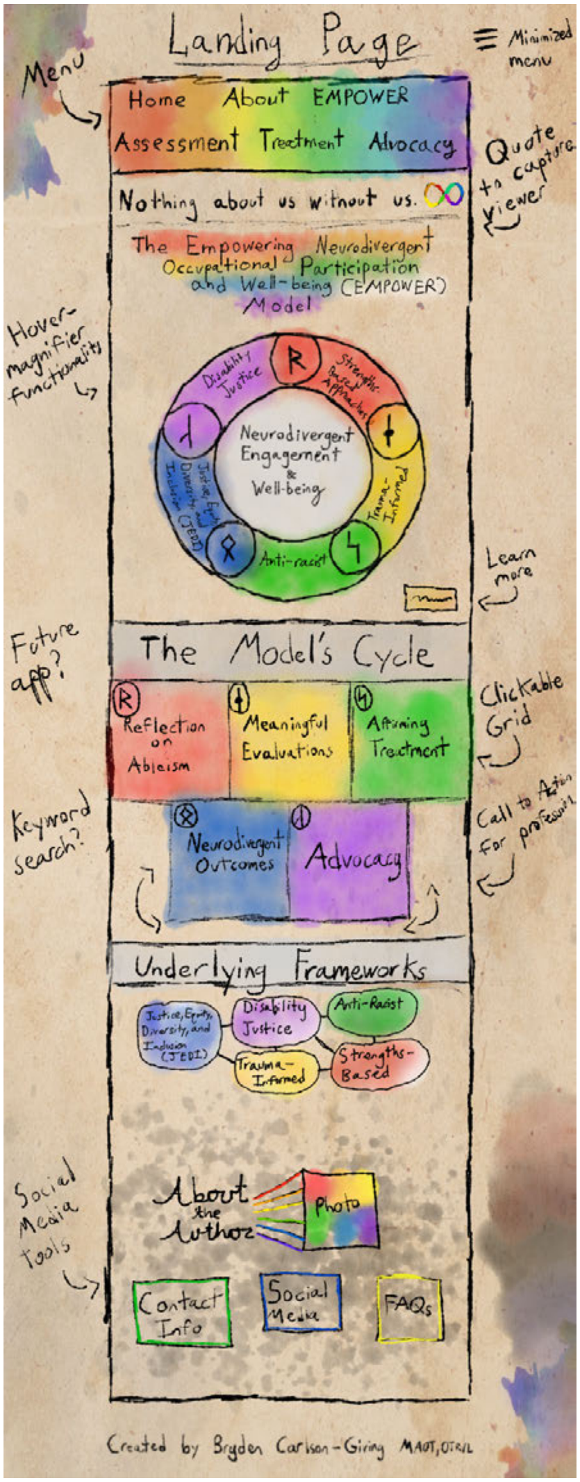
Key Messages and Dissemination Activities for the Primary Audience

Primary Audience	Key Shareholders: School-Based Occupational Therapy Practitioners
Key Messages	• Incorporating neurodiversity-affirming practices when supporting autistic children and youth enhances the quality and meaningfulness of service provided. • Develop an awareness of health and well-being priorities as identified by autistic individuals to maximize the practitioners' ability to empower autistic voices. • Current community-defined evidence illustrates autistic individuals do not want to be compared to neurotypical norms, and having neurotypicality as the benchmark for functioning is not only unhelpful but potentially harmful (Dorsey et al., 2022) • *Embracing Neurodivergent Occupations* will promote an OTP's confidence in providing holistic care and support for autistic children and youth.

Dissemination Activities	• Already submitted and presented at the 2023 AOTA conference summarizing descriptive analysis data of research study completed as a segment of the doctoral project. This dissemination activity shared results of how OTPs supporting autistic children and youth utilize the medical model and reformed social model of disability within their practice. See Appendix U for submitted proposal and Appendix E for the presentation slide deck. • A TedxTalk was written and presented regarding a facet of this doctoral project, including how to apply neurodiversity-affirming principles when supporting autistic children and youth (Carlson-Giving & McGinley, 2023). See Appendix V for the TedxTalk script and references. • A journal article summarizing results of the completed research study will be completed and submitted to a peer-reviewed journal (e.g., *Autism Research*, *The American Journal of Occupational Therapy*) within six months of the completion of this project. This dissemination activity will share results and implications for OTPs regarding the medical model and reformed social model of disability within pediatric occupational therapy practice. • A digital manual will be shared with the OTPs working with the school districts and via social media to introduce the toolkit and spur online excitement for the program; see Appendix W for the introductory manual that will be shared within online pediatric occupational therapy communities • Grant funding will be applied to convert the toolkit into a website as a resource hub and for accessibility. See Figure 6.1 for a sketch of the future website's landing page • This author submitted two separate submissions to the AOTA 2024 national conference, with one proposal highlighting the neurodiversity-affirming occupational therapy model created by this author for feedback and review by OTPs and the second proposal introducing the toolkit. See Appendix X and Appendix Y for the respective presentation proposals. • Present the program at the 2024 Minnesota Occupational Therapy Association (MOTA) conference for interested practitioners
Sources / Influential Spokespersons	• Bryden Carlson-Giving • Learn Play Thrive • The Deaf Autistic OT • OTs for Neurodiversity • Autism Level Up! • Therapist Neurodiversity Collective

Figure 6.1

Sketch of Embracing Neurodivergent Occupations' *[Website Landing Page]*



Secondary Target Audience: School District Management

The secondary target audience will be Minnetonka's school district management, including the Superintendent of Schools, Minnetonka's Special Education Advisory Council (SEAC), Executive Director of Special Education and English Learners, Director of Special Education, Early Childhood Special Education and Related Services Coordinator, and Transition Services Coordinator. Additional secondary audience members include special education directors from each of the remaining Lake Conference school districts. Table 6.3 depicts the key messages and dissemination activities for the secondary audience of this program. Dissemination activities will consist of written information, electronic media, and person-to-person contact.

Table 6.3

Key Messages and Dissemination Activities for the Secondary Audience

Secondary Audience	Minnetonka's school district management, consisting of: • Superintendent of schools • SEAC • Executive director of special education and English learners • Director of special education • Early childhood special education and related services coordinator • Transition services Coordinator Special education directors from the remaining Lake Conference school districts, including the districts of Buffalo, Eden Prairie, Edina, Hopkins, Saint Michael-Albertville, and Wayzata
Key Messages	• This toolkit will be effective in educating OTPs and provide them the tools needed to provide high quality care and supports with autistic students • Students within the Minnetonka and participating school districts will report increased health and well-being as a student within that district. Provision of holistic and meaningful care will promote overall academic outcomes for the district • The provision of neurodiversity-affirming services may likely reduce the need for additional services external to the district, such as behavioral specialists.
Dissemination Activities	• The program creator will reach out to Minnetonka school district management and special education directors of Lake Conference districts for formal meeting • Introductory manual (Appendix W), fact sheet (Appendix Z), and executive summary (Appendix AA) will be emailed to administration of each school district
Sources / Influential Spokespersons	• Bryden Carlson-Giving • Families of neurodivergent students • Practitioners utilizing neurodiversity-affirming practices

Dissemination Budget

The first phase of the program dissemination centers on website development and implementing the program as a website. Program dissemination costs will be higher for year one secondary to website creation costs, with the most expensive component of the year two budget being hiring a website designer. Though this author has some website development experience, it may be best to hire an advanced website creator to code the toolkit into a website format. Fortunately, many free search engine optimization (SEO) materials exist to support the reachability of the website. The total cost for year one of program dissemination (creating a website configuration of the toolkit) would be $1492.00 to $2392.00, fluctuating dependent upon the cost of a website designer. All written materials for the dissemination phase of the program will be digital, accruing no extra cost.

The final components for budget consideration rest within phase two of dissemination, which is creating and promoting an online workshop following feedback provided by OTPs within phase one of the program. The online workshop will be hosted by Squarespace, which will be absorbed within the cost of a Squarespace website at no additional fee. Dissemination costs would accumulate from educating practitioners about the program at professional conferences, including the annual American Occupational Therapy Association (AOTA) conference and this author's state conference. The AOTA conference is the most attended occupational therapy conference in North America and would be an efficient event to disseminate the program. There would be no additional costs for phase three of the program for website hosting secondary to those costs already included within phase two (no additional cost for hosting course content). Additional forms of dissemination include publicizing on podcasts, such as HealthMatters, OT Potential, or Two Sides of the Spectrum (which have no cost) and publishing articles. If an article was published within a peer-review journal, this author would ensure the article would be open-access such as the *Open-Journal of Occupational Therapy*. A fee of $300.00 would be paid by this author to allow for the article to be open-access and promote accessibility of content. The total cost for phase two of dissemination being ~$2,175.00. The combined two phases of dissemination would be ~ $3,667.00 to $4,567.00, largely dependent upon the cost of a website design services.

Table 6.4

Budget for Dissemination

Year One Dissemination – Website Creation	Personnel	- This author as head creator ($0.00) - Consulting with accessibility coaches for website development *($200)* - Website designer *(cost varies; $1100 to $2000)*
	Materials / Equipment	- Yearly revision of website content *($0.00)* - Annual cost of website host including domain name (e.g., Squarespace) *($192)* - Search engine optimization (SEO) to maximize reachability of the website, such as Ahrefs Webmaster Tools and Google Keyword Planner *($0.00)*
	Total Cost for Year One of Dissemination = $1492.00 to $2392.00	
Year Two Dissemination – Online Workshop	Personnel	- This author as workshop developer *($0.00)* - Publicize with neurodivergent social media influencers and accounts *($0.00)* - Yearly revision of online workshop *($0.00)*
	Communication	- Disseminating toolkit as a workshop at the AOTA's national conference (total cost for conference registration, food, travel, and lodging - *($1600.00)* - Disseminating toolkit as a short course at the Minnesota Occupational Therapy Association's (MOTA) conference *($275.00)* - Market through Minnesota Occupational Therapy Association (MOTA) *($0.00)* - Publicizing on podcasts, such as HealthMatters, OT Potential, or Two Sides of the Spectrum *($0.00)* - Publishing within a peer-review journal and paying processing fees to allow article to be open-access *($300.00)*
	Total Cost for Year Two of Dissemination = $2,175.00	
Total Cost of Dissemination Plan (Year One & Two) = ~ $3,667.00 to $4,567.00		

Dissemination Evaluation

The goal of disseminating and marketing the program is to increase OTPs supporting autistic children and youth and their ability to incorporate neurodiversity-affirming principles within assessment and service provision. Measurement criteria for evaluating the dissemination of the program include:

- Measuring effectiveness of marketing efforts and adjusting as needed
- Measuring the number of OTPs participating in the online workshop and the frequency of the workshop being invited to educate districts; a higher number of OTPs and an increasing frequency of being invited to lead workshops within districts would be an indicator of success
- Measure participants' attitudes regarding their ability to be neurodiversity-affirming via pre- and post-workshop with surveys
- Measure how participants learned about the workshop and website by including a question within the survey

Conclusion

The dissemination of the program targets two audiences, OTPs and school district management and their special education departments within the Minnetonka and remaining Lake Conference school districts. An additional primary audience could be OTPs working with autistic children and youth given the website and online workshop will have public access. The goals of the dissemination plan include creating an online website to promote accessibility, and the creation of an online workshop to coach OTPs supporting autistic children and youth and their utilization of the toolkit. Dissemination efforts include person-to-person contact, electronic media, and social media advocacy and marketing to reach the two target audiences.

CHAPTER SEVEN – Funding Plan

Introduction

As an ethical imperative, occupational therapy practitioners (OTPs) supporting neurodivergent individuals must utilize neurodiversity-affirming techniques to maximize neurodivergent health and well-being. *Embracing Neurodivergent Occupations* aims to support the reflective process for pediatric OTPs and promote practice changes that align with the neurodiversity movement. This chapter examines the budget needed to enact the program and potential funding resources. The funding chapter outlines the implementation budget for *Embracing Neurodivergent Occupations*, corresponding to the initial trial workshop introducing the program with OTPs within the Lake Conference School Districts. As previously mentioned, the dissemination phases of *Embracing Neurodivergent Occupations* are an interactive website exhibiting the toolkit, and an online workshop module hosted within the website guiding practitioners in implementing the toolkit (see Table 6.1 for dissemination budget details). This chapter highlights the costs and funding sources necessary for successful creation and implementation of *Embracing Neurodivergent Occupations*, with this phase lasting one year prior to the dissemination phase.

Budget for Creation and Implementation of Program

When designing the development of the program, there are numerous budget considerations for successful implementation. Table 7.1 details the budget for the implementation phase, including the total cost of program. For the implementation phase of the program, the initial trial workshop with Lake Conference District’s OTPs, the largest expense would be time spent by this author to complete fabricating *Embracing Neurodivergent Occupations*, such as continuing literature reviews, creating graphic visualizations of the information, and developing the workshop. For finalizing aspects of the toolkit, about eight hours a week for three months (total of 96 hours) will be required by this author. The cost would equate to the hourly rate of this author's current salaried position secondary to this author needing to take time off work, equaling a cost of $3936.00. This author wants to consult with a minimum of three autistic individuals, and the purpose of meeting with autistic consultants is to ensure the program maximizes the lived experiences of neurodivergent individuals, including those who are non-speaking, and ensure the program is the utmost affirming from diverse shareholder perspectives. Costs for paying neurodivergent consultants to share their feedback on the program range from ~$150 to $250 per consultant. Costs of assessment tools not yet licensed by this author will also need to be considered ($339.00). Throughout the workshop, there will be access to the assessment and screening tools (already included within the budget, and technique resources to support hands-on learning (no additional cost). Table 7.2 illustrates the budget for assessments that may be utilized within the workshop and/or purchased by OTPs to implement neurodiversity-affirming care. Additionally, free components of affirming resources listed within Appendix O will be utilized throughout the workshop. There will be no additional costs for workshop preparation or for conducting the workshop. This author will ask for the workshop to take place at their workplace, and work materials will be allowed to be used for the training. Given all tools and resources will be available digitally, there will be no costs for printing or paper. The cost for implementing the program as a workshop would be ~$5,585.00. When factoring the two phases of program dissemination, the total cost of the program will be approximately $9,252 to $10,152.00.

Table 7.1

Budget for Program Implementation

Phase of Program	**Budget Category**	**Resource** *(Amount)*
Implementation – Initial Workshop with M Health Fairview Employees (Year One)	Personnel	- Completing toolkit and workshop development (this author) *($3936.00)* - Instructor for workshop (this author) *($0.00)* - Consulting neurodivergent advocates for insight into toolkit and workshop content *(cost varies, likely $150 to $250 per consultation)*
	Materials / Equipment	- Digital information flyer(s) sent out to all OTPs within the Lake Conference School Districts, such as the fact sheet and the introductory manual *($0.00)* - Use of technology to conduct the workshop *($0.00)* - Laptop computer *($2000; already purchased)* - This author already has an individual license for the COPM, YC-PEM, PEM-CY, PEGS, and SP-2 this author will ask instrument creators for permission to utilize copies of purchased tools for education purposes *($0.00)* - Training Material items not yet licensed by this author, including the COSA and Visual Activity Sort *(Total of the two assessments = $339.00)* - Digital marketing materials created within Canva, an online graphic design tool *(annual subscription is $120)* - Tangible copies of assessment tools *($300.00)* - Folders containing an agenda, resource packet, paper, and pens for participants ($100.00) - Water and snacks for participants ($40.00)
	Total Cost for Implementation of Program = ~$5,585.00	
Total Cost for Dissemination Phase of Program (See Table 6.4) ~ $3,667.00 to $4,567.00		
Total Cost for All Phases of Program (Implementation and Dissemination) = ~ $9,252 to $10,152.00		

Table 7.2

Budget Items for Training Materials

Tool *(Cost)*
Canadian Occupational Performance Measure (COPM) *(Manual + 100 measures - $62.00)* https://www.thecopm.ca/buy/english-copm-pdf-usa/
Young Child – Participation and Environment Measure (YC-PEM) *($99.00)* https://canchild.ca/en/shop/23-yc-pem-young-children-s-participation-and-environment-measure
Participation and Environment Measure – Children and Youth (PEM-CY) *($99.00)* https://canchild.ca/en/shop/2-pem-cy-participation-and-environment-measure-children-and-youth
Perceived Efficacy & Goal-Setting System – 2nd Edition (PEGS) *(Complete kit - $125.00)* https://canchild.ca/en/shop/5-pegs-2nd-edition-complete-kit
Pediatric Interest Profiles ***(FREE)*** https://moho-irm.uic.edu/productDetails.aspx?aid=43
Child Occupational Self-Assessment (COSA) *($40.00)* https://moho-irm.uic.edu/productDetails.aspx?aid=3
Self-Perception Profile for Children ***(FREE)*** https://www.apa.org/obesity-guideline/self-preception.pdf
Sensory Profile-2 (SP-2) • Sensory Profile-2 Companion Kit (Manual + 25 copies of all forms (without adult)- *($339.50)* • Sensory Profile-2 Complete Kit with the Adolescent Adult Sensory Profile Kit *($500.00)* https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Motor-Sensory/Sensory-Profile-2/p/100000822.html?gad=1&gclid=CjwKCAjwvJyjBhApEiwAWz2nLa0Eye8vdqvlTfbNqT3ZMcOIkRRycItL8viRhDcl90GCHeG45B0GPRoCip4QAvD_BwE
Heart Drawing Tool ***(FREE)*** https://pdfs.semanticscholar.org/b4f7/b19da1677b8f6714f45b742d9a7a2bb2dbc4.pdf
Visual Activity Sort *($299.00)* https://www.visualactivitysort.com/product-page/visual-activity-sort
Pictured Child's Quality of Life Questionnaire (AUQUEI) ***(FREE)*** https://eprovide.mapi-trust.org/instruments/pictured-child-s-quality-of-life-self-questionnaire
Total Assessment Tool Expenses = $1,063.50

Available Local Resources

To fund this program, local resources and grant funding will be utilized. One local resource will be a conference room at this author's workplace to facilitate the online workshop. Incentives of educating OTPs within the Lake Conference School Districts for free or at a tremendous discount will be provided to increase the chance of Minnetonka Public School District to donate a conference room and their OTP's time away from clients. In addition to local resources, grant and supplemental funding resources will be harnessed such as those listed in Table 7.3 (see Appendix BB for a sample biographical sketch to support grant acquisition).

Table 7.3

Funding Sources

Funding Sources	Description
Organization for Autism Research (OAR)'s Applied Research Grant *(Foundation Grant)*	"OAR seeks to fund studies that expand the body of knowledge related to autism intervention and treatment, produce practical and clearly objective results, have the potential to positively affect public policy, and provide outcomes that offer to enhance quality of life for autistic individuals and their families. While applicants are always free to submit on any relevant area of research or intervention, this year, OAR has placed special emphasis on research addressing specific areas, with one being intersectionality, equity, and diversity (resonating with this doctoral project). The Applied Research Grant is an annual applied research competition where researchers can apply for one to two year-long grants of up to $40,000." (OAR, 2023a, para. 1) https://researchautism.org/researchers/applied-research/
Organization for Autism Research (OAR)'s Community Grant *(Foundation Grant)*	"The Community Grant Competition supports the design, packaging, and distribution of information resources that aim to enhance the physical/health and quality of life of autistic individuals. This competition recognizes the expertise of community members and aims to empower community shareholders, such as autistic individuals, family members, and community organizations, to share their knowledge in order to improve health outcomes for autistic people. Up to seven grants will be awarded to support the development of a practical tool that can positively impact the health of autistic individuals, either directly or indirectly (e.g., by providing guidance to caregivers or providers). A full list of project priorities can be found in the Request for Applications. Grants will range from $1,000-$10,000." (OAR, 2023b, para. 1) https://researchautism.org/educators/community-grant-competition/
The Commonwealth Fund Grants *(Foundation Grants)*	"The Commonwealth Fund supports independent research on health care issues and makes grants to promote better access, improved quality, and greater efficiency in healthcare. Grant award amount significantly varies." (Commonwealth Fund, 2023, para. 1) https://www.commonwealthfund.org/

Nancy Lurie Marks Family Foundation Grants *(Foundation Grants)*	"The Nancy Lurie Marks Family Foundation is committed to understanding autism from a scientific perspective, increasing opportunities and services available to the autistic community and educating the public about autism. In pursuit of its mission, the Foundation develops and provides grants to programs in research, clinical care, policy, advocacy and education. The foundation has various grant categories, including advocacy, education and social policy; community, and basic science, and sponsored symposia." (NLM Foundation, 2023, para. 2) https://www.nlmfoundation.org/grant-categories/
Stimpunk's Creator Grants *(Foundation Grants)*	"Neurodivergent? Disabled? Need funding for your art, advocacy, or research? We offer US$3,000 grants to neurodivergent and disabled creators. We consider proposals on a quarterly basis. These are for individual (non-institutional) creator grants only." (Stimpunk, 2023, para. 1) https://stimpunks.org/creators/
Innovation DuPage's Neurodiverse Entrepreneur Program	"The goal of the Neurodiverse Entrepreneur Program (NDEP) is to increase business leadership opportunities for neurodivergent individuals. Selected NDEP companies will receive a $4,000 microgrant." (ID, 2023) https://www.innovationdupage.org/programs/ndep
Crowd funding	Pending on how much grant money is awarded, this author may utilize popular crowdfunding sites to support funding of this program, such as GoFundMe and Givebutter.
Personal capital	Utilizing funds from salary earned to support dissemination efforts

Conclusion

Embracing Neurodivergent Occupations is a knowledge translation tool to promote occupational therapy's role in promoting authentic neurodivergent development with neurodivergent children and youth and increase confidence in providing neurodiversity-affirming practice. It is a moral imperative autistic and neurodivergent ways of living are recognized as occupations and are empowered. Grants and supplemental funding resources exist to support *Embracing Neurodivergent Occupations'* creation, implementation, and dissemination, and to ultimately see to this program's actualization.

CHAPTER EIGHT – Conclusion

It is a moral and ethical imperative occupational therapy practitioners (OTPs) provide neurodiversity-affirming services with neurodivergent clients (Dallman et al., 2022). Research has illustrated the profession is rooted within the medical model of disability, and the inclusion of disability studies within occupational frameworks remains to be lacking (Harrison et al., 2021; Holler et al, 2021; Shore et al., 2020). There remains a gap in how disability justice is embodied within occupational therapy and occupational science, restricting access to much needed conversations surrounding disability identity within the disciplines (Harrison et al., 2021; Sheth et al., 2021).

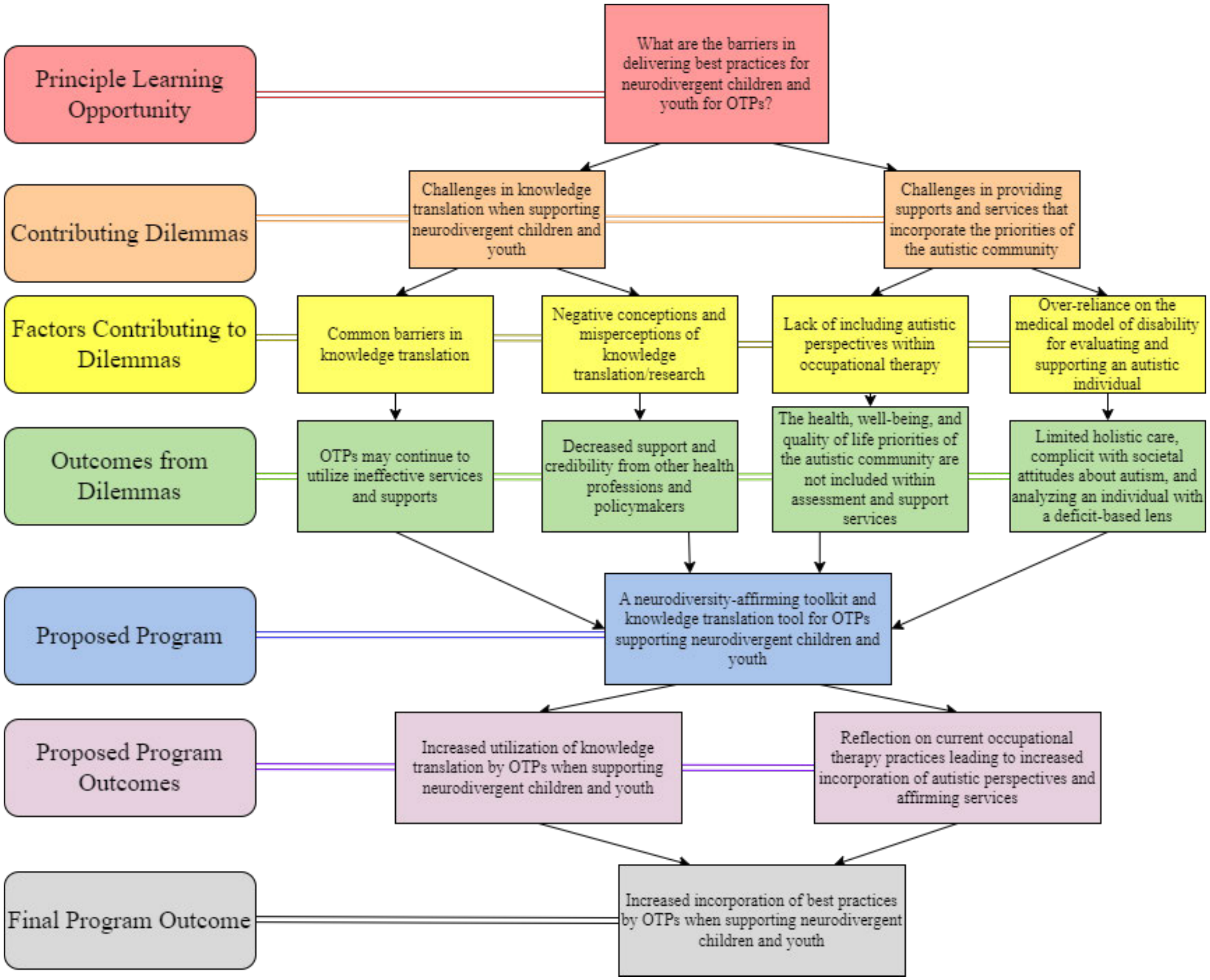
The fields of occupational therapy and occupational science must reflect on current methodologies and theoretical frameworks and come to grasp that the disciplines perpetuate ableist ideologies, significantly impacting the health and well-being of neurodivergent clients (ASAN, n.d.; Shore et al., 2020). OTPs create occupational marginalization secondary to neurotypicality often being the impetus for therapeutic services, devaluing neurodivergent occupations and neurodivergent ways of living. Autistic individuals have been advocating for health professions, including occupational therapy, to cease in having ableist frameworks being the foundation for practice and to abandon harmful practices (ASAN, n.d.; Taylor, 2022; TNC, 2022b). This is true even for this author’s professional organization, the American Occupational Therapy Association (AOTA), with AOTA publishing recent literature and position papers accentuating ableist practices with neurodivergent individuals (AOTA, 2017; AOTA, 2022; Shore et al., 2020). Neurodivergent OTPs have been pleading for occupational therapy and occupational science to evolve, and *Embracing Neurodivergent Occupations* desires to answer this call.

Embracing Neurodivergent Occupations and Empowering Disabled Voices: A Knowledge Translation Tool to Support Neurodiversity-Affirming Occupational Therapy Practice and Challenge Ableism Within the Profession is a knowledge translation tool centering the disabled lived experience as the heart of occupational therapy service provision. *Embracing Neurodivergent Occupations* answers the current gap in occupational therapy practice by supporting OTPs in reflecting on ableism, how ableism persists throughout the occupational therapy process, and providing the tools needed to deconstruct and modify current practices. *Embracing Neurodivergent Occupations* interweaves knowledge translation best practices to support application of community-defined and lived-experience research into practice (Jones et al., 2015; Mallidou et al., 2018; Myers et al., 2017; Pellerin et al., 2019). *Embracing Neurodivergent Occupations* utilizes the frameworks of disability justice (Sins Invalid, 2019), community-defined evidence practice (CDEP Integration Advisory Group, 2021; Martinez et al., 2010; National Latino Behavioral Health Association & National Network to Eliminate Disparities, 2009), lived-experience informed practice (Wise, 2023), and the ICF-CY (WHO, 2007) to support implementation of neurodiversity-affirming practices and reflection within rehabilitation. OTPs require training in critical reflexivity and empowering neurodivergent and disabled individuals, and *Embracing Neurodivergent Occupations* will provide the infrastructure for such reflection to occur. The program intends to be an example of community-based participatory research (CBPR), with neurodivergent shareholders being the epicenter of the program's creation.

The primary component of the program is the Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) model. The EMPOWER model is the result following an abundance of literature reviews completed by this author regarding neurodiversity-affirming practices and neurodivergent lived experiences within rehabilitation. The EMPOWER model is a continuous self-reflective process aimed to support OTPs in providing neurodiversity-affirming practices throughout the entire occupational therapy process. The EMPOWER model has five underlying frameworks guiding its ideology, including: strengths-based approaches (de Schipper et al., 2016; Dunn, 2017; Huntley et al., 2019; Marnell, 2023; Murthi et al., 2023; Patten, 2022); trauma-informed care (Rumball, 2022; TNC, 2022b); anti-racist (Aylward et al., 2021; Doyle, 2020; Johnson et al., 2020; Lavalley et al., 2020; Pooley, 2020; Sterman et al., 2021); justice, equity, diversity, and inclusion (JEDI) principles (Gibson, 2020; Khan, 2021; Ryan et al., 2020; Sterman et al., 2021; Taff et al., 2017; UNC School of Medicine, 2023; Zafran et al., 2022); and disability justice (Sins Invalid, 2019; Waldschmidt, 2018; Twardowski, 2022; Yao et al., 2022).

The program will initially be a virtual workshop for OTPs within the Lake Conference School Districts, and following feedback provided by participating OTPs and summative evaluation efforts with neurodivergent shareholders, the program will be reimagined into a website where online modules will be housed. The profession of occupational therapy has an opportunity to transcend from the confinement of the medical model of disability, to recognize neurodivergent ways of living as authentic occupations, and to become an anti-ableist profession. *Embracing Neurodivergent Occupations* is essential to support this growth for OTPs and the occupational therapy profession, and to ultimately reduce health inequities and occupational marginalization experienced by neurodivergent individuals posed by OTPs. Neurodivergent ways of living are occupations, and *Embracing Neurodivergent Occupations* aspires to amplify this call for action.

APPENDIX A – Explanatory Model of Program



APPENDIX B – Survey for Research Study

A Traffic Light of Evidence for Occupational Therapy Services Used with Autistic Children

Start of Block: Consent Form

Consent Form Introduction: You are being asked to participate in a research study for occupational therapists and occupational therapy assistants who have or currently work with children and youth. This study is called A Traffic Light of Evidence for Occupational Therapy Services Used with Autistic Children and Youth. The study is being done by Bryden Giving, a neurodivergent occupational therapist and a doctoral student at Boston University in Massachusetts. A traffic light of evidence will be created to help practitioners identify which strategies have more evidence supporting their use and how the strategies target or do not target the health and wellbeing of the autistic community. Long-term objectives include: the increased utilization of evidence-based practices within occupational therapy working with autistic children and youth, and (2) the increased incorporation of autistic perspectives encouraging occupational therapy practitioners to reflect on current practices. Due to the enormity of strategy choices practitioners have at their disposal, a select few will be initially selected within the traffic light. I need your help in deciding which strategies I ensure are included within the traffic, with the strategies with the most responses to be included within the visual resource. Additionally, questions regarding evidence-based practice, and methods are included as well. Approximately 100 people are expected to participate in this research.

Risks and Benefits of Study: The benefits of the study include contributing to knowledge to the occupational therapy profession and improving the livelihoods of the autistic community. The survey completed will be anonymous, with no way of relating answered questions to respondents. Though the data will be password-protected within Qualtrics and will not contain identifiable data, no guarantees can

be made regarding the interception of data sent via the internet by any third parties. The Institutional Review Board at Boston University may review study records for quality control or safety. A list of the people or groups who may review the study records for purposes such as quality control or safety (e.g. the Institutional Review Board at Boston University, the sponsor or funding agency for the study, federal and state agencies that oversee or review research, Central University Offices)

Below, you will find answers to the most commonly asked questions about participating in a research study. Please read this entire page and ask questions you have before you agree to be in the study. It will take approximately five to ten minutes to complete. Your responses to this survey will be confidential and results will be presented in a way that no one will be identifiable. Confidentiality will be maintained to the degree permitted by Qualtrics, the password-protected survey software used for this research. Specifically, no guarantees can be made regarding the interception of data sent via the internet by any third parties. Your participation is voluntary and your decision whether or not to participate will not affect your relationships with the researchers and Boston University. If you decide to stop at any time, you may do so.

If you have any questions about this project, please contact Bryden at bgiving@bu.edu or Dr. Lori Vaughn at lvaughn@bu.edu. In addition, if you have additional questions, you may contact Boston University Charles River Campus IRB at 617-358-6115. The IRB Office webpage has information where you can learn more about being a participant in research, and you can also complete a Participant Feedback Survey. By clicking the advance arrow below and responding to items on this survey, you are giving us your consent to allow us to use your responses for research and educational purposes. The results of the research study will be included in the final presentation of the doctoral project at Boston University, and may have the potential for presentation at local and/or national conferences and/or publication. Thank you again for your participation, and for improving the profession's ability to support the health and wellbeing priorities of the autistic community.

Q34 Throughout this survey, identity-first language is utilized to respect the wishes of the autistic community.

End of Block: Consent Form

Start of Block: Logic Question

Question #1 Have you in the past or do you currently work with autistic children and youth in your occupational therapy practice?

- ○ **Yes (1)**
- ○ **No (2)**

Skip To: End of Survey If Have you in the past or do you currently work with autistic children and youth in your occupation... = No

End of Block: Logic Question

Start of Block: Demographic Questions

Page Break

Question #2 In which country do you currently reside?

- ○ **Afghanistan (1)**
- ○ **Albania (2)**
- ○ **Algeria (3)**
- ○ **Andorra (4)**
- ○ **Angola (5)**
- ○ **Antigua and Barbuda (6)**
- ○ **Argentina (7)**

○ **Armenia (8)**

○ **Australia (9)**

○ **Austria (10)**

○ **Azerbaijan (11)**

○ **Bahamas (12)**

○ **Bahrain (13)**

○ **Bangladesh (14)**

○ **Barbados (15)**

○ **Belarus (16)**

○ **Belgium (17)**

○ **Belize (18)**

○ **Benin (19)**

○ **Bhutan (20)**

○ **Bolivia (21)**

○ **Bosnia and Herzegovina (22)**

○ **Botswana (23)**

○ **Brazil (24)**

○ **Brunei Darussalam (25)**

○ **Bulgaria (26)**

○ **Burkina Faso (27)**

○ **Burundi (28)**

○ **Cambodia (29)**

○ **Cameroon (30)**

○ **Canada (31)**

○ **Cape Verde (32)**

○ **Central African Republic (33)**

○ **Chad (34)**

○ **Chile (35)**

○ **China (36)**

○ **Colombia (37)**

○ **Comoros (38)**

○ **Congo, Republic of the... (39)**

○ **Costa Rica (40)**

○ **Côte d'Ivoire (41)**

○ **Croatia (42)**

○ **Cuba (43)**

○ **Cyprus (44)**

○ **Czech Republic (45)**

○ **Democratic Republic of the Congo (47)**

○ **Denmark (48)**

○ **Djibouti (49)**

○ **Dominica (50)**

○ **Dominican Republic (51)**

○ **Ecuador (52)**

○ **Egypt (53)**

○ **El Salvador (54)**

○ **Equatorial Guinea (55)**

○ **Eritrea (56)**

○ **Estonia (57)**

○ **Ethiopia (58)**

○ **Fiji (59)**

○ **Finland (60)**

○ **France (61)**

○ **Gabon (62)**

○ **Gambia (63)**

○ **Georgia (64)**

○ **Germany (65)**

○ **Ghana (66)**

○ **Greece (67)**

○ **Grenada (68)**

○ **Guatemala (69)**

○ **Guinea (70)**

○ **Guinea-Bissau (71)**

○ **Guyana (72)**

○ **Haiti (73)**

○ **Honduras (74)**

○ **Hong Kong (S.A.R.) (75)**

○ **Hungary (76)**

○ **Iceland (77)**

○ **India (78)**

○ **Indonesia (79)**

○ **Iran (80)**

○ **Iraq (81)**

○ **Ireland (82)**

○ **Israel (83)**

○ **Italy (84)**

○ **Jamaica (85)**

○ **Japan (86)**

○ **Jordan (87)**

○ **Kazakhstan (88)**

○ **Kenya (89)**

○ **Kiribati (90)**

○ **Kuwait (91)**

○ **Kyrgyzstan (92)**

○ **Lao People's Democratic Republic (93)**

○ **Latvia (94)**

○ **Lebanon (95)**

○ **Lesotho (96)**

○ **Liberia (97)**

○ **Libyan Arab Jamahiriya (98)**

○ **Liechtenstein (99)**

○ **Lithuania (100)**

○ **Luxembourg (101)**

○ **Madagascar (102)**

○ **Malawi (103)**

○ **Malaysia (104)**

○ **Maldives (105)**

○ **Mali (106)**

○ **Malta (107)**

○ **Marshall Islands (108)**

○ **Mauritania (109)**

○ **Mauritius (110)**

○ **Mexico (111)**

○ **Micronesia, Federated States of... (112)**

○ **Monaco (113)**

○ **Mongolia (114)**

○ **Montenegro (115)**

○ **Morocco (116)**

○ **Mozambique (117)**

○ **Myanmar (118)**

○ **Namibia (119)**

○ **Nauru (120)**

○ **Nepal (121)**

○ **Netherlands (122)**

○ **New Zealand (123)**

○ **Nicaragua (124)**

○ **Niger (125)**

○ **Nigeria (126)**

○ **North Korea (127)**

○ **Norway (128)**

○ **Oman (129)**

○ **Pakistan (130)**

○ **Palau (131)**

○ **Panama (132)**

○ **Papua New Guinea (133)**

○ **Paraguay (134)**

○ **Peru (135)**

○ **Philippines (136)**

○ **Poland (137)**

○ **Portugal (138)**

○ **Qatar (139)**

○ **Republic of Moldova (141)**

○ **Romania (142)**

○ **Russian Federation (143)**

○ **Rwanda (144)**

○ **Saint Kitts and Nevis (145)**

○ **Saint Lucia (146)**

○ **Saint Vincent and the Grenadines (147)**

○ **Samoa (148)**

○ **San Marino (149)**

○ **Sao Tome and Principe (150)**

○ **Saudi Arabia (151)**

○ **Senegal (152)**

○ **Serbia (153)**

○ **Seychelles (154)**

○ **Sierra Leone (155)**

○ **Singapore (156)**

○ **Slovakia (157)**

○ **Slovenia (158)**

○ **Solomon Islands (159)**

○ **Somalia (160)**

○ **South Africa (161)**

○ **South Korea (162)**

○ **Spain (163)**

○ **Sri Lanka (164)**

○ **Sudan (165)**

○ **Suriname (166)**

○ **Swaziland (167)**

○ **Sweden (168)**

○ **Switzerland (169)**

○ **Syrian Arab Republic (170)**

○ **Tajikistan (171)**

○ **Thailand (172)**

○ **The former Yugoslav Republic of Macedonia (173)**

○ **Timor-Leste (174)**

○ **Togo (175)**

○ **Tonga (176)**

○ **Trinidad and Tobago (177)**

○ **Tunisia (178)**

○ **Turkey (179)**

○ **Turkmenistan (180)**

○ **Tuvalu (181)**

○ **Uganda (182)**

○ **Ukraine (183)**

○ **United Arab Emirates (184)**

○ **United Kingdom of Great Britain and Northern Ireland (185)**

○ **United Republic of Tanzania (186)**

○ **United States of America (187)**

○ **Uruguay (188)**

○ **Uzbekistan (189)**

○ **Vanuatu (190)**

○ **Venezuela, Bolivarian Republic of... (191)**

○ **Viet Nam (192)**

○ **Yemen (193)**

○ **Zambia (580)**

○ **Zimbabwe (1357)**

Page Break

Question #3 How many years have you been practicing in the occupational therapy field?

○ **Under 3 years (1)**

○ **4 - 6 years (2)**

○ **7 - 9 years (3)**

○ **10 - 12 years (4)**

○ **13 - 15 years (5)**

○ **16 - 18 years (6)**

○ **19 - 21 years (7)**

○ **22 - 24 years (8)**

○ **Over 25 years (9)**

Question #4 How many years have you been practicing in pediatrics specifically?

○ **Under 3 years (1)**

○ **4 - 6 years (2)**

○ **7 - 9 years (3)**

○ **10 - 12 years (4)**

○ **13 - 15 years (5)**

○ **16 - 18 years (6)**

○ 19 - 21 years (7)

○ 22 - 24 years (8)

○ Over 25 years (9)

Page Break

Question #5 What is your highest level of occupational therapy education?

○ Apprenticeship (1)

○ Associate's Degree (2)

○ Bachelor's Degree (3)

○ Master's Degree (4)

○ Certified Advanced Degree of Study (CAGS) (5)

○ Doctoral Degree (6)

Page Break

Question #6 What is your current position in occupational therapy practice?

○ Occupational Therapy Assistant (1)

○ Occupational Therapist (2)

Page Break

Question #7 Please select your place of practice when working with autistic children and youth:

☐ **Inpatient (1)**

☐ **Sensory integration clinic (2)**

☐ **Non-sensory integration clinic (general outpatient) (3)**

☐ **School-based (4)**

☐ **Home care (5)**

☐ **Community-based setting (6)**

☐ **Private practice (7)**

☐ **Other -> Please fill in box below (8)**

____

Page Break

Question #8 When examining your occupational therapy career, approximately what percentage of your caseload has been working with autistic children and youth?

○ **0 - 20% (1)**

○ **21 - 40% (2)**

○ **41 - 60% (3)**

○ **61 - 80% (4)**

○ **81 - 100% (5)**

End of Block: Demographic Questions

Start of Block: Strategies Question

Question #9 Which of the following strategies or methods do you utilize in your practice with autistic children and youth? Please check all that apply.

- ☐ **ALERT Program (1)**
- ☐ **Animal-Assisted Activities and Occupations (e.g., Equine-Assisted Therapy, Hippotherapy) (2)**
- ☐ **Applied Behavioral Analysis (ABA) (3)**
- ☐ **Aromatherapy (4)**
- ☐ **Art Therapy (5)**
- ☐ **Astronaut Training (6)**
- ☐ **Auditory Integration Training (AIT) (7)**

☐ **Ayres Sensory Integration (ASI) (8)**

☐ **Behavioral Modification Techniques (e.g., reinforcement, discrete trial training, token economies) (9)**

☐ **Behavioral/Perceptual Vision Therapy (e.g., eye exercises to improve visual processing and visual perception) (10)**

☐ **Brain Balance (11)**

☐ **Brain Gym (12)**

☐ **Cognitive-Behavioral Instructional Strategies (e.g., journaling, reflection, examining thoughts and emotions) (13)**

☐ **Cognitive Orientation to daily Occupational Performance (CO-OP) Model (14)**

☐ **Craniosacral Therapy (15)**

☐ **Developmental, Individual-differences, and Relationship-based (DIR) Floortime Model (16)**

☐ **Early Start Denver Model (ESDM) (17)**

☐ **Environmental Modifications to the Learning Environment (e.g., adapted seating, modified lighting) (18)**

☐ **Food Chaining (19)**

☐ **Group Service Delivery Models (e.g., group therapy) (20)**

☐ **Handwriting Without Tears / Learning Without Tears (HWT/LWT) (21)**

☐ **Health Promotion Programming (22)**

☐ **Integrated Listening Systems (iLs) (23)**

☐ **Lifeskills Training (24)**

☐ **The Listening Program (TLP) (25)**

☐ **Masgutova Neurosensorimotor Reflex Integration (MNRI) (26)**

☐ **Massage Therapy (27)**

☐ **Parent Education and Coaching (28)**

☐ **Peer-Based Instruction and Supports (29)**

☐ **Play Project (30)**

☐ **Qigong Massage (31)**

☐ **Rhythmic Movement Training (RMT) (32)**

☐ **Sensory Diets (33)**

☐ **Sensory Stories (34)**

☐ **Sequential-Oral-Sensory (SOS) Approach to Feeding (35)**

☐ **Social Communication, Emotional Regulation, and Transactional Supports (SCERTS) Model (54)**

☐ **Social Skills Training (36)**

☐ **Social Stories (37)**

☐ **Social Thinking (38)**

☐ **Structured Teaching (39)**

☐ **Task Analysis (53)**

☐ **Technology-based Services and Supports (e.g., computer programs, virtual reality) (40)**

☐ **Therapeutic Listening (52)**

☐ **Tomatis Method (41)**

☐ **Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) (42)**

☐ **Videomodeling (43)**

- ☐ **Visual Supports (44)**
- ☐ **Weighted Vests (45)**
- ☐ **Weighted Items (not including weighted vests, such as a weighted blanket) (46)**
- ☐ **Wilbarger Deep Pressure Protocol (47)**
- ☐ **Whole-School and Emotional Learning Programs (48)**
- ☐ **Yoga (49)**
- ☐ **Zones of Regulation (50)**
- ☐ **Other strategies -> Please fill out box below (51)**

____

End of Block: Strategies Question

Start of Block: Likert #1 - EBP

Questions #10 Please answer the question along the Likert scale.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Question #10: Utilizing research-findings within my clinical decision-making is important. (1)	○	○	○	○	○

Page Break

Question #11 Please answer the question along the Likert scale.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Question #11: I am confident in critically appraising and applying research findings into my practice. (1)	○	○	○	○	○

Page Break

Question #12 Please answer the question along the Likert scale.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Question #12: Reimbursement agencies are requiring use of research evidence within occupational therapy plans of care. (1)	○	○	○	○	○

Page Break

Question #13 Please answer the question along the Likert scale.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
Question #13: At my current worksite, I feel supported in utilizing research findings within my practice. (1)	○	○	○	○	○

Page Break

End of Block: Likert #1 - EBP

Start of Block: Likert Questions #2

Question #14 Please answer the question along the Likert scale.

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
Question #14: My work as an occupational therapist should include removing societal barriers impacting persons with disabilities. (1)	○	○	○	○	○

Q27 Below you can provide an explanation/comments regarding your answer (not required):

____

Page Break

Question #15 Please answer the question along the Likert scale.

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
Question #15: I know the health and wellbeing priorities of the autistic community (autistic individuals themselves). (1)	○	○	○	○	○

Q28 Below you can provide an explanation/comments regarding your answer (not required):

____

Page Break

Question #16 Please answer the question along the Likert scale.

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
Question #16: Assessment of social barriers in the child's meaningful environments (such as negative attitudes of autism in school) must be a core part of the assessment process when assessing autistic children and youth. (1)	○	○	○	○	○

Q30 Below you can provide an explanation/comments regarding your answer (not required):

____

Page Break

Question #17 Please answer the question along the Likert scale.

	Strongly disagree (1)	Somewhat disagree (2)	Neutral (3)	Somewhat agree (4)	Strongly agree (5)
Question #17: Insurance companies and/or work setting influence what goals I target and how I measure outcomes (e.g., a need for a standardized measure). (1)	○	○	○	○	○

Q31 Below you can provide an explanation/comments regarding your answer (not required):

____

End of Block: Likert Questions #2

Start of Block: Likert #3: Perception of Goal Setting

Page Break

Question #18 Please select your response regarding goal setting along the following scale from 1 - 5:

○ **1 = Goal setting is based mostly on deficits identified by the practitioner and/or results from standardized testing than the child and family priorities. (1)**

○ **2 = Goal setting is based a little more on deficits identified by the practitioner and/or results from standardized testing than child and family priorities. (2)**

○ **3 = Neutral (3)**

○ **4 = Goal setting is based a little more on child and family priorities than deficits identified by the practitioner and/or results from standardized testing. (4)**

○ **5 = Goal setting is based mostly on the child and their family's preferences and priorities than deficits identified by the practitioner and/or results from standardized testing. (5)**

Q32 Below you can provide an explanation/comments regarding your answer (not required):

____

End of Block: Likert #3: Perception of Goal Setting

Start of Block: Likert #4: Bottom-Up vs. Top-Down

Q24 Bottom-Up: A bottom-up approach to assessment focuses on the foundational components of function, such as strength, range of motion, balance, sensory processing, which are believed to be prerequisites to successful occupational performance or functioning.
Top-Down: A top-down approach to assessment focuses on measuring the patient's ability to participate in occupations and evaluating how the task and environment may be adapted to promote performance.

Question #19 Please select your response regarding bottom-up and top-down approaches along the following scale from 1 - 5:

○ **1 = I mostly utilize a bottom-up approach when assessing autistic children and youth. (1)**

○ **2 = I utilize a bottom-up approach a little more than a top-down approach when assessing autistic children and youth. (2)**

○ **3 = Neutral (3)**

○ **4 = I utilize a top-down approach a little more than a bottom-up approach when assessing autistic children and youth. (4)**

○ **5 = I mostly utilize a top-down approach when assessing autistic children and youth. (5)**

Q33 Below you can provide an explanation/comments regarding your answer (not required):

____

End of Block: Likert #4: Bottom-Up vs. Top-Down

Start of Block: Likert #5: Use of Assessments

Question #20 Please select your response regarding assessments along the following scale from 1 - 5:

- ○ **1 = I mostly use assessments that evaluate sensory-motor and physical deficits (e.g., Peabody, BOT-2, SPM-2) during the assessment process. (1)**
- ○ **2 = I use assessments that evaluate sensory-motor and physical deficits (e.g., Peabody, BOT-2, SPM-2) a little more than assessments that analyze barriers and supports within the child's environment, interests and priority of the child, or the child's performance in occupations (e.g., REAL, COPM, YC-PEM). (2)**
- ○ **3 = Neutral (3)**
- ○ **4 = I use assessments that analyze barriers and supports within the child's environment, interests and priority of the child, or the child's performance in occupations (e.g., REAL, COPM, YC-PEM) a little more than assessments that evaluate sensory-motor and physical deficits (e.g., Peabody, BOT-2, SPM-2). (4)**
- ○ **5 = I mostly use assessments that analyze barriers and supports within the child's environment, interests and priority of the child, or the child's performance in occupations (e.g., REAL, COPM, YC-PEM). (5)**

Q34 Below you can provide an explanation/comments regarding your answer (not required):

____

End of Block: Likert #5: Use of Assessments

Start of Block: Likert #6: Plan of Care and Conclusion of Service

Question #21 Please select your response regarding providing services along the following scale from 1 - 5:

- ○ **1 = In service provision, I focus mostly on improving the child’s body structural factors (e.g., physical skills, cognition, sensory processing). (1)**

○ **2 = In service provision, I focus on improving the child's body structural factors (e.g., physical skills, cognition, sensory processing) a little more than adapting the learning environment and occupation, and addressing societal barriers impacting performance. (2)**

○ **3 = Neutral (3)**

○ **4 = In service provision, I focus on adapting the learning environment and occupation, and addressing societal barriers impacting performance a little more than improving the child's body structural factors (e.g., physical skills, cognition, sensory processing). (4)**

○ **5 = In service provision, I focus mostly on adapting the learning environment and occupation, and addressing societal barriers impacting performance. (5)**

Q35 Below you can provide an explanation/comments regarding your answer (not required):

____

Page Break

Question #22 Please select your response regarding the end of services along the following scale from 1 - 5:

○ **1 = At the conclusion of service provision, I mostly assess the improvement of the child's ability to function independently, without the help of others. (1)**

○ **2 = At the conclusion of service provision, I assess the improvement of the child's ability to function independently, without the help of others a little more than assessing the social changes made and the support system of the child and their family. (2)**

○ **3 = Neutral (3)**

○ **4 = At the conclusion of service provision, I assess the social changes made and the support system of the child and their family a little more than assessing the improvement of the child's ability to function independently, without the help of others. (4)**

○ **5 = At the conclusion of service provision, I assess the social changes made and the support system of the child and their family. (5)**

Q36 Below you can provide an explanation/comments regarding your answer (not required):

____

Page Break

Question #23 Please select your response regarding the conclusion of service provision along the following scale from 1 - 5:

○ **1 = At the conclusion of service provision, I mostly assess outcomes using measures that show evidence of the child's improvement compared to standardized norms. (1)**

○ **2 = At the conclusion of service provision, I assess outcomes using measures that show evidence of the child's improvement compared to standardized norms a little more than assessing the outcome based on the child and their family's satisfaction and preferences. (2)**

○ **3 = Neutral (3)**

○ **4 = At the conclusion of service provision, I assess outcomes based on the child and their family's satisfaction and preferences a little more than using**

measures that show evidence of the child's improvement compared to standardized norms. (4)

○ **5 = At the conclusion of service provision, I mostly assess outcomes based on the child and their family's satisfaction and preferences. (5)**

Q37 Below you can provide an explanation/comments regarding your answer (not required):

____

End of Block: Likert #6: Plan of Care and Conclusion of Service Provision

APPENDIX C – IRB Application

Exemption Application

SECTION A: Protocol and Contact Information

Protocol Title: A Traffic Light of Evidence for Occupational Therapy Strategies Used with Autistic Children and Youth
PI Name and Degrees: Bryden Giving, MAOT, OTR/L
Preferred Pronoun: him/his/he
PI Email Address: bgiving@bu.edu
PI Phone Number: [redacted]
PI Department: Occupational Therapy
BU Mailing Address: NA
Additional Contact/Faculty Advisor: Dr. Lori Vaughn
Contact Information: lvaughn@bu.edu

SECTION B: Additional Study Personnel

☒ **There are no additional personnel working on the research study**
☐ **Additional study personnel are listed on the attached personnel roster form**

SECTION C: Funding Information

☒ The research is unfunded
☐ The research is funded. Complete the table(s) below for each funding source:

Funding Source	**Award Status**	**Grant / Award #**	**Period of Support**	**BU Award Status**	**Awardee Institution**	**Grant Title if different from Protocol title**
enter text	Choose an item.	enter text	enter text	Choose an item.	enter text	enter text
enter text	Choose an item.	enter text	enter text	Choose an item.	enter text	enter text
enter text	Choose an item.	enter text	enter text	Choose an item.	enter text	enter text

☐ **The research is funded by more than 3 sources.** If yes, provide the above information for each funding source via email to IRB@bu.edu.

SECTION D: Conflict of Interest

☒ **Yes** ☐ **No**

ALL personnel responsible for the design, conduct, or reporting of the proposed research, including at minimum all senior/key personnel listed on the grant application, have completed the financial interest disclosure forms, submitted them to the COI office, and completed training as dictated under the BU COI policy. A copy of the BU COI submission confirmation emails for the PI and all study personnel must be submitted to the IRB Office.

☐ Yes ☒ No

On the financial interest disclosure forms submitted, did you check "yes" to any of the questions on either the FIND1 or NONFIND1 form? If yes, the IRB Office will contact the COI office to obtain a copy of the disclosure information and/or the management plan, as applicable.

SECTION E: Exemption Categories

To qualify for exemption, the study must: be minimal risk, fall into one of the below categories, and may not involve prisoners or be regulated by the FDA (with the exception of # 6).

Mark all categories that apply:

☐ (1) Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Provide the following information below, *as applicable:

☐ *Not applicable

- Submit documentation of the school/organization permission
- If recruitment/enrollment of the PI's own students, provide the plan for ensuring that the PI will not know which students are participating (e.g. having a co-investigator obtain consent, etc.)
- If the study will take place during regular class/school time, describe the plan for the students who don't want to participate and for ensuring that the study activities are not a significant deviation in time or effort from regular school/organizational activities

enter text

☒ (2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

- ☒ (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;
  Note: Research activities involving children under this criterion are those involving educational tests, or observation of public behavior where the investigators do not participate in the activity being observed.
- ☒ (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation;
  Note: Research activities involving children under this criterion are those involving educational tests, or observation of public behavior where the investigators do not participate in the activity being observed.
- ☒ (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).
  Note: Research activities under this criterion does not apply to research with children.

☐ (3) (i) Research involving benign behavioral services in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) audiovisual recording if the subject prospectively agrees to the service and information collection at least one of the following criteria is met:

- ☐ (A) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects
- ☐ (B) Any disclosure of the human subjects' responses outside of the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; **OR**
- ☐ (C) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly through identifiers linked to the subjects, and the IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7): when appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.

☐ (ii) Benign behavioral interventions are brief in duration, harmless, painless, and not physically invasive, not likely to have a significant adverse lasting impact on the subjects, and the investigator has no reason to think the subjects will find the interventions offensive or embarrassing. Examples include playing an online game, solving puzzles under various conditions, and deciding how to allocate a nominal amount of received cash between themselves and someone else.

☐ (iii) The research involves deception. If yes, and the research involves deceiving the subjects regarding the nature or purposes of the research, this exemption is not applicable unless the subject authorizes the deception through a prospective agreement to participate in research in circumstances in which the subject is informed that he or she will be unaware of or misled regarding the nature or purposes of the research.

☐ (4) Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

☐ (i) The identifiable private information or identifiable biospecimens are publicly available

☐ (ii) Information, which may include information about biospecimens , is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the investigator does not contact the subjects, and the investigator will not re-identify the subjects

☐ (iii) The research involves only information collection and analysis involving the investigator's use of identifiable information when that use is regulated under 45 CFR parts 160 and 164 ('HIPAA'), subparts, A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 of for "public health activities and purposes" as described under 45 CFR 164.512(b)

☐ (iv) The research is conducted by, or on behalf of, a Federal department or agency using government-generated of government-collected information obtained for non-research activities, if the research generates identifiable private information obtained for non-research activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 U.S.C. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 U,S.C. 552a, and if, applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 U.S.C 3501 et seq.

☐ (5) Research and demonstration projects which are conducted by or otherwise subject to the approval of federal department or agency heads (or the approval of the heads of bureaus or other subordinate agencies that have been delegated authority to conduct the research and demonstration projects, and which are designed to study, evaluate, or otherwise examine: public benefit or service programs; procedures for obtaining benefits or services under those programs, possible changes in or alternatives to those programs or procedures; or possible changes in methods or levels of payment for benefits or services under those programs. Such projects include, but are not limited to, internal studies by Federal employees, and studies under contracts or consulting agreements, cooperative agreements, or grants. Exempt projects also include waivers or otherwise mandatory requirements using authorities such as sections 1115 and 1115A of the Social Security Act, as amended.

Each Federal department or agency conducting or supporting the research and demonstration projects must establish, on a publicly accessible Federal website or in such other manner as the department or agency may determine, a list of the research and demonstration projects that the Federal department or agency conducts or supports under this provision. The research or demonstration project must be published on this list prior to commencing the research involving human subjects.

☐ (6) Taste and food quality evaluation and consumer acceptance studies, if
  ☐ Wholesome foods without additives are consumed; or
  ☐ A food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the FDA or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

SECTION F: Location of the Research

List each location where the research will take place:

☐ **BU campus** (building and room number):

☐X **Field activities** (specific address/organization): [redacted]

☐ **Research will take place outside of the United States: complete Appendix A - International Research Form**

☐ **Additional research sites: complete the below table.**

Institution Name	Site Investigator	Research Activities	IRB Review
enter text	enter text	enter text	☐ requesting reliance ☐ site will review
enter text	enter text	enter text	☐ requesting reliance ☐ site will review
enter text	enter text	enter text	☐ requesting reliance ☐ site will review
enter text	enter text	enter text	☐ requesting reliance ☐ site will review

SECTION G: Study Information

1. **Summarize the study in lay language** (Do not copy from the grant/scope of work/proposal, etc. This summary should include the research design, purpose, objectives, research question, hypothesis, and any relevant background information. Do not include citations in this section. Please limit this section to no more than 300 words.)

Best practice for collaborating with autistic children and youth includes utilizing evidence-based services and ensuring methods affirm and honor autistic identity. Evidence-based strategies are more cost-effective and associated with higher-quality outcomes than non-evidence-based approaches, while autistic affirming approaches improve the quality of life and self-determination of autistic individuals. The long-term objectives of this project include: (1) increase the uptake of the evidence-based process into occupational therapy clinical decision-making for children and youth service planning, and (2) increased incorporation of autistic perspectives in practice. The final product will be a visual tool to streamline the evidence-based practice process for clinicians when selecting strategies when working with children and youth. I will create a traffic light as a "one-stop-shop" designating the strategies evaluated with a standardized grade (e.g., green, yellow, and red) and disseminate the visual resource to occupational therapy practitioners. It is time-consuming for practitioners to keep up to date with the evidence regarding their current practice area while retaining evidence-based practice skills. Having the evidence levels within a traffic light of evidence will assist practitioners in using evidence-based practice within their clinical decision-making. The traffic light definitions provide a simple common language that can be used by therapists, researchers, managers, and families to develop a shared understanding of the implications of best-available evidence. Additionally, autistic perspectives regarding the strategies will be included within the visual resource to improve practitioners' ability to incorporate autistic perspectives into clinical decision-making. A survey will be conducted to gather information regarding which occupational therapy strategies are most utilized with autistic children and youth. The investigator hypothesizes strategies targeting the body-structure of the ICF to be the most utilized (e.g., Therapeutic Listening, Wilbarger Protocol), and practitioners are unaware of the health and wellbeing priorities of the autistic community.

2. **Study Procedures** (e.g. Methods of data collection, research activities/procedures, duration and types of participant contacts including study visits, phone calls, internet surveys, mailings, etc.)

An internet survey will be sent out to occupational therapy practitioners who work or have worked with autistic children and youth. The survey will be created within Qualtrics, a data-protected survey software within their cloud. Respondents will be recruited by posting in various community groups within social media that are composed of pediatric occupational therapy practitioners. A portion of the survey questions (questions #13 - #20) are adapted from the Orientation and Disability Scale, a tool developed for identifying how the medical model of disability and the social model of disability are utilized by occupational therapy practitioners in physical rehabilitation settings. The questions have been morphed for reframing the questions for supporting autistic children and youth.

3. **Duration of participation** (e.g. How long participants will be involved in the research from start to finish.)

Participants will be involved in the research for the duration of survey completion. The survey will be available for completion from April 1st, 2022 to May 1st, 2022.

4. **Risks of participation and plan to mitigate those risks** (e.g. Expected risks to participants or other risks that are related to the study and the plan to protect participants from those risks.)

The only foreseeable risk is that individuals may not feel comfortable answering items on the survey due to the controversial nature of some of the strategies included within the survey. The survey completed will be anonymous, with no way of relating answered questions to respondents. Though the data will be password-protected within Qualtrics and will not contain identifiable data, no guarantees can be made regarding the interception of data sent via the internet by any third parties. Participants will demonstrate consent for completion of the survey by clicking the advance arrow following reviewing the study description and informed consent information within the first question of the survey.

5. **Benefits to participants related to the study. (**State if no direct benefits, or if there may be benefits to a larger population.)

There is no direct benefit to practitioners individually, though their participation contributes to bettering practices within the occupational therapy field and targeting the health and wellbeing priorities of the autistic community.

6. **Protection of participant Privacy** (Include where procedures will take place and how participant privacy will be protected.)

The data received from the survey responses will not be connected to social media posting redirections of the survey is sent out by emails; participants will access it through an anonymous link. Thus, no identifying information will be attached to participant responses.

7. **Is this research being conducted in a HIPAA Covered Entity at BU or elsewhere?**

☒ **No** ☐ **Yes; if yes, complete the HIPAA Authorization/Waiver form.** BU CRC covered entities include Sargent College Rehabilitation Services, Physical Therapy Center at the Ryan Center for Sports Medicine and Rehabilitation, Sargent Choice Nutrition Center, The Danielsen Institute, and Boston University Health Plan.

8. **Does this research involve student records at BU or elsewhere?**

☒ **No** ☐ ***Yes; if yes,** I confirm that I will comply with the FERPA policy that is in place at the educational institution where I am conducting my research. This includes, if applicable, the requirements for written agreement when requesting a waiver of consent for personally identifiable information. If an agreement is required, this agreement must be submitted to the IRB. **Note:** In accordance with FERPA, written consent must be obtained to access student records; the consent must specify the records that may be disclosed, the purpose of the disclosure, and identify the person or class of parties to whom the disclosure can be made and a signature line must be added to the consent statement.

9. Confidentiality of Data (Describe whether identifiers will be collected, how data will be stored and protected from unauthorized access. If data will be shared with collaborators, describe how, e.g. RedCap, Sharepoint, etc.)

Identifiers will not be collected and data will be stored within Qualtrics, a data-protected survey software. My academic mentor and I will be the only individuals with access to the data.

SECTION H: Participant Population

1. Number of participants to be enrolled (If different arms or groups will be enrolled, provide the number per group):

100 participants are anticipated to take part in the study.

2. Participant population (e.g., Adults, children, BU students or employees, non-English speaking, etc.):

Occupational therapy practitioners who have worked or are currently supporting autistic children and youth.

3. Provide any additional protections for vulnerable participant populations (e.g. Children, persons with intellectual disabilities, BU students or employees, etc.): ☒ **N/A**

☒ **No** ☐ **Yes; The research involves children** (under the age of 18 in Massachusetts). If yes, is the research funded by the Department of Education? ☐ No ☐ Yes; If yes, do you intend to survey minors with questions of a personal nature? ☐ No ☐ Yes; If yes, your research falls under the Protection of Pupil Rights Amendment (PPRA) and parents must additionally be consented for permission to enroll their children in the research and you must confirm that you will comply with the PPRA requirements that are in place at the educational institution where the research will be conducted: ☐ Yes

4. Inclusion criteria:

1. Are an occupational therapy practitioner and (2) have worked with or currently autistic children and youth as a part of their caseload

5. Exclusion criteria:

1. Not an occupational therapy practitioner and (2) have never worked with an autistic child

Section I: Recruitment and Informed Consent

1. **Describe the recruitment process** (Include who will recruit, when, where and how, as well as how participants will be identified, if applicable):

   The primary investigator will be doing the recruiting, sharing the link to community groups within social media comprising of pediatric occupational therapy practitioners. Group examples include Pediatric Occupational Therapists, Pediatric Occupational Therapy, and the special interest section of Children and Youth within AOTA CommuneOT. The survey will provide access to anyone with a link with a snowball effect likely to occur if practitioners email the link to the survey to other practitioners. The survey will be open for approximately one to two months, with a reminder message/post taking place after two to three weeks.

X **Recruitment materials are being used in this research study and are included with this application. If recruitment materials will be used but are not included with the submission, describe why:**

An infographic describing the study as promotional material is currently being created and is not included into the application submission due to not yet be ing completed.

☐ **No recruitment process is planned. Describe why:**

2. **Describe the informed consent process** (Include who will consent, when, where and how, if applicable):

   Participants will demonstrate consent for completion of the survey by clicking the advance arrow following reviewing the study description and informed consent information within the first question of the survey.

X **Interactions with study participants will take place and a consent script will be used and is included with the submission. If consent materials will be used but are not included with the submission, describe why:**

☐ **No consent process is planned. Describe why:**

Section J: Costs and Payments

X **There are not costs or payments to participants in this study**

☐ **Participants will incur costs as a result of participating in this study. Describe the costs:**

☐ **Participants will receive compensation for being part of the study. Describe the compensation:**

SECTION K: Pre-Submission Checklist

This form can be completed, signed and scanned and submitted to the IRB at: irb@bu.edu. Faxed documents and handwritten materials are not accepted. *Mark all that apply:*

☐ Personnel Roster
☐ Copies of the BU COI submission confirmation emails for the PI and all study personnel
☐ If international research, Appendix A - International Research Form
☐ If requesting that another institution rely on the CRC IRB, the Single IRB Request Form
☐ If research involves a HIPAA Covered Entity, the HIPAA Authorization/Waiver form
☐ Recruitment and screening materials
☐ Informed Consent Form and related materials (children assent, parental permission, etc.)
☐ Data collection materials (surveys, interview questions, assessments, etc.)
☐ Other study documentation:

SECTION L: Principal Investigator Certification / Signatures

By signing below, you certify that the information contained in this Application is true, complete, and accurate and that you will conduct this research in accordance with applicable laws, regulations, and BU CRC IRB policies.

(electronic signature)

Principal Investigator Signature: Date: 02/06/2022

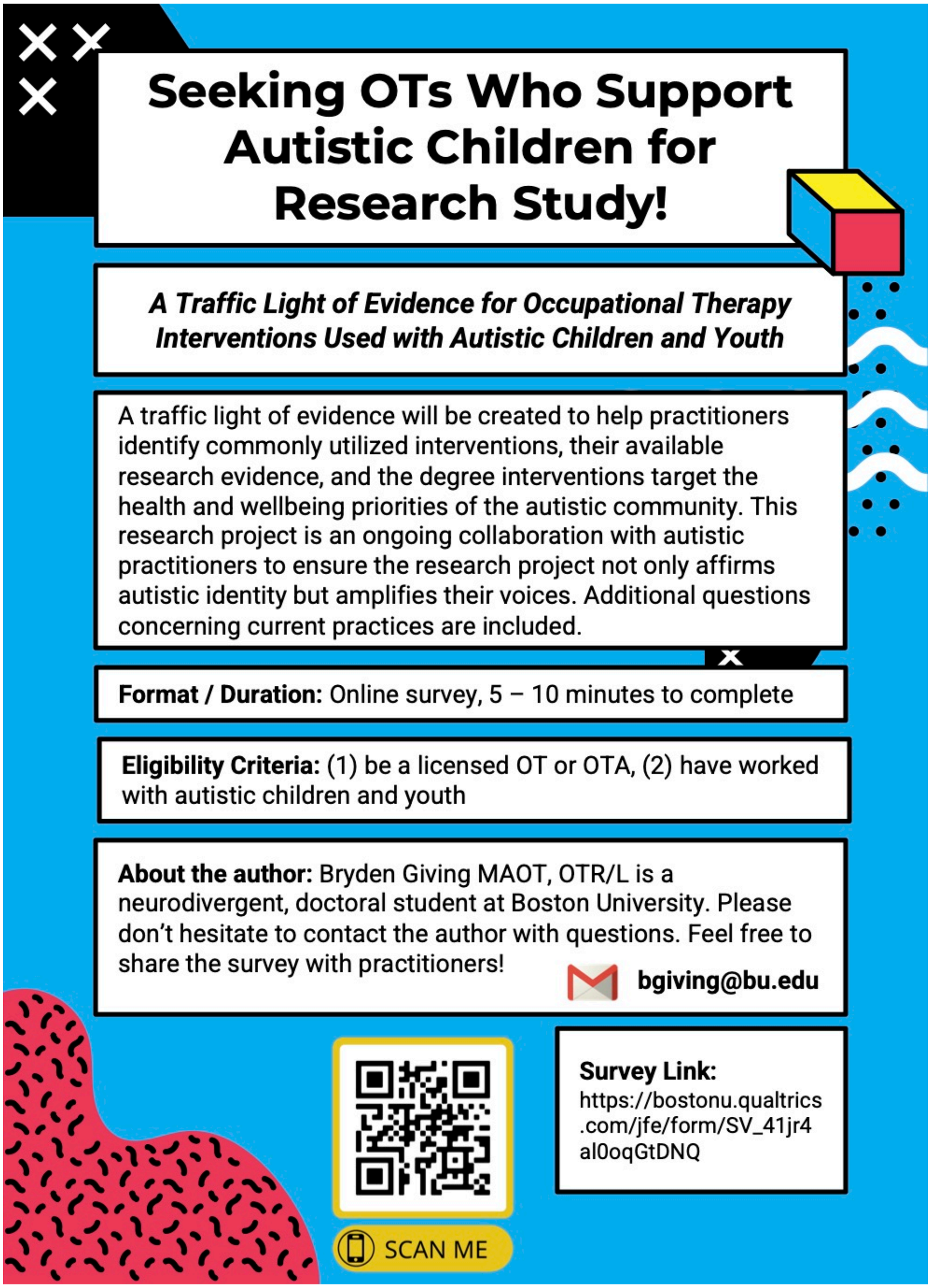
If PI is a student, signature of the faculty advisor is required below. By signing, the faculty advisor is indicating agreement with the above statements.

Faculty Advisor Printed Name:

Faculty Advisor Signature: Date:

NOTE: Electronic signatures are acceptable, as are emails confirming the above certification information.

APPENDIX D – Flyer for Research Study



Seeking OTs Who Support Autistic Children for Research Study!

A Traffic Light of Evidence for Occupational Therapy Interventions Used with Autistic Children and Youth

A traffic light of evidence will be created to help practitioners identify commonly utilized interventions, their available research evidence, and the degree interventions target the health and wellbeing priorities of the autistic community. This research project is an ongoing collaboration with autistic practitioners to ensure the research project not only affirms autistic identity but amplifies their voices. Additional questions concerning current practices are included.

Format / Duration: Online survey, 5 – 10 minutes to complete

Eligibility Criteria: (1) be a licensed OT or OTA, (2) have worked with autistic children and youth

About the author: Bryden Giving MAOT, OTR/L is a neurodivergent, doctoral student at Boston University. Please don’t hesitate to contact the author with questions. Feel free to share the survey with practitioners!

bgiving@bu.edu

SCAN ME

Survey Link:
https://bostonu.qualtrics
.com/jfe/form/SV_41jr4
al0oqGtDNQ

APPENDIX E – AOTA 2023 Conference Powerpoint Slides: Short Course 230 – Utilization of the Medical Model and Social Model of Disability Within Occupational Therapy Practice Supporting Autistic Children and Youth

AOTA American Occupational Therapy Association

inspire

2023 Annual Conference & Expo

Short Course 230 - Utilization of the Medical Model and Social Model of Disability Within OT Practice Supporting Autistic Children and Youth

Bryden Carlson-Giving, MAOT, OTR/L

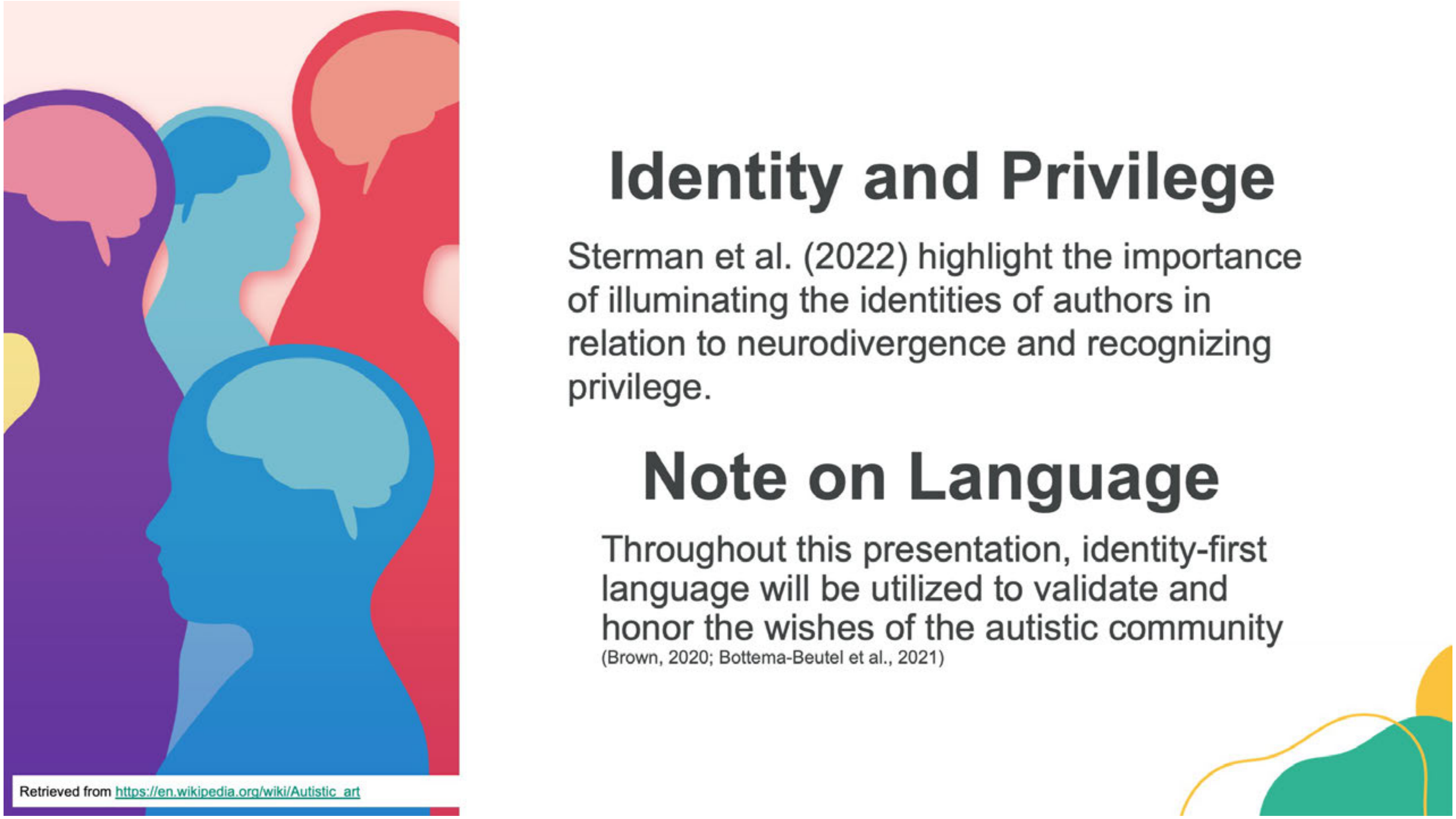
04/21/2023

Acknowledgements

I would like to extend my sincere gratitude to the following individuals that have supported this project in both small and grand ways:

Dr. Lori Vaughn
Sarah Selvaggi Hernandez from ***The Autistic OT***
Dr. Amy Laurent & Dr. Jacquelyn Fede from ***Autism Level Up!***
Dr. Roni Holler
Elizabeth Duffy
Julia Sterman
Noor Pervez and Avery Outlaw from the ***Autistic Self-Advocacy Network***

AOTA inspire
2023 Annual Conference & Expo



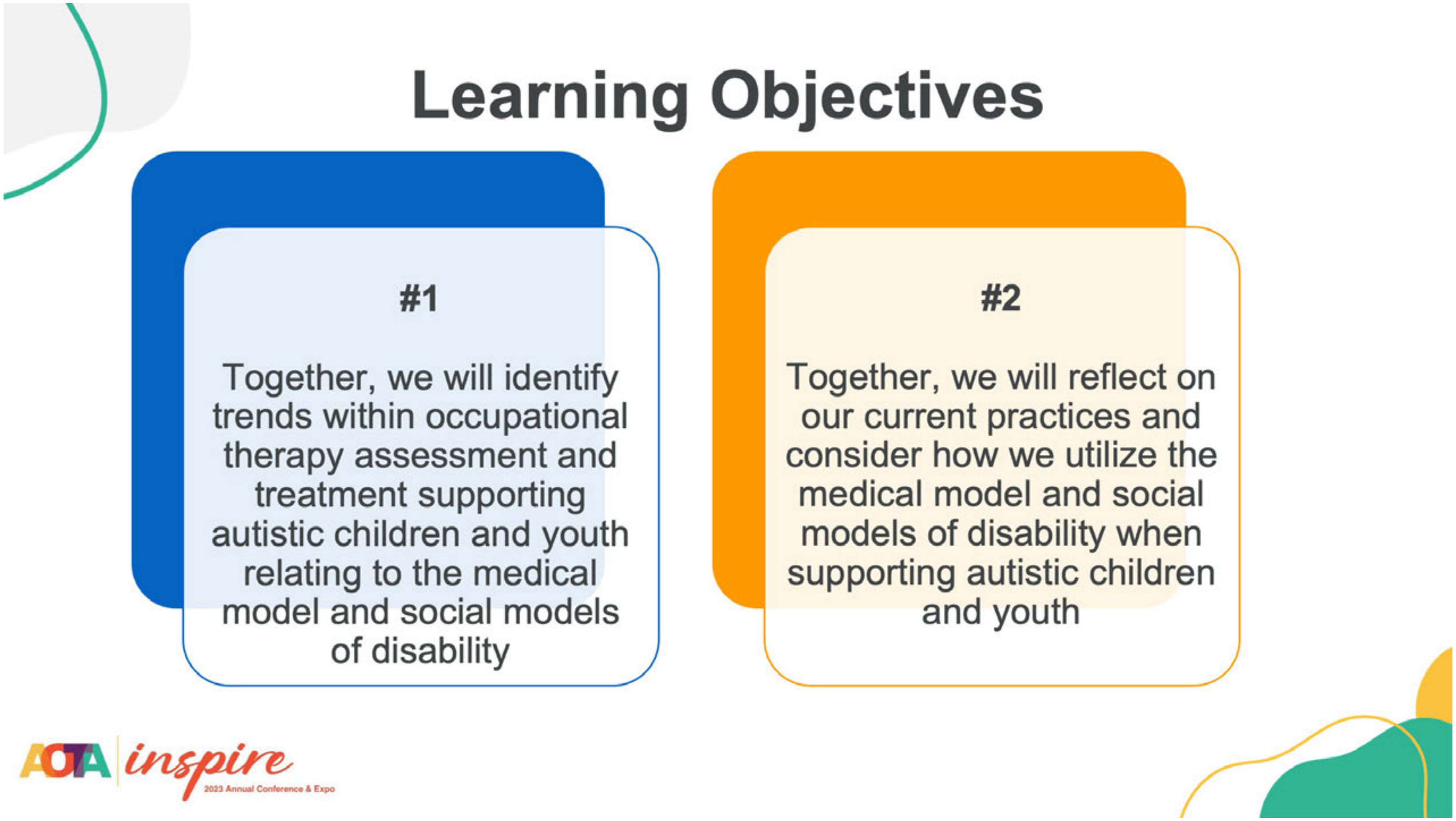
Retrieved from https://en.wikipedia.org/wiki/Autistic_art

Identity and Privilege

Sterman et al. (2022) highlight the importance of illuminating the identities of authors in relation to neurodivergence and recognizing privilege.

Note on Language

Throughout this presentation, identity-first language will be utilized to validate and honor the wishes of the autistic community (Brown, 2020; Bottema-Beutel et al., 2021)



Learning Objectives

#1

Together, we will identify trends within occupational therapy assessment and treatment supporting autistic children and youth relating to the medical model and social models of disability

#2

Together, we will reflect on our current practices and consider how we utilize the medical model and social models of disability when supporting autistic children and youth

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Limited Inclusion of Autistic Individuals in Healthcare Research

- Research has shown autistic individuals are rarely incorporated into the creation of healthcare services intended to be utilized with the autistic community (ASAN, 2020; Monahan et al., 2021)

- The lack of autistic inclusion significantly limits how meaningful the healthcare services actually are for autistic individuals, including occupational therapy

- Treatment strategy effectiveness…for whose benefit?

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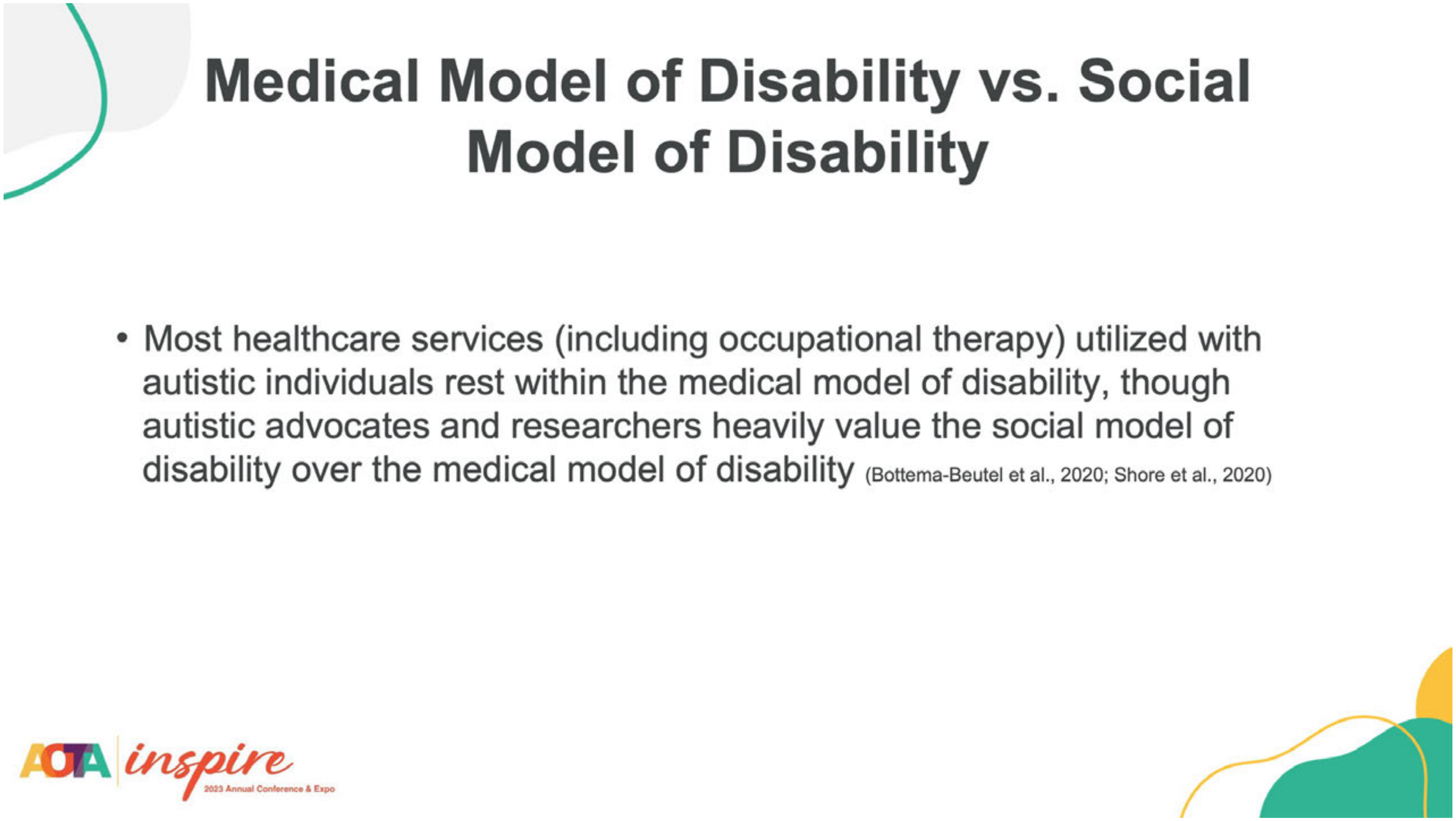

Medical Model of Disability vs. Social Model of Disability

- Most healthcare services (including occupational therapy) utilized with autistic individuals rest within the medical model of disability, though autistic advocates and researchers heavily value the social model of disability over the medical model of disability (Bottema-Beutel et al., 2020; Shore et al., 2020)

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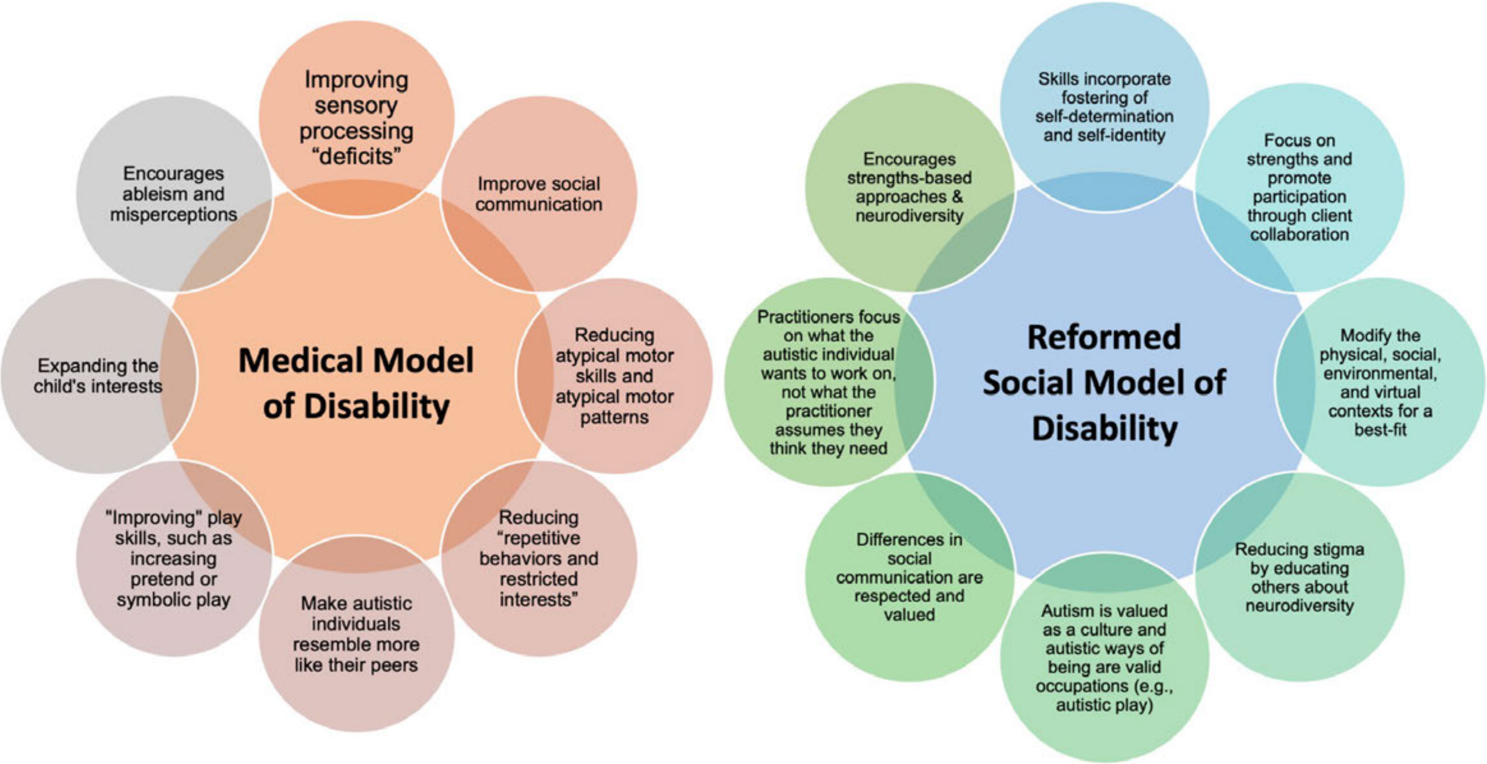

Medical Model of Disability

Improving sensory processing "deficits"

Improve social communication

Reducing atypical motor skills and atypical motor patterns

Reducing "repetitive behaviors and restricted interests"

Make autistic individuals resemble more like their peers

"Improving" play skills, such as increasing pretend or symbolic play

Expanding the child's interests

Encourages ableism and misperceptions

Reformed Social Model of Disability

Skills incorporate fostering of self-determination and self-identity

Focus on strengths and promote participation through client collaboration

Modify the physical, social, environmental, and virtual contexts for a best-fit

Reducing stigma by educating others about neurodiversity

Autism is valued as a culture and autistic ways of being are valid occupations (e.g., autistic play)

Differences in social communication are respected and valued

Practitioners focus on what the autistic individual wants to work on, not what the practitioner assumes they think they need

Encourages strengths-based approaches & neurodiversity

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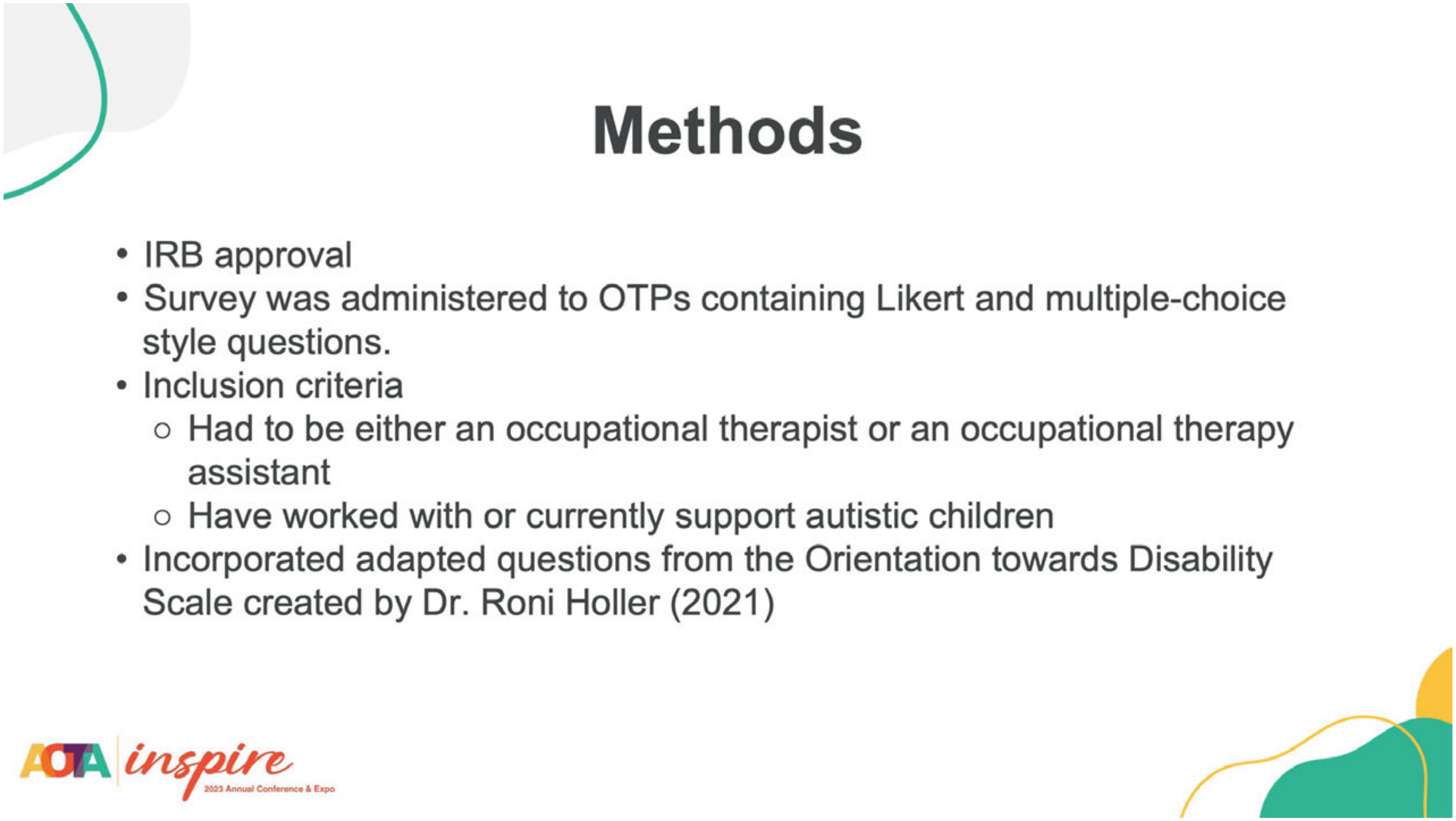
Adapted from AARC, 2020; ASAN, n.d.; Shore et al., 2020; TNC, 2022

Primary research question:
How are occupational therapy practitioners applying concepts of the medical and social models of disability when supporting autistic children and youth?



Methods

- IRB approval
- Survey was administered to OTPs containing Likert and multiple-choice style questions.
- Inclusion criteria
  - ○ Had to be either an occupational therapist or an occupational therapy assistant
  - ○ Have worked with or currently support autistic children
- Incorporated adapted questions from the Orientation towards Disability Scale created by Dr. Roni Holler (2021)

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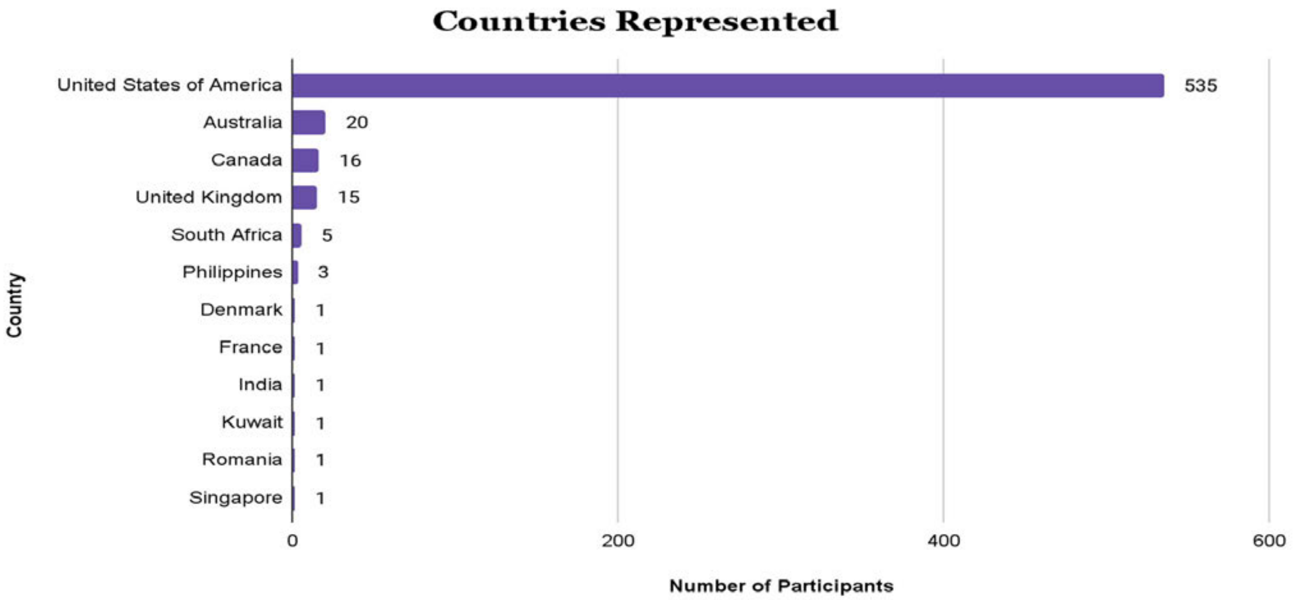
Results - Demographics



Countries Represented

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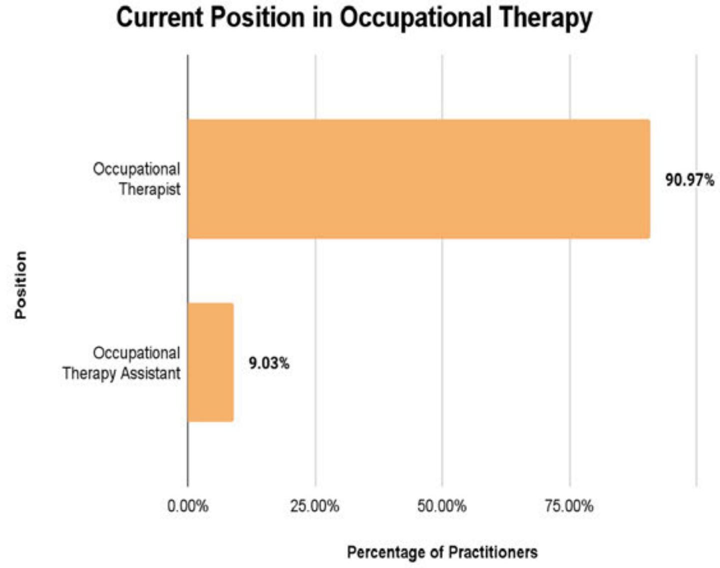
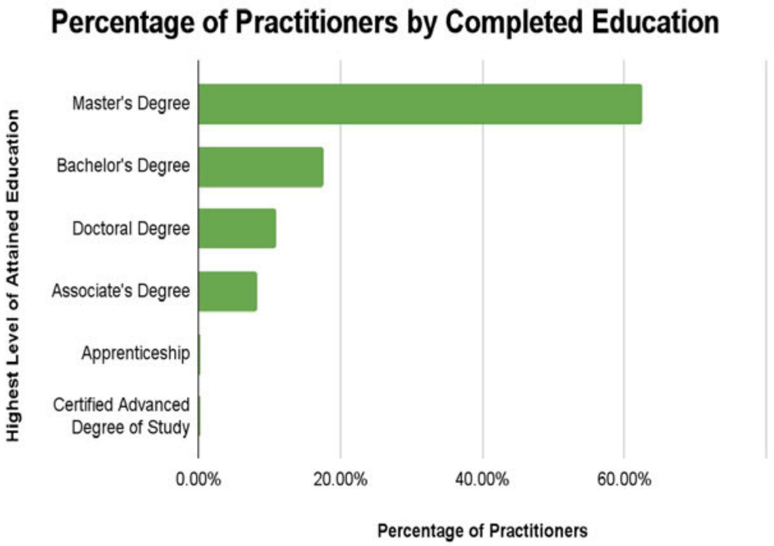
Results - Demographics


Current Position in Occupational Therapy


Percentage of Practitioners by Completed Education

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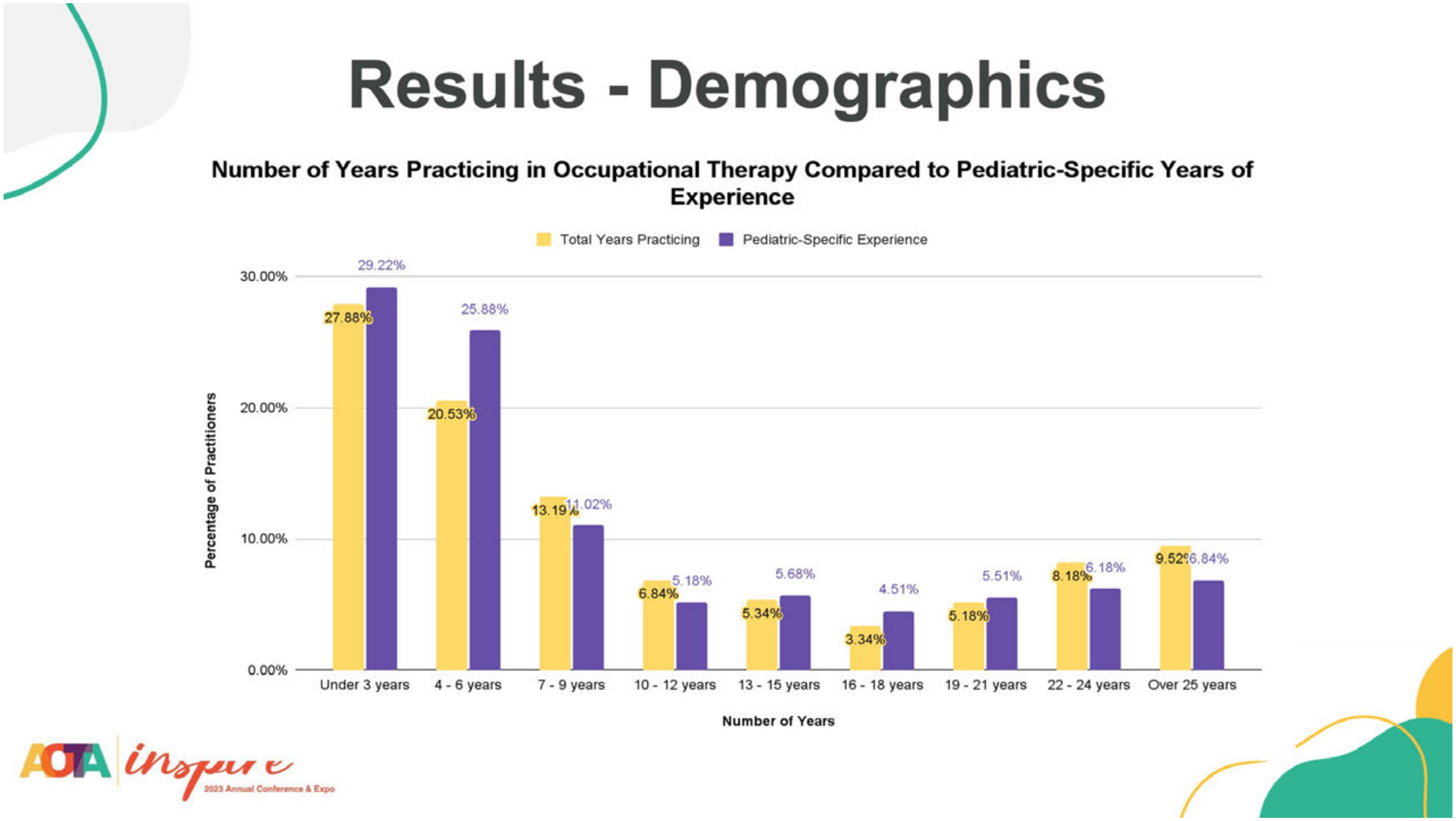

Results - Demographics

Number of Years Practicing in Occupational Therapy Compared to Pediatric-Specific Years of Experience

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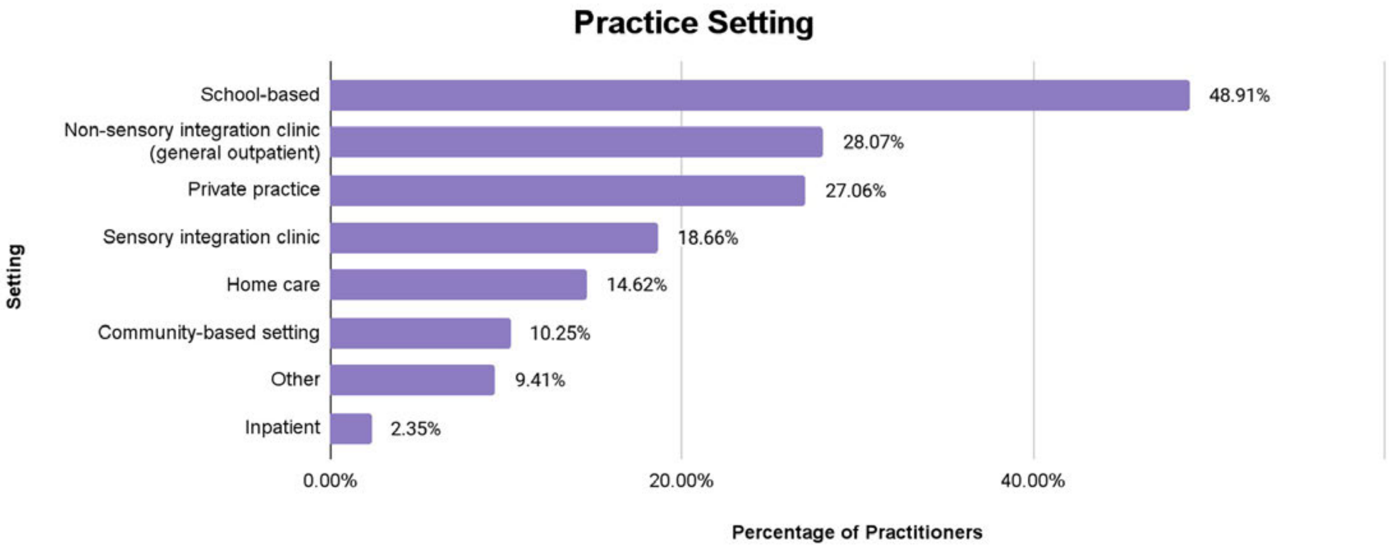
Results - Demographics



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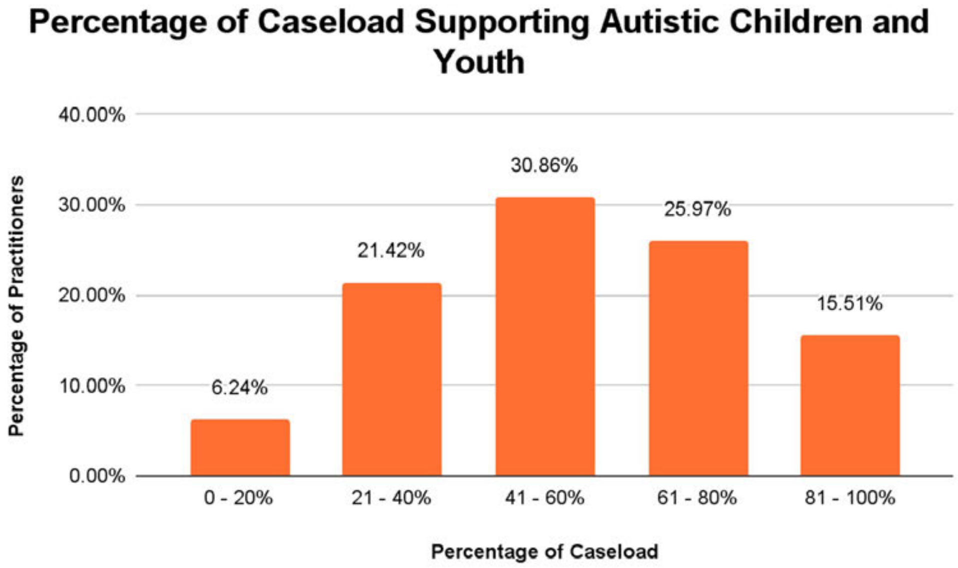
Results - Demographics



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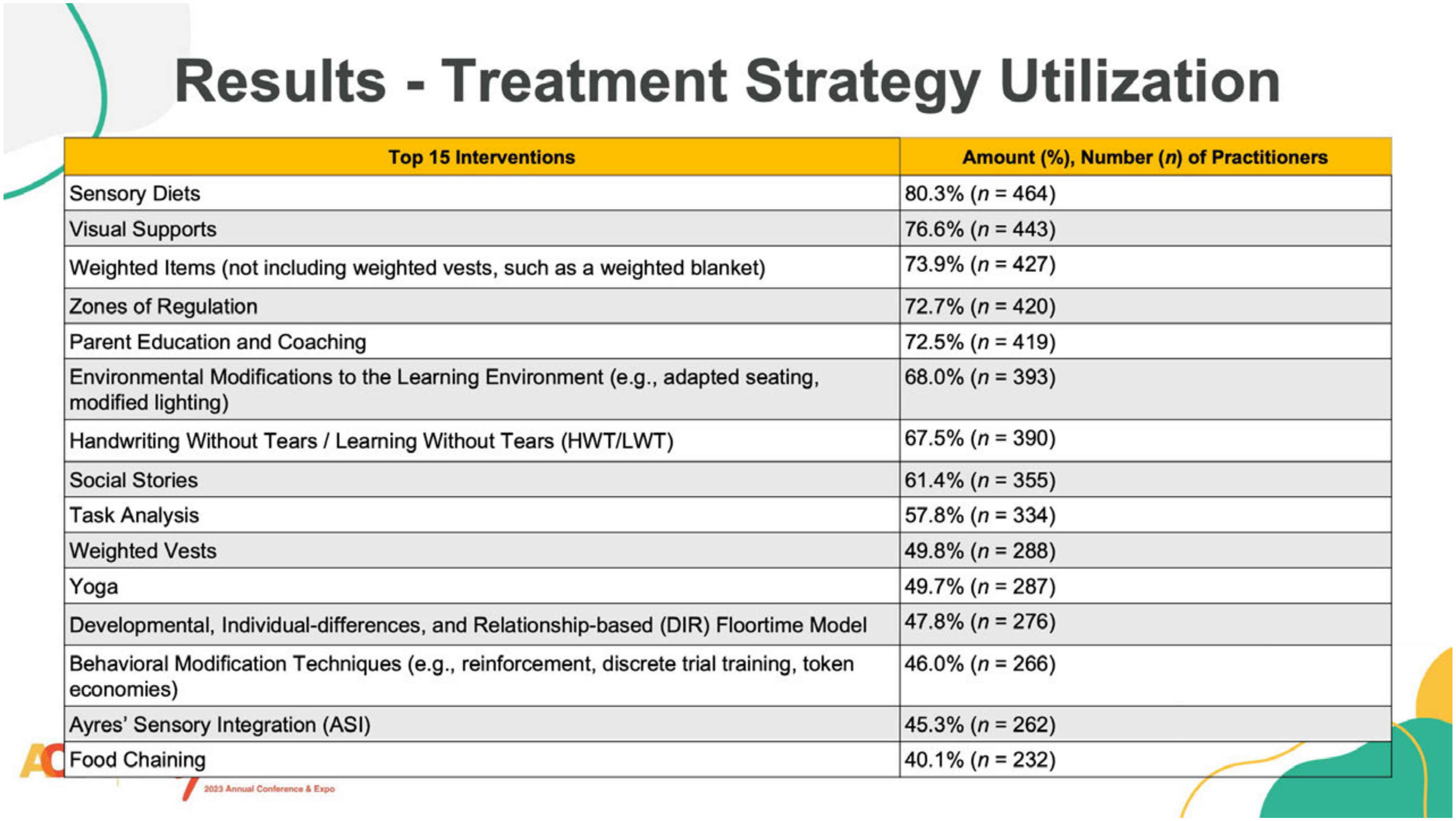

Results - Treatment Strategy Utilization

Top 15 Interventions	Amount (%), Number (*n*) of Practitioners
Sensory Diets	80.3% (*n* = 464)
Visual Supports	76.6% (*n* = 443)
Weighted Items (not including weighted vests, such as a weighted blanket)	73.9% (*n* = 427)
Zones of Regulation	72.7% (*n* = 420)
Parent Education and Coaching	72.5% (*n* = 419)
Environmental Modifications to the Learning Environment (e.g., adapted seating, modified lighting)	68.0% (*n* = 393)
Handwriting Without Tears / Learning Without Tears (HWT/LWT)	67.5% (*n* = 390)
Social Stories	61.4% (*n* = 355)
Task Analysis	57.8% (*n* = 334)
Weighted Vests	49.8% (*n* = 288)
Yoga	49.7% (*n* = 287)
Developmental, Individual-differences, and Relationship-based (DIR) Floortime Model	47.8% (*n* = 276)
Behavioral Modification Techniques (e.g., reinforcement, discrete trial training, token economies)	46.0% (*n* = 266)
Ayres' Sensory Integration (ASI)	45.3% (*n* = 262)
Food Chaining	40.1% (*n* = 232)

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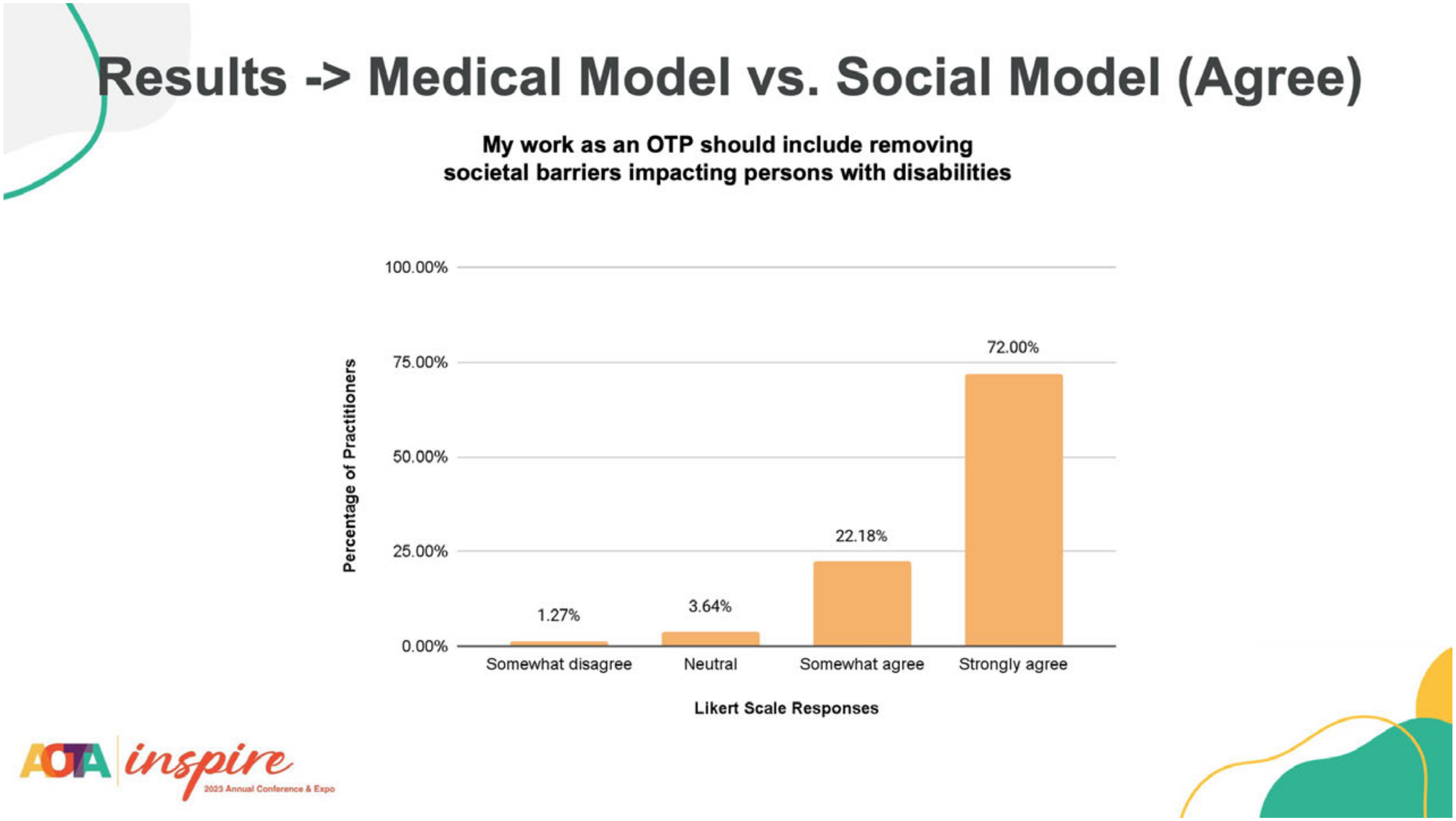

Results -> Medical Model vs. Social Model (Agree)

My work as an OTP should include removing societal barriers impacting persons with disabilities

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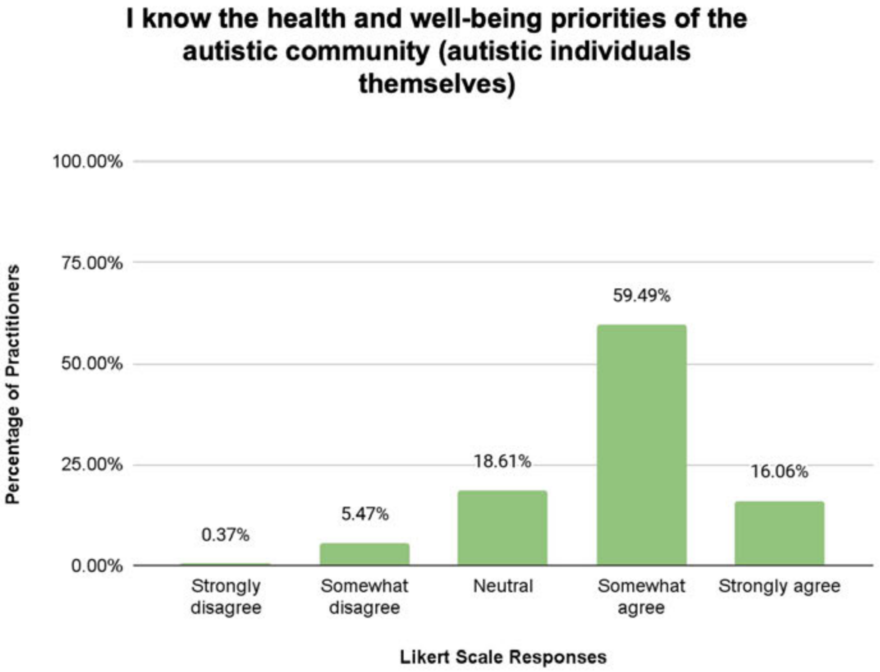
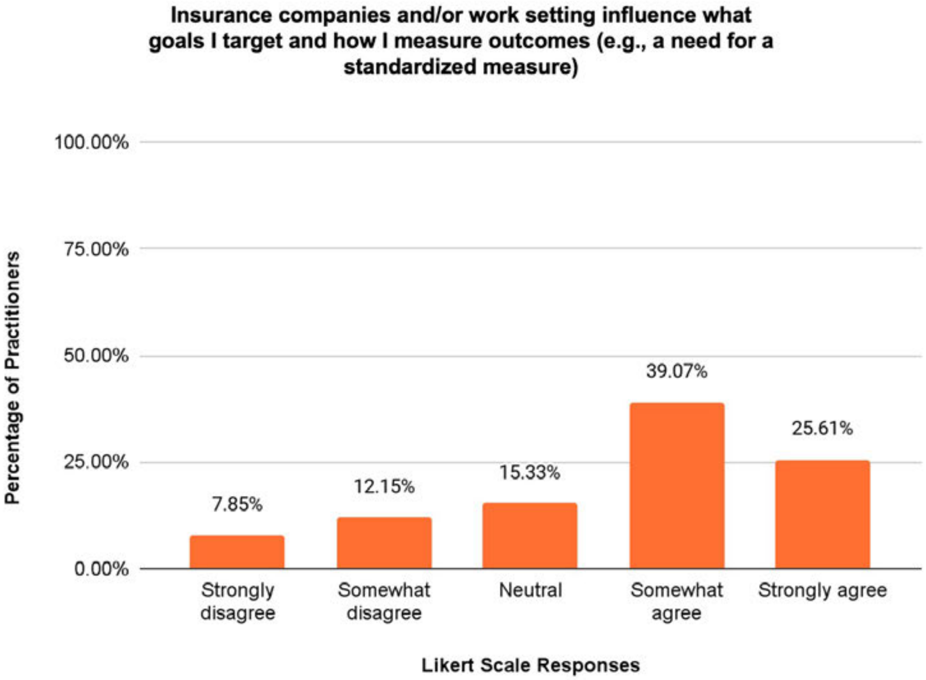
Results -> Medical Model vs. Social Model (Agree)



Results -> Medical Model vs. Social Model



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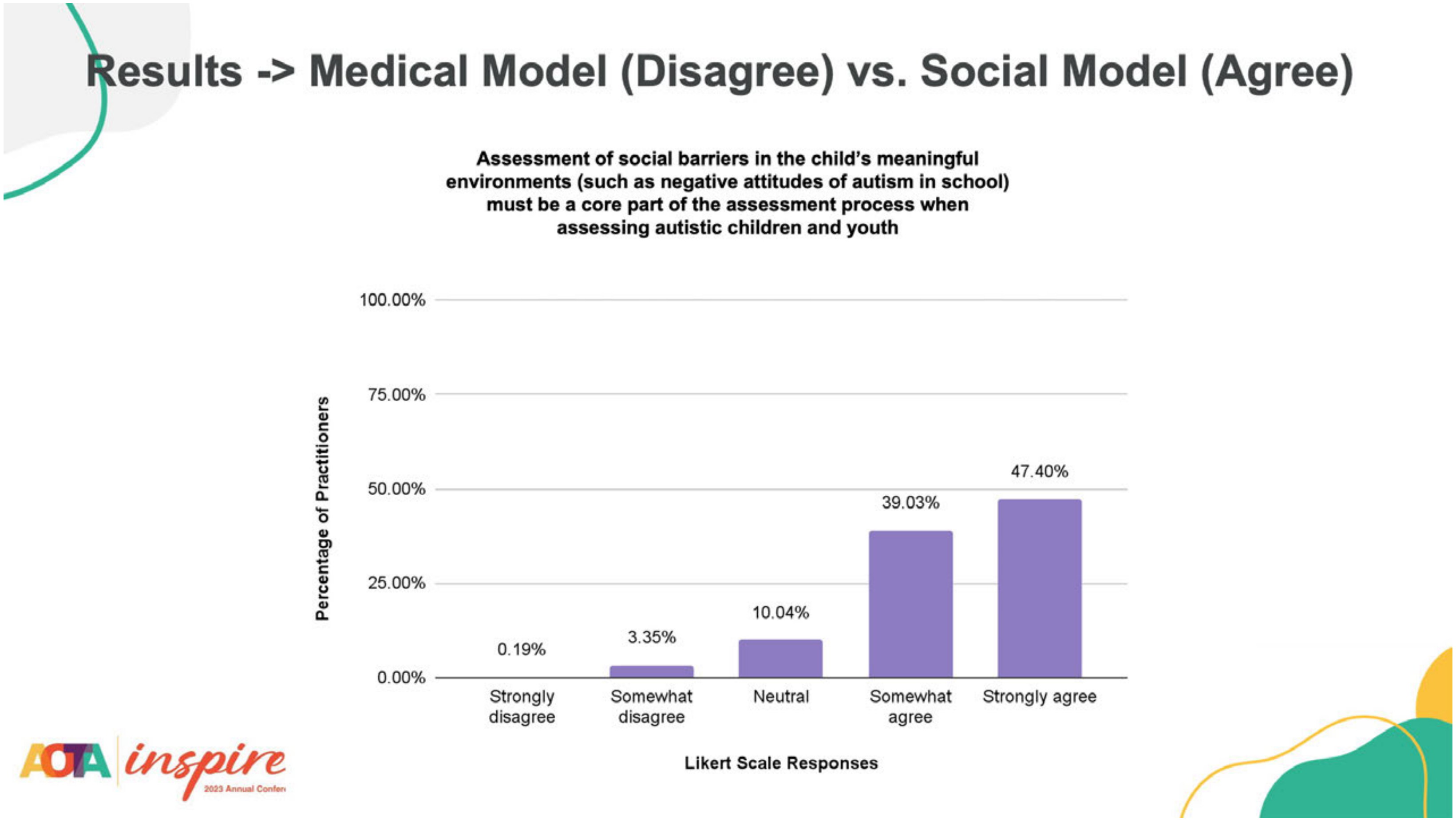
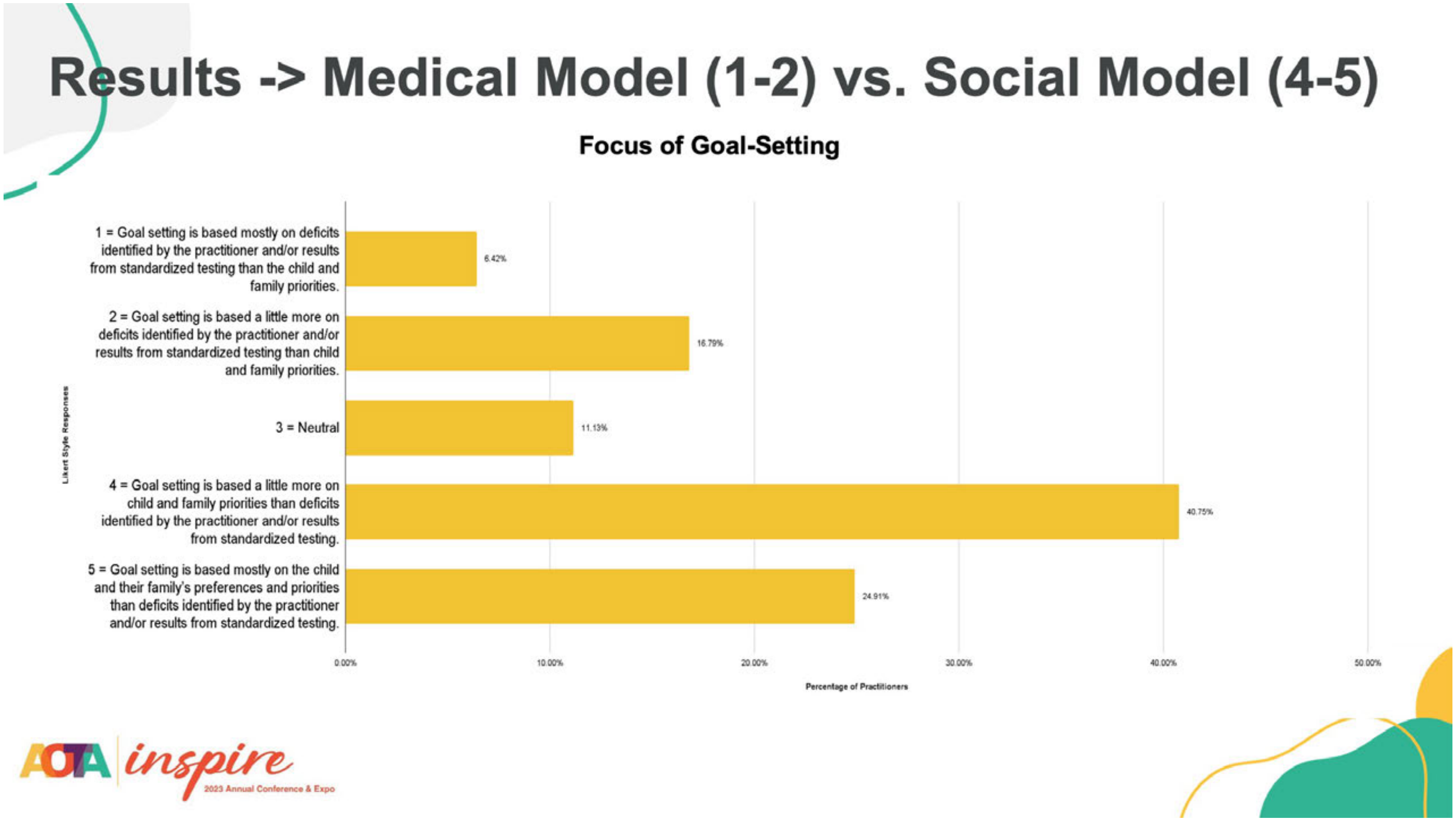


Results -> Medical Model (Disagree) vs. Social Model (Agree)

Assessment of social barriers in the child's meaningful environments (such as negative attitudes of autism in school) must be a core part of the assessment process when assessing autistic children and youth



Results -> Medical Model (1-2) vs. Social Model (4-5)

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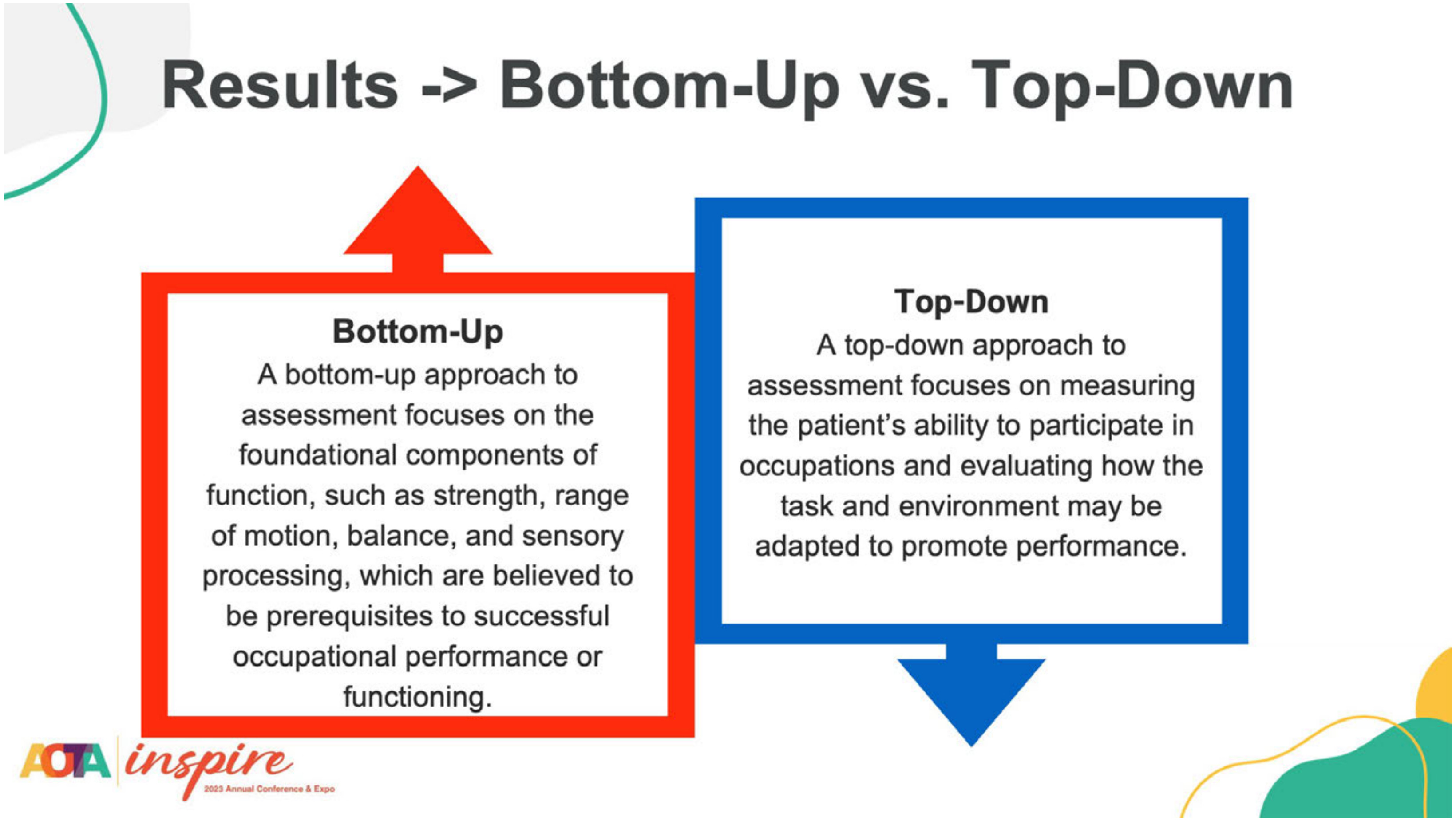

Results -> Bottom-Up vs. Top-Down

Bottom-Up
A bottom-up approach to assessment focuses on the foundational components of function, such as strength, range of motion, balance, and sensory processing, which are believed to be prerequisites to successful occupational performance or functioning.

Top-Down
A top-down approach to assessment focuses on measuring the patient’s ability to participate in occupations and evaluating how the task and environment may be adapted to promote performance.

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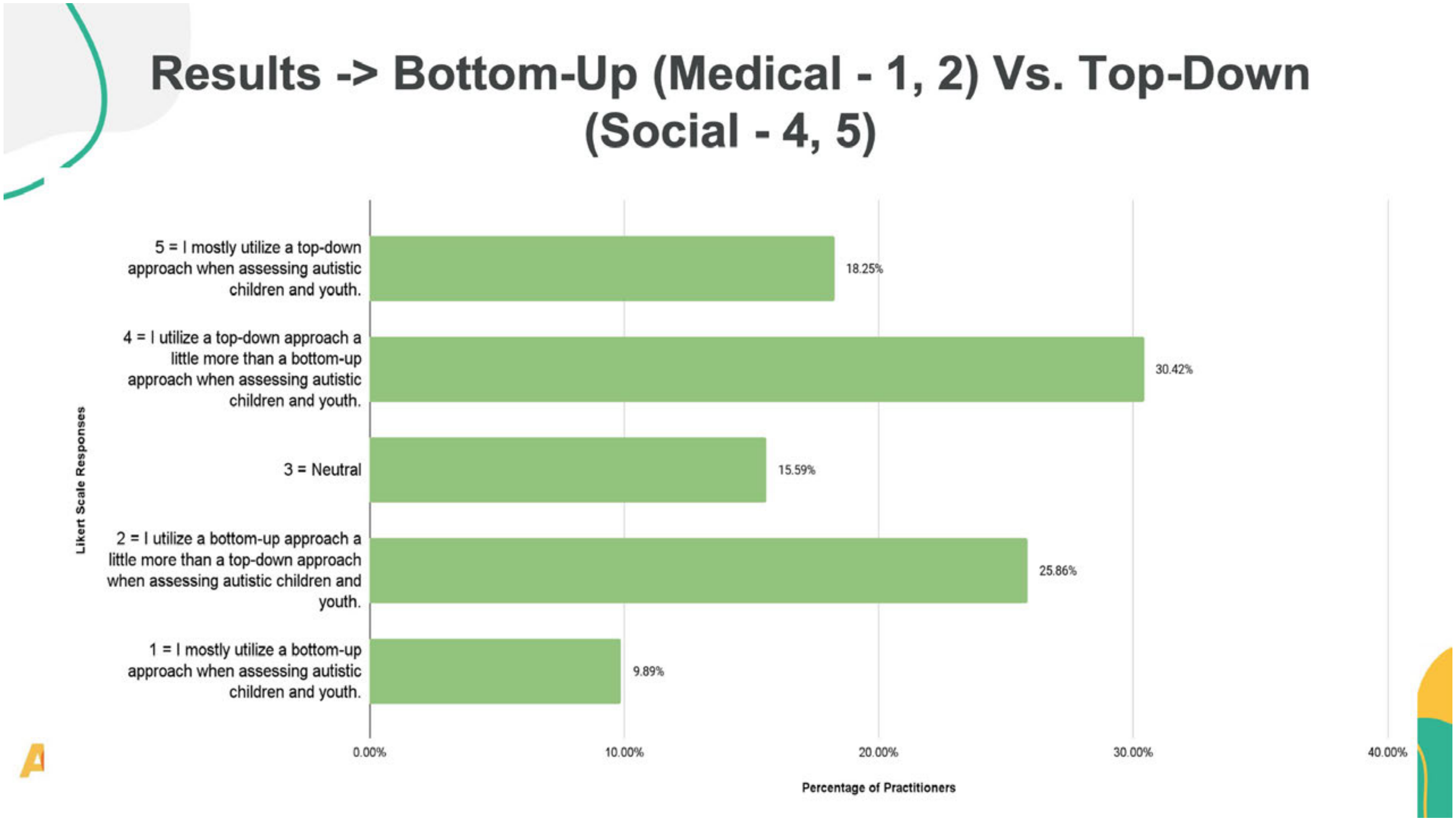
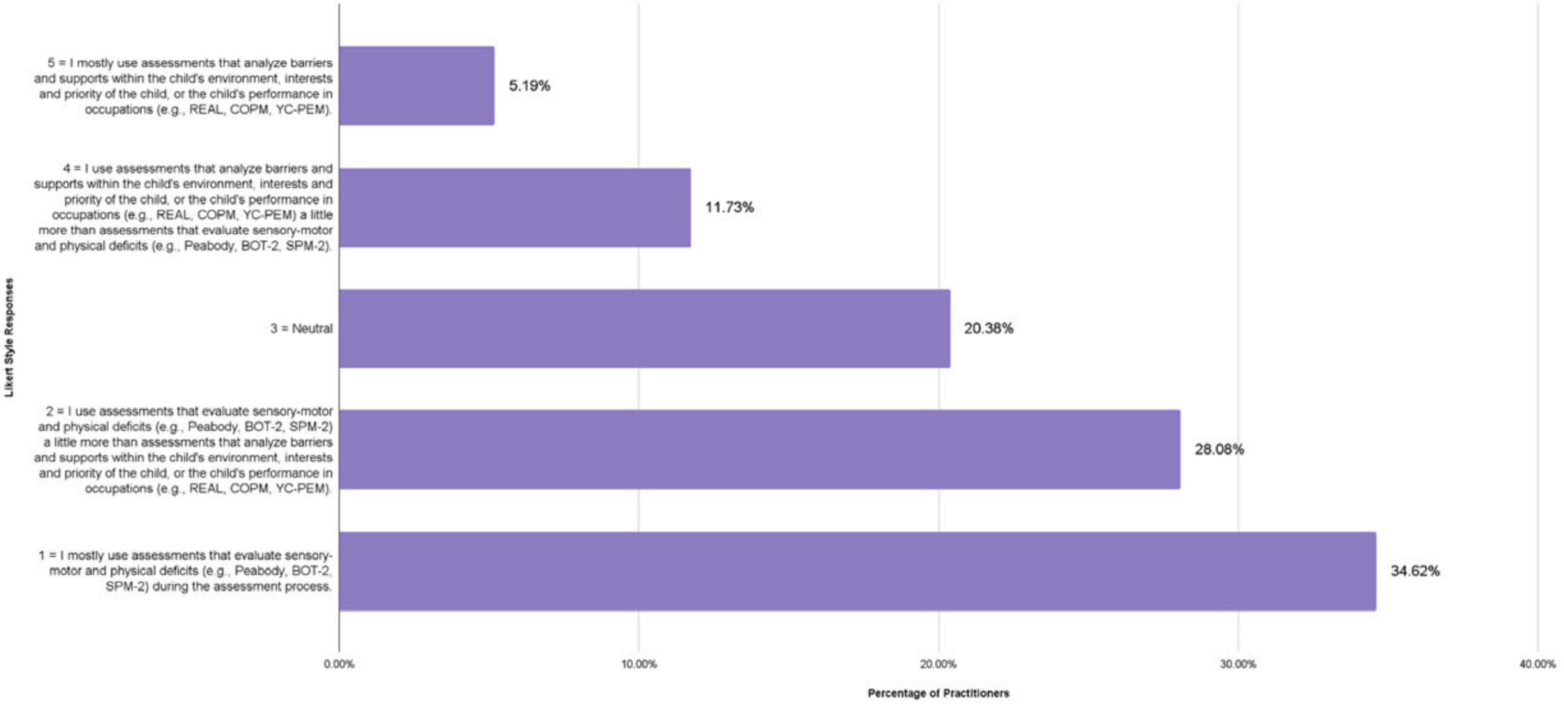
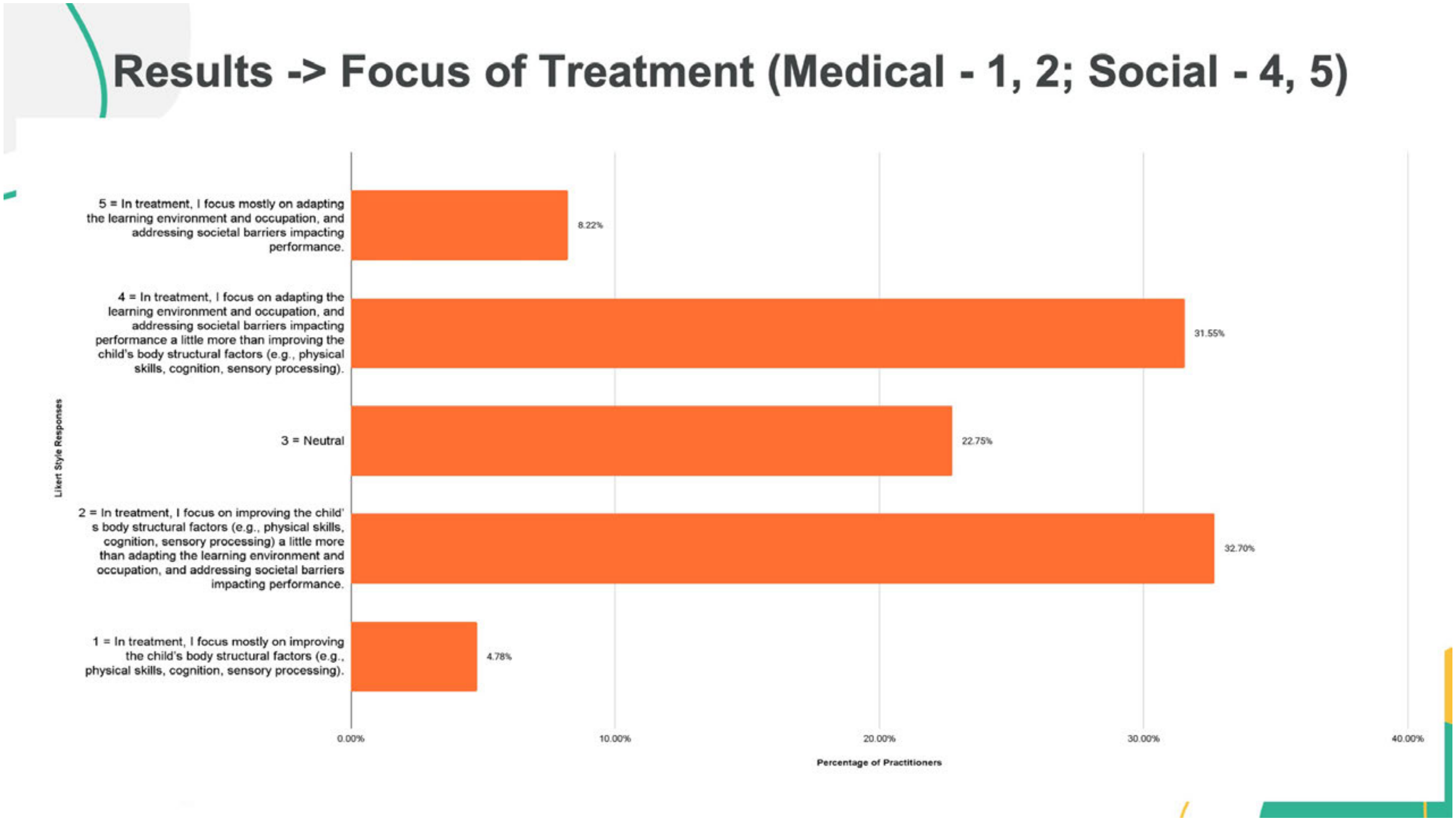


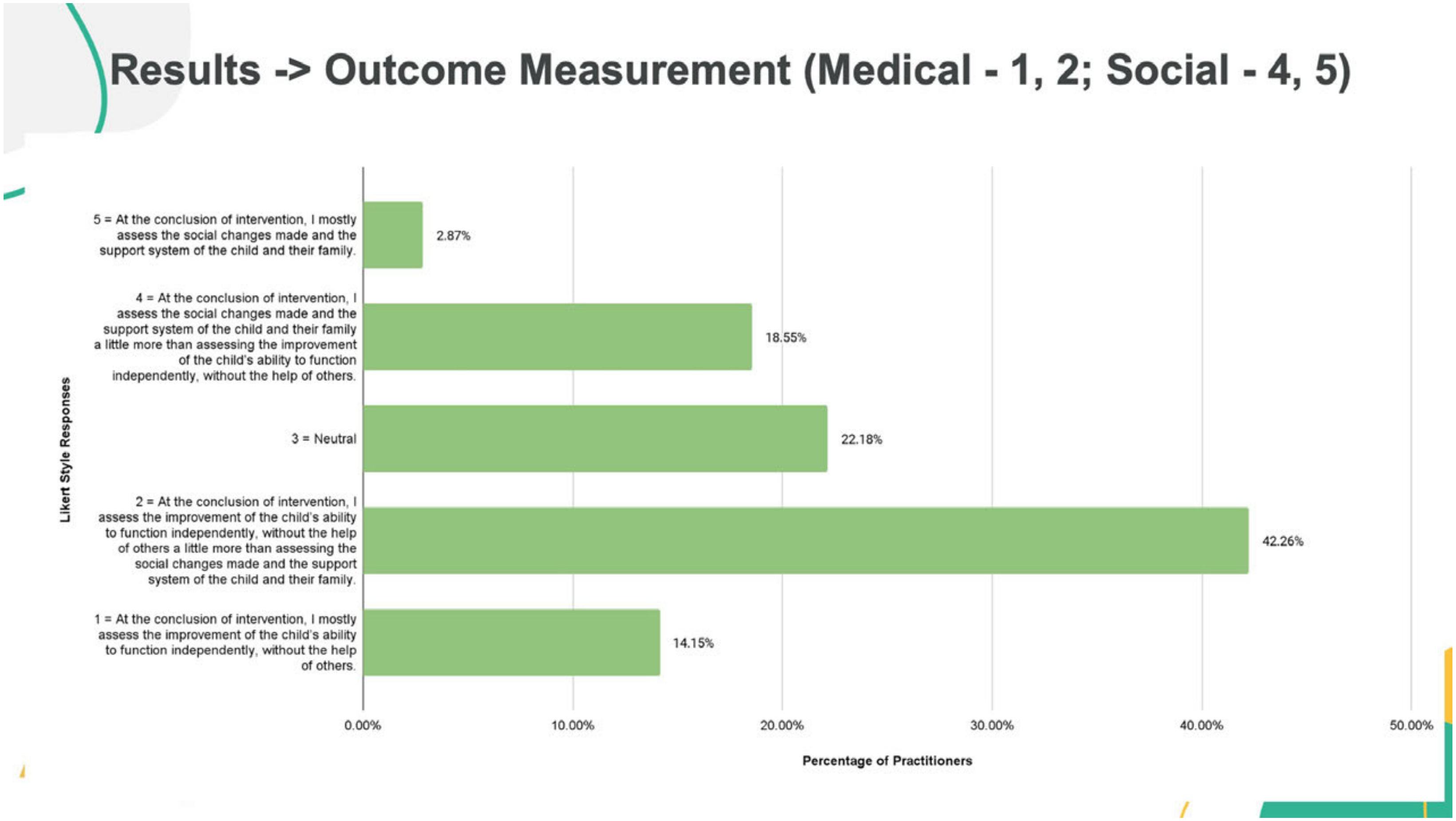
Results -> Bottom-Up (Medical - 1, 2) Vs. Top-Down (Social - 4, 5)

Results -> Assessment Utilization (Medical - 1, 2; Social - 4, 5)

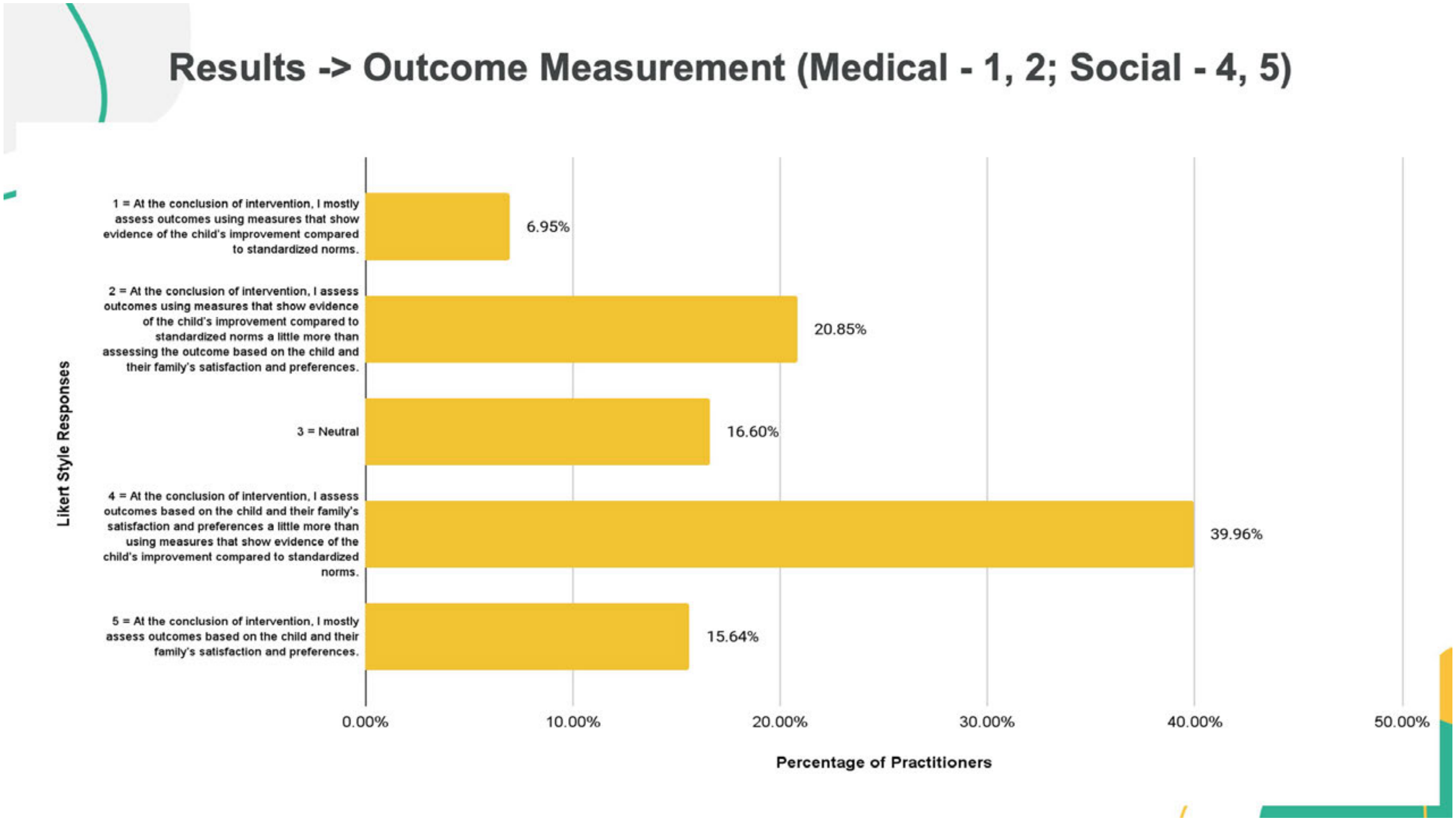




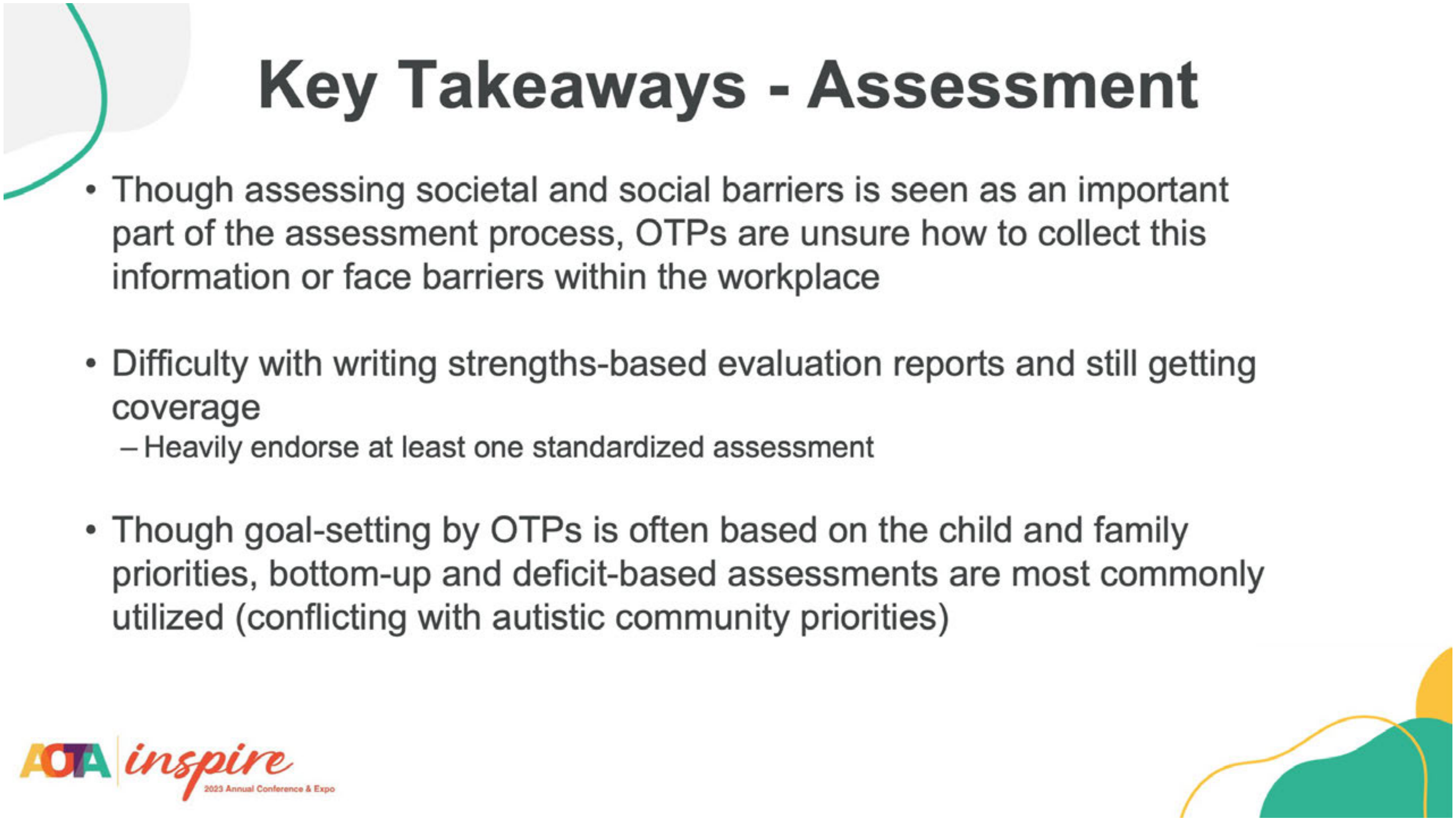
Results -> Focus of Treatment (Medical - 1, 2; Social - 4, 5)



Results -> Outcome Measurement (Medical - 1, 2; Social - 4, 5)



Results -> Outcome Measurement (Medical - 1, 2; Social - 4, 5)



Key Takeaways - Assessment

- Though assessing societal and social barriers is seen as an important part of the assessment process, OTPs are unsure how to collect this information or face barriers within the workplace

- Difficulty with writing strengths-based evaluation reports and still getting coverage
  - Heavily endorse at least one standardized assessment

- Though goal-setting by OTPs is often based on the child and family priorities, bottom-up and deficit-based assessments are most commonly utilized (conflicting with autistic community priorities)

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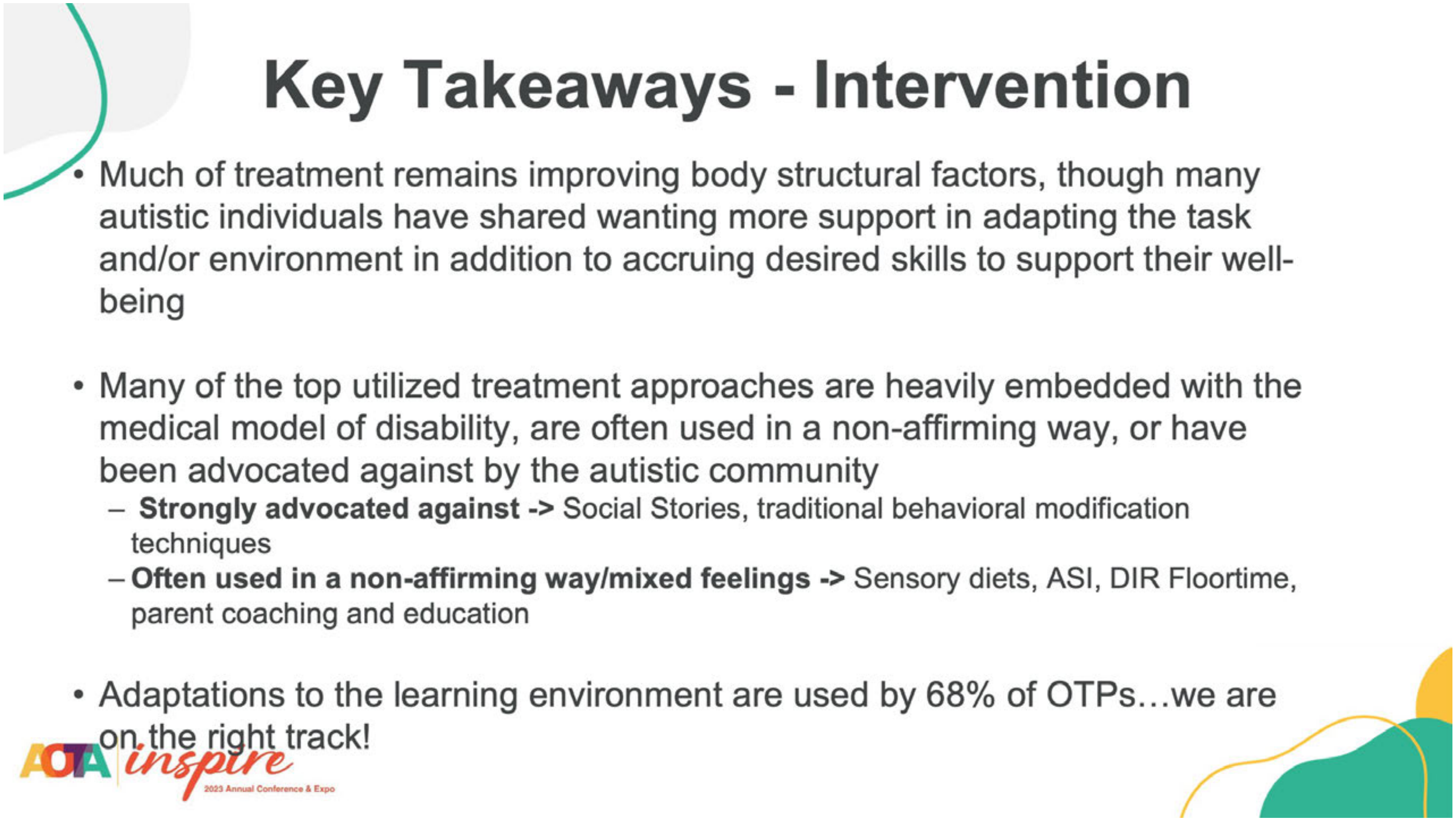

Key Takeaways - Intervention

- Much of treatment remains improving body structural factors, though many autistic individuals have shared wanting more support in adapting the task and/or environment in addition to accruing desired skills to support their well-being

- Many of the top utilized treatment approaches are heavily embedded with the medical model of disability, are often used in a non-affirming way, or have been advocated against by the autistic community
  - **Strongly advocated against ->** Social Stories, traditional behavioral modification techniques
  - **Often used in a non-affirming way/mixed feelings ->** Sensory diets, ASI, DIR Floortime, parent coaching and education

- Adaptations to the learning environment are used by 68% of OTPs…we are on the right track!

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Recommendations

- Actively listen to and empower autistic voices
  - How much of your social media feed comprises of neurodivergent individuals?
- Recognize autistic ways of being as valid occupations (e.g., autistic play, autistic social skills)
- Independence should not always be the assumed goal
- Reflect on the standardized assessments you are using…how meaningful is the data? Standardized assessments typically compare disabled individuals to non-disabled individuals, and for what outcome?
  - If needing to use a standardized assessment, begin with using a top-down assessment (e.g., most likely to be occupation or participation-focused) to minimize harm

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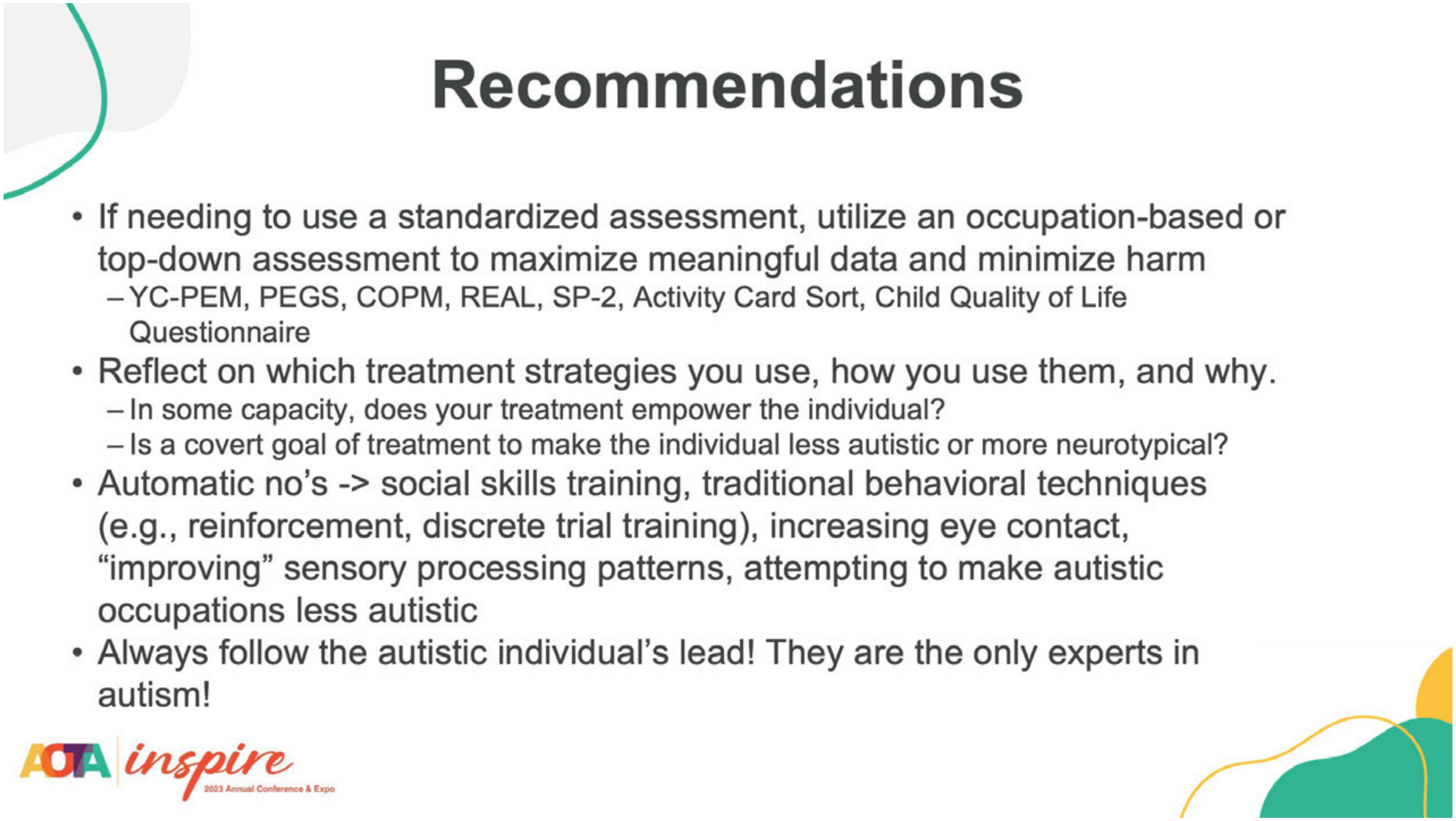

Recommendations

- If needing to use a standardized assessment, utilize an occupation-based or top-down assessment to maximize meaningful data and minimize harm
  - YC-PEM, PEGS, COPM, REAL, SP-2, Activity Card Sort, Child Quality of Life Questionnaire
- Reflect on which treatment strategies you use, how you use them, and why.
  - In some capacity, does your treatment empower the individual?
  - Is a covert goal of treatment to make the individual less autistic or more neurotypical?
- Automatic no's -> social skills training, traditional behavioral techniques (e.g., reinforcement, discrete trial training), increasing eye contact, "improving" sensory processing patterns, attempting to make autistic occupations less autistic
- Always follow the autistic individual's lead! They are the only experts in autism!

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Recommended Resources/Treatment Strategies

Visual Supports & Environmental Modifications	Responsive Feeding Therapy
Dunn's Ecological Model of Sensory Processing	Comprehensive Literacy & Alternative Pencils
Health Promotion Programming (e.g., Every Moment Counts)	Kelly Mahler's Interoception Curriculum
Learn Play Thrive	Trauma-Informed Care
Autism Level Up!	Strengths-Based Approaches
OTs for Neurodiversity	Culturally-Responsive Practice
Autistic Self-Advocacy Network	Affirming Parent Coaching and Education

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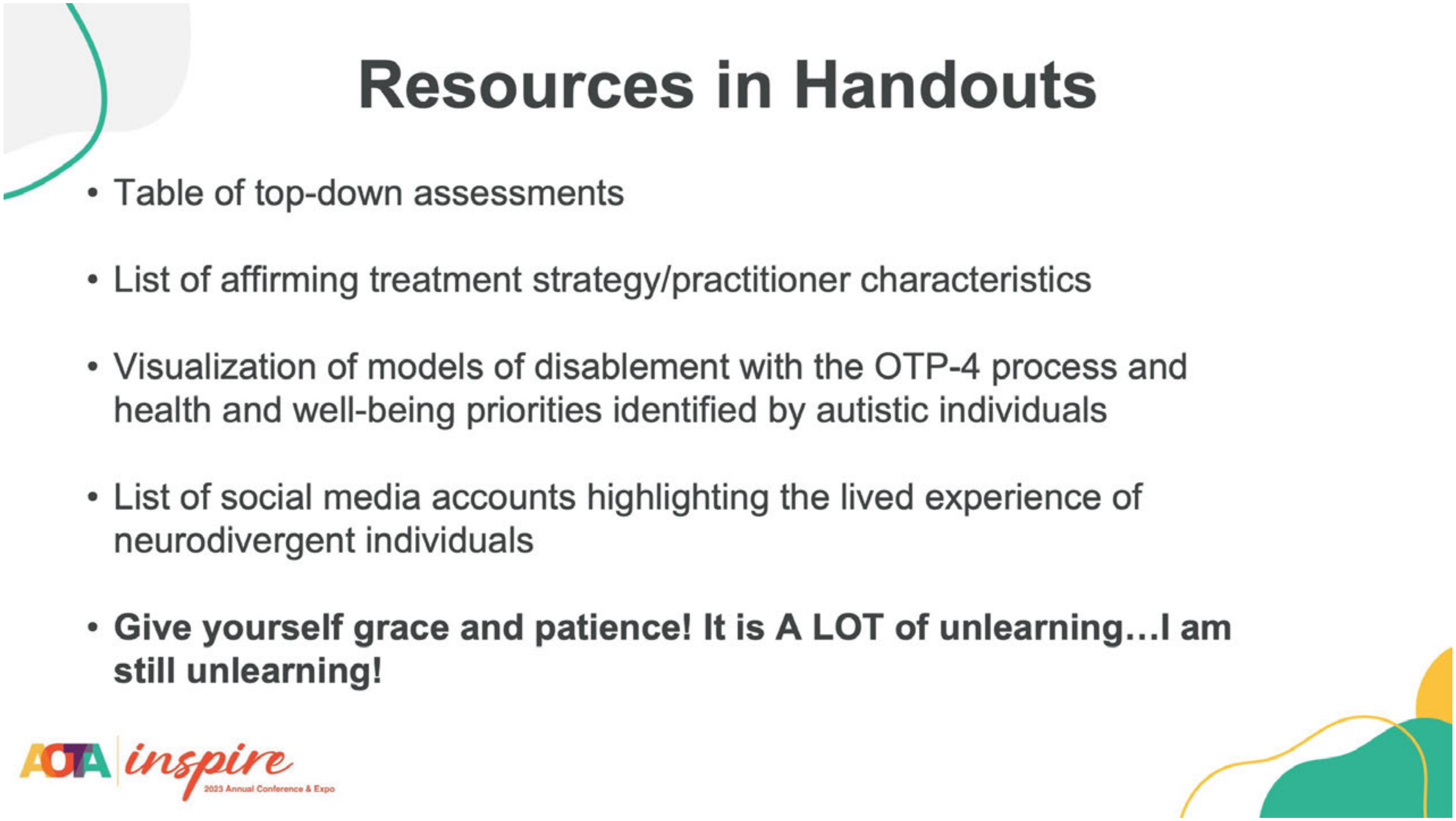
***Be on the lookout in Fall 2023 for the completed doctoral project including this topic!**



Resources in Handouts

- Table of top-down assessments
- List of affirming treatment strategy/practitioner characteristics
- Visualization of models of disablement with the OTP-4 process and health and well-being priorities identified by autistic individuals
- List of social media accounts highlighting the lived experience of neurodivergent individuals
- **Give yourself grace and patience! It is A LOT of unlearning…I am still unlearning!**

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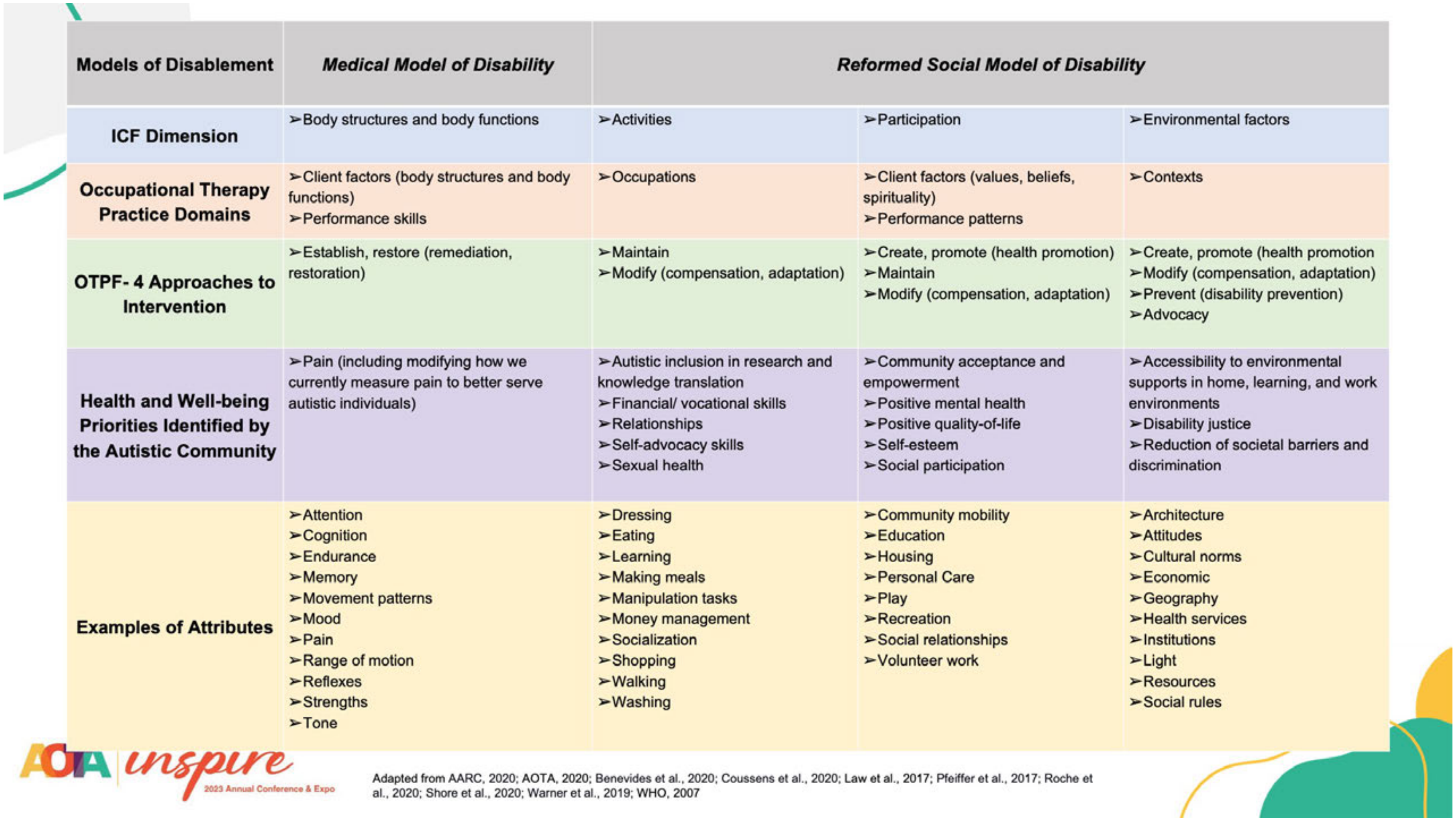

Models of Disablement	*Medical Model of Disability*	*Reformed Social Model of Disability*		
ICF Dimension	➢Body structures and body functions	➢Activities	➢Participation	➢Environmental factors
Occupational Therapy Practice Domains	➢Client factors (body structures and body functions) ➢Performance skills	➢Occupations	➢Client factors (values, beliefs, spirituality) ➢Performance patterns	➢Contexts
OTPF- 4 Approaches to Intervention	➢Establish, restore (remediation, restoration)	➢Maintain ➢Modify (compensation, adaptation)	➢Create, promote (health promotion) ➢Maintain ➢Modify (compensation, adaptation)	➢Create, promote (health promotion ➢Modify (compensation, adaptation) ➢Prevent (disability prevention) ➢Advocacy
Health and Well-being Priorities Identified by the Autistic Community	➢Pain (including modifying how we currently measure pain to better serve autistic individuals)	➢Autistic inclusion in research and knowledge translation ➢Financial/ vocational skills ➢Relationships ➢Self-advocacy skills ➢Sexual health	➢Community acceptance and empowerment ➢Positive mental health ➢Positive quality-of-life ➢Self-esteem ➢Social participation	➢Accessibility to environmental supports in home, learning, and work environments ➢Disability justice ➢Reduction of societal barriers and discrimination
Examples of Attributes	➢Attention ➢Cognition ➢Endurance ➢Memory ➢Movement patterns ➢Mood ➢Pain ➢Range of motion ➢Reflexes ➢Strengths ➢Tone	➢Dressing ➢Eating ➢Learning ➢Making meals ➢Manipulation tasks ➢Money management ➢Socialization ➢Shopping ➢Walking ➢Washing	➢Community mobility ➢Education ➢Housing ➢Personal Care ➢Play ➢Recreation ➢Social relationships ➢Volunteer work	➢Architecture ➢Attitudes ➢Cultural norms ➢Economic ➢Geography ➢Health services ➢Institutions ➢Light ➢Resources ➢Social rules

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Adapted from AARC, 2020; AOTA, 2020; Benevides et al., 2020; Coussens et al., 2020; Law et al., 2017; Pfeiffer et al., 2017; Roche et al., 2020; Shore et al., 2020; Warner et al., 2019; WHO, 2007

Thank you!

https://autism-advocacy.fandom.com/wiki/Neurodiversity

**Bryden Carlson-Giving,
MAOT, OTR/L**

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APPENDIX F – Disability Justice Principles as Created By Sins Invalid (2019)

1. **Intersectionality:** “Simply put, this principle says that we are many things, and they all impact us. We are not only disabled, we are also each coming from a specific experience of race, class, sexuality, age, religious background, geographical location, immigration status, and more. Depending on context, we all have areas where we experience privilege, as well as areas of oppression. The term “intersectionality” was first introduced by feminist theorist Kimberlé Crenshaw in 1989 to describe the experiences of Black women, who experience both racism and sexism in specific ways. We gratefully embrace the nuance that this principle brings to our lived experiences, and the ways it shapes the perspectives we offer.” (Sins Invalid, 2019, p. 23)
2. **Leadership of the Most Impacted:** “When we talk about ableism, racism, sexism & transmisogyny, colonization, police violence, etc., we are not looking to academics and experts to tell us what’s what — we are lifting up, listening to, reading, following, and highlighting the perspectives of those who are most impacted by the systems we fight against. By centering the leadership of those most impacted, we keep ourselves grounded in real-world problems and find creative strategies for resistance.” (Sins Invalid, 2019, p. 23)
3. **Anti-Capitalist Politics:** “Capitalism depends on wealth accumulation for some (the white ruling class), at the expense of others, and encourages competition as a means of survival. The nature of our disabled bodyminds means that we resist conforming to “normative” levels of productivity in a capitalist culture, and our labor is often

invisible to a system that defines labor by able-bodied, white supremacist, gender normative standards. Our worth is not dependent on what and how much we can produce." (Sins Invalid, 2019, p. 23-24)

4. **Cross-Movement Solidarity: "**Disability justice can only grow into its potential as a movement by aligning itself with racial justice, reproductive justice, queer and trans liberation, prison abolition, environmental justice, anti-police terror, Deaf activism, fat liberation, and other movements working for justice and liberation. This means challenging white disability communities around racism and challenging other movements to confront ableism. Through crossmovement solidarity, we create a united front." (Sins Invalid, 2019, p. 24)
5. **Recognizing Wholeness: "**Each person is full of history and life experience. Each person has an internal experience composed of our own thoughts, sensations, emotions, sexual fantasies, perceptions, and quirks. Disabled people are whole people." (Sins Invalid, 2019, p. 24)
6. **Sustainability:** "We learn to pace ourselves, individually and collectively, to be sustained long-term. We value the teachings of our bodies and experiences, and use them as a critical guide and reference point to help us move away from urgency and into a deep, slow, transformative, unstoppable wave of justice and liberation." (Sins Invalid, 2019, p. 24-25)
7. **Commitment to Cross-Disability Solidarity:** "We value and honor the insights and participation of all of our community members, even and especially those who are most often left out of political conversations. We are building a movement that breaks

down isolation between people with physical impairments, people who are sick or chronically ill, psych survivors and people with mental health disabilities, neurodiverse people, people with intellectual or developmental disabilities, Deaf people, Blind people, people with environmental injuries and chemical sensitivities, and all others who experience ableism and isolation that undermines our collective liberation." (Sins Invalid, 2019, p. 25)

8. **Interdependence:** "Before the massive colonial project of Western European expansion, we understood the nature of interdependence within our communities. We see the liberation of all living systems and the land as integral to the liberation of our own communities, as we all share one planet. We work to meet each other's needs as we build toward liberation, without always reaching for state solutions which inevitably extend state control further into our lives." (Sins Invalid, 2019, p. 25)
9. **Collective Access:** "As Black and brown and queer crips, we bring flexibility and creative nuance to our engagement with each other. We create and explore ways of doing things that go beyond able-bodied and neurotypical norms. Access needs aren't shameful — we all function differently depending on context and environment. Access needs can be articulated and met privately, through a collective, or in community, depending upon an individual's needs, desires, and the capacity of the group. We can share responsibility for our access needs, we can ask that our needs be met without compromising our integrity, we can balance autonomy while being in community, we can be unafraid of our vulnerabilities, knowing our strengths are respected." (Sins Invalid, 2019, p. 26)

10. **Collective Liberation:** “We move together as people with mixed abilities, multiracial, multi-gendered, mixed class, across the sexual spectrum, with a vision that leaves no bodymind behind.” (Sins Invalid, 2019, p. 26)

APPENDIX G – ASAN's Ethical Principles and Strategy Selection Guidance (ASAN, n.d.)

The Autistic Self-Advocacy Network (ASAN) has reviewed the literature and found common ethical questions that arise when creating and selecting strategies to be used with autistic individuals. ASAN has created a well-detailed document outlining ethical standards to consider, and categorized many practices within healthcare as "always acceptable" or "never acceptable/red flag practices to avoid." ASAN advocates these principles and recommendations can be applied to all healthcare services aiming to support an autistic individual. For more information regarding each principle and statement, please review ASAN's (n.d.) document. Please note first-person pronouns, such as "we" and "us" as described by ASAN, references the autistic community which this author is not a member of.

Questions to Consider When Planning for Services and Supports (p. 20)

1) What are the goals of the service, both stated and unstated? Who is involved in coming up with and writing those goals?
2) What beliefs about autism are implied by the service? Why does it target a specific skill or behavior?
3) Who benefits most from the service? How do various people involved in the service (the autistic person, their parents/family, their support people, etc.) benefit?
4) Would you consider this service ethical if it was performed on a non-autistic person?
5) What are the possible (or known) long-term effects of the service on the person?
6) What are the possible (or known) long-term effects of not providing the service or

support with the person?

Principles (pp. 21-22)

1) Autistic people are people.
    a) We are human beings with thoughts, feelings, wants, needs, and dreams. We experience pain and joy, just like non-autistic people do. Our internal experiences and inner lives are important, even if they are different from those of non-autistic people. We have the same human rights as non-autistic people…Autism is not a justification to abuse us or subject us to harmful therapies against our will. This statement is true for all autistic people. Autistic characteristics themselves are not acceptable targets for service provision.
    b) Therapies and services must have a more concrete and substantial rationale for targeting a particular trait than "it is an autistic trait" or "it makes this person look different." Autistic people have full, rich selves….it is not solely the autistic person's duty to "fix" communication breakdowns and differences in experiences between non-autistic people and us. It is also the duty of non-autistic people around us to help fix these breakdowns – and also realize when something is less a problem to be solved and more a matter of different communication styles.
2) Autistic people have the right to give and refuse informed consent just like their non-autistic peers.
3) Therapies and services must focus on improving the autistic person's quality of life by increasing opportunities for and access to self-determination, communication, self-advocacy, and other goals that are important to the autistic person.

4) Autistic children thrive when they have the supports they need to succeed, just like any other child.
    a) Autistic children often respond well to structured, accessible interaction with an adult who is focused on them, supporting their communication and engagement, sharing learning and enjoyment, and providing a warm, positive relationship – as would any child. Providing these kinds of support is crucial, and should not be conflated with “treating” autism. An autistic child who does well or appears more visibly engaged with these kinds of supports in place isn’t becoming less autistic – they’re simply showing what they are capable of with the right support.
5) Therapies and services should use knowledge that we have about humans in general to best support autistic people.
6) Supports don’t need to be autism-specific to help autistic people.
    a) For example, an autistic child who has trouble with handwriting might benefit from the same type of occupational therapy and assistive technology (such as typing assignments rather than handwriting them) that a non-autistic child would. Supports also don’t need to be specifically for disabled people to help. For example, while some autistic adults who want to drive will require specialized instruction, many autistic adults just need the same kinds of driving lessons that non-disabled people have.
7) Autistic people have a wide variety of interests, hobbies, and activities we enjoy, just like non-autistic people. We have the right to engage in these activities without it being a “therapy” or “intervention.”

8) What the service calls itself is not as important as what it actually is.
    a) There are therapies and services that are largely ethical but call themselves ABA because that is the only way insurance will cover them. There are interventions that insist they are not ABA or they are “safe” alternatives to ABA, despite being rooted in ABA or having significant unethical elements.

Always Acceptable Practices (pp. 22-23)

1) Trauma-informed approaches
2) Cultural competency and cultural humility
3) Ensuring that the autistic person always has an effective and robust method of communication as the first priority
4) Support should be provided for as long as the person needs or desires it
5) Giving the person space and time to move around (including stimming), take breaks, and feel comfortable
6) Explicitly encouraging the autistic person to communicate their goals for the service. Including the autistic person as a core member of all goal-setting/planning the course of the service provision and any associated meetings, such as IEP meetings or support planning meetings.
7) **Presuming competence:** presuming that, with the right supports, the autistic person is capable of learning, thinking, communicating, and gaining new skills. A practitioner who presumes competence focuses on identifying the supports an autistic person needs in order to meet their goals, rather than making assumptions about what they can and cannot do.

8) Minimizing physical contact to what is absolutely necessary for the service to support the individual. Asking for consent every time physical contact is necessary and informing the person of exactly what the physical contact will be.
9) Distinguishing when an issue is less something for the autistic person to do differently and more something to change in their environment or address in the behavior of others around them.
    a) For example, if an autistic person has meltdowns at school every day because they find the lighting too harsh, changing the lighting in their classroom instead of trying to get them to tolerate it.
10) Figuring out when the issue is something that could be resolved with assistive technology and equipment.
11) Targeting services and supports towards specific skills and problems
12) Working with other healthcare providers to ensure an issue is truly behavioral, not medical, in nature.
    a) For example, someone who has severe migraines that manifest as meltdowns where they curl into a ball, holding their head, needs to be assessed by a neurologist, not put into a service seeking to change how they behave during a meltdown.
13) Provide support in inclusive settings (those where disabled and non-disabled people are together) whenever possible.
14) Reject functioning labels
15) Acknowledging, celebrating, and encouraging what a person can do and is good at.

16) Embracing the idea that all people (autistic and non-autistic alike) grow up and change on different developmental tracks.

Never Acceptable Practices (pp. 24-26)

1) Targeting "undesirable" traits or behaviors that are common in all people of a certain age, autistic or not.
    a) In other words, therapies and services should not pathologize normal/typical behavior for the age group of the client. An autistic five-year-old being unable to sit still for long periods of time or an autistic 15-year-old wanting to play video games all day aren't "autistic behaviors," they're just things that most five or 15-year-olds go through. Holding autistic people to higher standards than their non-autistic peers merely because they are autistic is unacceptable.
2) Deeming a trait or behavior "desirable" or "undesirable" based on whether it is typical of people of a certain age.
    a) Therapies and services should not force autistic people to engage in a behavior simply because most people their age do it or discourage a behavior because most people their age do not do it.
3) Stating or implying that there is only one possible or "correct" way for all people to learn a skill.
4) Conflating impairments in areas like speech or motor skills with the absence of internal processes and feelings.

5) Teaching autistic children to assume that their viewpoint or way of being in social situations is wrong and that they must defer to their neurotypical peers, whose way of being is "correct."
6) Punishing autistic people differently than non-autistic people for the same behavior solely on the basis of autism/ related diagnoses.
7) Focusing on non-specific "social skills," to the detriment of all other skills.
8) Social skills training that encourages autistic people to merely "act neurotypical" rather than presenting neutral information for navigating social interactions.
    a) Too many social skills services simply promote masking or camouflaging autistic traits, or inflexibly presume there is one correct way to handle a given situation. Support in thinking through social scenarios should not be seen as *training* but should aim to empower autistic people to self-advocate and give us tools to make the social decisions that we decide make the most sense for us.
9) A goal of indistinguishability, or making the autistic person appear "normal" or exactly like their non-autistic peers.
10) A goal of reducing stimming.
    a) There are some stims that a person may want or need to redirect as a matter of safety. But even when there is a very good reason to stop or modify a particular stim, the goal should never be to eliminate stimming entirely. The goal should be to help them find a stim that does not have the same negative effects (for example, someone who is distressed by hitting their AAC device might get calming input by squeezing a stim toy instead).

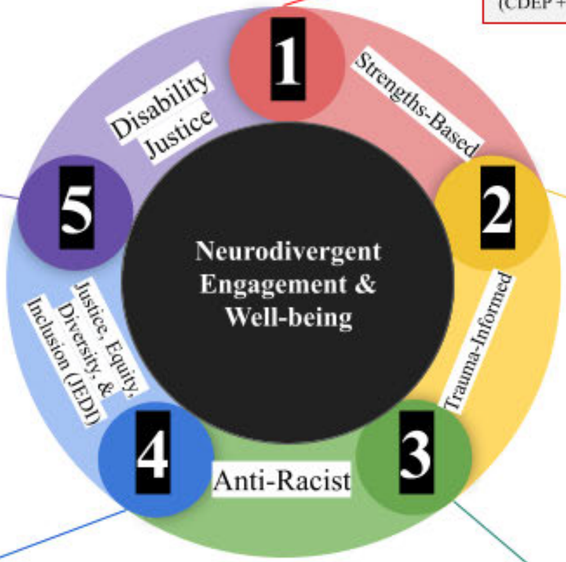
11) Using restraints or seclusion of any kind.
12) Using aversives of any kind.
13) Abuse or neglect of any kind, including, but not limited to, physical, verbal, emotional, and sexual abuse.
14) Using basic needs (for example, food, drink, toys, favored objects, breaks, change of activity, attention, special interests) as rewards.
15) Withholding basic needs (for example, food, drink, toys, favored objects, breaks, change of activity, attention, special interests) as a punishment.
16) Hassling, harassing, coercing, or annoying an autistic person who has communicated "no" until they say "yes." Coerced consent is not consent.
17) Knowingly or intentionally overriding someone's "no."
18) Using "exposure therapy," or teaching autistic people to "tolerate discomfort" in and of itself, as opposed to giving us tools to self-regulate, helping us reduce and control exposure to painful stimuli, or changing our environment to reduce exposure to triggers.
19) Patronizing/infantilizing language and actions, such as treating an autistic person as younger than they are.
20) Using "mental age," e.g., saying "this person has the mental age of a 5-year-old" of someone who is not actually five years old.
    a) Autistic people, regardless of our support needs, are the same "mental age" that our bodies biologically are. An autistic adult with an intellectual disability is not a 5-year-old in an adult's body; they are an adult with a lifetime of experiences,

    knowledge, and relationships, who also is autistic and has an intellectual disability.

21) Using deficit-based thinking or focusing mainly on what an autistic person cannot do or has trouble with.
22) Touching autistic people unnecessarily (for example, using hand-over-hand tactics).
23) Portraying a service as “the only way [the autistic person] can learn.”
24) Portraying autistic people as some kind of nebulous “other” to whom general knowledge about humanity does not apply.
25) Asserting that an autistic person will never “improve” without multiple hours of a specific therapy/service per day.
26) Subjecting an autistic person to multiple hours of service per day, to the point where the person is prevented from other important life activities (including rest and relaxation), the person is obviously in distress, or there is no observable purpose or benefit for the excess hours of service provision.
    a) This does not need to be multiple hours of one service per day; it can be the sum total of multiple services or services on top of other necessary events in the person’s day, such as school.
27) Requiring autistic people to give up or not use their assistive technology unless there is a clear and unavoidable reason why the service could harm the assistive tech and a suitable alternative is offered.

APPENDIX H – Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model

Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model



Reflection on Ableism

(1) Continuously reflect on how the dominant medical model of disability influences how you view and work with neurodivergent children and youth, and (2) community-defined evidence practice and lived experience-informed practice (CDEP + LEIP) are prioritized.

Meaningful Evaluations

(1) Neurodivergent individual is primary source of information, (2) outcome measures included focus on participation in meaningful occupations designated by the neurodivergent individual and adaptations to natural contexts and tasks, (3) no comparison to non-disabled/non-neurodivergent norms , (4) consideration of autistic health and well-being priorities, (5) goals focus on skills that empower the individual and not making the teacher/family's lives easier, and (6) strengths-based assessment and reporting.

Affirming Service Delivery

(1) Therapy seeks to understand and support the individual and promote authentic neurodivergent development, (2) embracing the neurodivergent individual's sensory processing differences, (3) natural environments are adapted to be maximally enabling, (4) strengths-based approaches, (5) prioritize techniques created by or in collaboration with neurodivergent individuals, and (6) treatment focuses on empowerment of individuals and changing of environment than attempting to change the individual.

Neurodivergent Outcomes

(1) Outcome measurement focuses on the neurodivergent' individual's satisfaction with performance, (2) measurement of adaptations to natural contexts are prioritized, (3) and if standardized assessments are required, top-down measures are prioritized to minimize harm.

Advocacy

(1) Education of alternative ways to learn and experience the world, (2) empowerment of neurodivergent occupations as valid forms of being, (3) advocate for professional organizations and publications to prioritize neurodiversity research and neurodivergent researchers/practitioners for publications on neurodivergent occupations, and (4) continuously challenge ableism within the occupational therapy profession.

APPENDIX I – Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model Cycle Phase and Underlying Framework Supporting Literature and Descriptions

Model Segments	Description
Reflection on Ableism	- Understand that our healthcare system and education (including occupational therapy), is heavily dominated by the medical model of disability. You are likely to view differences in neurology and were likely taught to modify or change a neurodivergent individual to be more neurotypical, though this may not always be apparent. Recognize ableism has many forms including micro-aggressions, and ableism discriminates against disabled individuals (Bottema-Beutel et al., 2021; Marnell, 2023; Pellicano & den Houting, 2022). A brief example is measuring the abilities of a disabled individual to a non-disabled individual as the standard for functioning, creating goals emphasizing age-appropriate expectations, and tolerating input; these are ableism goals, not exemplifying neurodiversity-affirming practice (Marnell, 2023). Understand ableism and intentionally avoid it. - Take a free assessment to see how your ableism may influence your worldview, such as Bridges Learning Systems' (https://bridgeslearningsystem.com/wp-content/uploads/2021/12/SEA-Bridge_Assessment-of-Individual-Ableism.pdf) or VanDaaalan's Neurodiversity Attitudes Scale (https://keep.lib.asu.edu/_flysystem/fedora/c7/VanDaalen_asu_0010E_20671.pdf) - View assessment of ableism as not a single occurrence but a never-ending reflection (continuously consider where you are on the growth spectrum for challenging health inequities (see Appendix) - Recognize ableism is rooted within our occupational therapy scope of practice. For example, many of our assessments construe and prioritize non-disabled functionality, and place non-disabled ways of living as the goal for optimal health and well-being. Additionally, the profession heavily emphasizes function and independence over community living and interdependence, which conflicts with disabled perspectives (Mahipaul, 2022) **- Occupational therapy must adopt an anti-ableism lens**, and this includes all aspects of occupational therapy service delivery and addressing the profession's biased ableist language (Patten, 2023). - Patten (2022, figure 5) provides the following methods OTPs can implement to committing to an anti-ableist lens 1. Changing your language 2. Documenting strengths intentionally and with substance 3. Using different outcomes of success 4. Understand the impact of race, gender, sexuality, and class on services and outcomes 5. Educate on ableism, disability studies, and disability justice 6. Hire disabled educators, therapists, and researchers 7. Teaching students to be wrong and understand their biases 8. Collaborate with disabled researchers

	9. Assess if you contributing to a high or low functioning environment 10. Supporting self-advocacy 11. Stop the normalcy narrative - OTPs may consider utilizing the *seven-step framework for critical analysis* to support their reflection of overt and covert ableist practices (Nixon et al., 2017)
Meaningful Evaluations	- **Most important ->** center the neurodivergent child as the primary source of information - Incorporate neurodivergent created questionnaires, such as the WHO's autism spectrum quality of life (ASQoL) form with the WHOQoL-BREF (https://research.ncl.ac.uk/neurodisability/leafletsandmeasures/autismqualityoflifemeasure/asqolmeasure/) - Consider assessment and screening tools maximizing lived experiences and well-being priorities, such as the Canadian Occupational Performance Measure (COPM), Young Child - Participation and Environment Measure (YC-PEM), Participation and Environment Measure - Children and Youth (PEM-CY), Perceived Efficacy of Goal-Setting System (PEGS), Pediatric Interest Profiles, Child Occupational Self-Assessment (COSA), Self-Perception Profile for Children and Adolescents, Heart Drawing Tool, Visual Activity Sort, and Pictured Child's Quality of Life Questionnaire (AUQUEI) - Currently in development -> TAP Into Strengths Questionnaire, a strengths-based questionnaire by an autistic OTP and academic (Marnell, 2023) - Consider completing a sensory assessment (observation and Sensory Profile-2) secondary to sensory processing differences existing for most neurodivergent individuals (Marnell, 2023) - Assess the individual's natural environments (home, school, communication partners) for supports and barriers - If standardized assessments are required for insurance reimbursement purposes, strongly consider top-down and occupation-based assessments to maximize meaningful data and minimizing harm (see Appendix) - Consider using the following occupational therapy models to ensure care is holistic, environmental factors are considered, and culture is validated: Kawa Model, Model of Human Occupation, and the Person Environment Occupation Performance Model. - Set goals with the neurodivergent individual and not assume family's priorities align with the individual's hopes, dreams, and identity
Affirming Service Delivery	- Prioritize treatment techniques and resources created by or in collaboration with neurodivergent individuals, such as Autism Level UP!, Every Moment Counts, Learn Play Thrive Approach, Responsive Approach to Feeding, OTs for Neurodiversity, Strengths-Based Approaches, Comprehensive Literacy and alternative pencils, and Kelly Mahler's Interoception Curriculum (see Appendix for more approaches) - No inclusion of behavioral feeding methods, Applied Behavioral Analysis (ABA), or traditional behavioral techniques (e.g., reinforcement, discrete trial training, pivotal response training)

	- The service targets improving the autistic individual's quality of life by increasing access and opportunities to self-determination, communication, self-advocacy or other goals identified as priorities by the neurodivergent individual (ASAN, n.d.) - If the autistic individual cannot make their goals clear, goals should be created based on the team's best clinical judgment of what will best allow the individual to lead a self-determined life (ASAN, n.d.) - Create a maximally enabling environment for the individual's natural contexts - As defined by the OTPF-4, approaches to intervention emphasize maintain, modify (compensation and adaptation), create or promote (health promotion), and prevention (Shore et al., 2020) - Provision/inclusion of robust method of communication and unrestricted access AAC (ASAN, n.d.; TNC, 2022b). Robust method of communication entails allowing the individual to communicate anything they need in the most effective way possible (e.g., if speech is not an effective method, augmentative and alternative communication [AAC] should be provided) (ASAN, n.d.) - Targeted skills incorporate a fostering of self-determination and self-identity - Focus on strengths and promote participation through client collaboration - Modifying the physical, social, environmental, and virtual contexts for a best fit - Reducing stigma by educating others about neurodiversity - Sensory processing differences are validated without expectations for tolerance, extinction, or expecting to modify how they process sensory information (TNC, 2022b). Environmental and task accommodations are provided in line with the individual's sensory processing differences (ASAN, n.d.; TNC, 2022b) - If social participation is targeted, emphasis is placed on recognizing diversity in social intelligence, such as the double empathy problem for all (ASAN, n.d.; Harvey, n.d; TNC, 2022b). Everyone learns different styles of social communication by neurotype (ASAN, n.d.; TNC, 2022b). No promotion of masking or camouflaging autistic traits in any way (ASAN, n.d.; TNC, 2022b)

Neurodivergent Outcomes	- Strengths-based goal writing and strengths-based evaluation reports (ASAN, n.d.; Marnell, 2023; TNC, 2022b). Remember, no one builds their lives on remediated “deficits!” (Patten, 2022) - Consider incorporating autistic health and well-being priorities, including perception and acceptance of self, positive mental health, self-esteem, academic well-being, social participation and relationships, meaningful everyday tasks instead of discrete skills, changes made to the natural environments, quality of life, self-advocacy skills, the individual’s ability to utilize accommodations and adaptations, and reduction of societal barriers (AARC, 2019; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020; Warner et al., 2019) - Neurodiversity-affirming goal areas may include a (non-exhaustive list, meant to inspire): promoting learners’ insight into their sensory processing differences, promoting their ability to self-advocate for accommodations and their needs, promoting confidence, and identifying and promoting participation in leisure interests (Marnell, 2023) - Outcomes are not measured by changes in standardized scores (much of which promote neurotypical skills) but the learner’s satisfaction with their performance in skills identified as meaningful by them - Neurotypicality or achieving a norm-based skill are never targeted objectives (Marnell, 2023)
Advocacy - Anti-Ableist	- Focus on disability-led publications to emphasize the lived experiences of disabled individuals, such as the research article highlighting an individual within the community of study was included throughout the process (Patten, 2022) - Occupational therapy needs to dismantle the classification of individuals based on norms, reduce and eliminate disabling environments, modify perceptions of disability as a deviance, and critically reflect the unequal power dynamic between clinicians and clients that contribute to these problems (Patten, 2022). - Occupational therapy and occupational science need to embrace nontraditional research methodologies that center lived experiences and voices, collaborate and highlight marginalized populations within the profession, amplify disability studies as a critical aspect of education, and authentically partner with the disability community in research, practice, and education (Patten, 2022). - Occupational therapy and occupational science must adopt an anti-ableism lens. Ableism proliferates within many of our assessments and education, resulting in the health care the profession provides to expound ableism (Patten, 2022) - Self-advocates and shareholders need to be the designers of any research relating to their community, and we reframe our mindset within the profession when supporting clients of overcoming disability to overcoming ableism (Patten, 2022). - Ableism is rampant with occupational therapy and occupational science literature, including position papers created by AOTA and recently published literature within AJOT (AOTA; 2022; Kuhaneck et al., 2023; Omairi et al., 2022). When reviewing neurodivergent-related research published in popular occupational therapy journals such as the *American Journal of Occupational Therapy*, accepted articles often define the effectiveness of an intervention by an outcome that is not neurodiversity-affirming, utilize ableist descriptions and language when discussing neurodivergent children and youth, and articles examining an outcome related to a neurodivergent individual do not mention or include collaboration with a neurodivergent individual. There is significant lack of including autistic individuals within the research-creation, or the research utilizes ableist concepts when discussing autism (Le et al., 2021).

Underlying Frameworks	Description
Strengths-based Approaches	**Strengths-based practice has been defined by Murthi et al. (2023, p. 3) as:** 1. Presume the competence of autistic people by focusing on their strengths (including abilities, talents, and interests) rather than emphasizing their deficits, using autistic strengths constructively instead of coercively or as a reward to obtain preferred behaviors. We define constructive use of strengths as organically embedding strengths in the treatment goals and process rather than only as a reinforcement strategy. 2. Include autistic people as collaborators in research and practice through participatory research methodologies or collaboration with clients in the therapeutic process. 3. Create supportive environments that maximize the strengths and interests of autistic people. Supportive environments include but are not limited to sensory, social, attitudinal, and physical environments. - Patten Koenig (2020, para 6) highlights the following reflective questions to ask yourself regarding strengths-based practice: 1. Am I focusing on weaknesses in the absence of strengths? 2. Am I offering activities and choices that are related to interests? 3. Am I viewing autistic interests as strengths versus motivators or worse yet suppressing them as maladaptive behaviors? 4. Am I combining a strengths perspective with the challenges that are being addressed? The first place to find the answers to those questions is to examine our evaluations, goals, individual educational plans and interventions. If the answer is a one-line response for "strengths," it is time to see the biased perspective and make the shift to an authentic strength-based practice. - Utilize language preferred by the community. For example, the autistic community prefers and values identity-first language (Brown, 2020; Bottema-Beutel et al., 2021; Kenny et al., 2016; Taboas et al., 2022). Always adapt pending on the individual's preferences and respect their preference. - Honoring neurodivergencies as different neurotypes that don't need fixing; neurodivergence (e.g., autism, ADHD, depression, etc.) are a unique neurology the profession (and world) need to honor (Marnell, 2023). - Challenge the idea that neurodivergent occupations need to be "fixed." For example, ableist views of autistic performances and occupations include: non-functional play, inflexible, limited eye contact, disordered sensory processing, and restrictive interests. Strengths-based and NA viewpoints would highlight these characteristics instead as: autistic play, passionate, autistic social participation differences, unique sensory processing, and love for sameness (Marnell, 2023). - Strengths-based goals and evaluations (see appendices for details) - Recognize autistic and neurodivergent individuals have interests, strengths, and abilities that often surpass their neurotypical peers (de Schipper et al., 2016; Huntley et al., 2019; Meilleur et al., 2015). For an example regarding autistic

	individuals, autistic strengths include honesty, loyalty, attention to detail, and artistic talents (de Schipper et al., 2016; Huntley et al., 2019) - Ask caregivers to provide a list of the individual's passions and interests prior to evaluation (Marnell, 2023). Autistic children frequently report a greater ability to communicate, regulate themselves, and overall well-being when provided with unrestricted access to interests (Patten, 2022); if evaluation activities incorporate the individual's interests the OTP can get a more realistic and accurate idea of the individual's skills when engagement and interest is maximized. - Measuring participation in life needs to emphasize context, and participation in a particular activity varies across contexts - Modification of the natural environments of an individual (e.g., school, home, workplace) have been emphasized as a priority by autistic individuals (Benevides et al., 2020) - For modifications to the environment and routine to best match the individual's sensory strengths, view p. 243 to p. 251 in Dunn (2014) - Consider implementing the YC-PEM and the PEM-CY for changes made within the learner's environments and any ableist attitudes of partners and family members - Strengths-based approaches were found to reduce anxiety, stress, and develop positive mental health; by providing strengths-based approaches you are beginning to adopt an anti-ableist lens (Murthi et al., 2023) - Instead of describing an individual as "low" or "high functioning", shift the language to describe environments. How high or low-functioning is the environment? To what degree is ableism, stigma, and discrimination present? How are the financial and personnel resources? Our profession needs to advocate for high-functioning environments, and absolutely stop giving societal structures and systems that enable low-functioning environments a pass (Patten, 2023). - Consider and reflect all aspects of people within their authentic lives, such as viewing all characteristics and behaviors as neutral or positive; strengths-based approaches allow the opportunity to harness the beautiful complexity of human beings (Dunn, 2017). - Consider taking Learn Play Thrive's strengths-based courses
Trauma-informed	- Autistic and neurodivergent individuals are more likely to be exposed to traumatic events, much of which is due to experiencing ableism every day, bullying, interpersonal traumas, and abuse (Rumball, 2022) - Incorporate trauma-informed screeners into every evaluation with an autistic or neurodivergent individual, such as the Trauma Expression and Connection Assessment (TECA), the Child and Adolescent Needs and Strengths (CANS) - Trauma Comprehensive Version, the Child Self-Report Trauma Screener, the Interactive Trauma Scale - Utilize principles of trauma-informed care - Consider Stephen Porges's polyvagal theory (though keep in mind research attempting to examine the effects of the theory in practice have outcome measures including reduction of autistic symptoms and is embedded within the medical model of disability resulting with mixed views of the theory within the neurodiversity community; examples of such literature -> Porges et al., 2013 and Squillace et al., 2022.

Anti-Racist	- You cannot be neurodiversity-affirming and not be anti-racist; racial justice is an essential component of disability justice and neurodiversity-affirming care (Doyle, 2020) - Being anti-racist is both a set of practices, conversations, and a social movement to eradicate racism (Hamaz, 2008) - Though there is no difference in the number of BIPOC autistic individuals compared to white autistic individuals, there remains a pronounced delay (often two to three years) for autism diagnostic testing for ethnic/racial marginalized communities and of those of lower socioeconomic status (Aylward et al., 2021) **Recommendations for anti-racist actions for OTPs and the profession (Sterman & Njelesani, 2021):** • Engage in reflexivity on how the media portrays specific cultural groups and how the media shapes their perceptions (Gerlach, 2008) • Reflect on how societal and professional norms perpetuate racism (Gibson, 2020; Mahoney & Kiraly-Alvarex, 2019) • Be comfortable calling out racism with clients, your workplace, and the profession as a whole (Gibson, 2020) • Learn how racism impacts clients' experiences of occupations, and listen and believe their experiences (Beagan & Etowa, 2009) • Promote spirituality to support health, well-being, and counteract the daily experiences of racism (Beagan & Etowa, 2011) • Promote occupational reconstructions such as protests to enact social change (Frank & Kigunda Muriithi, 2015; Pyatak & Muccitelli, 2011; Ryan et al., 2020) - Recognize everyday doing intersects with oppression, whether it be ableism, racism, colonialism, racism, sexism, classism, or intersectional experiences, occupations are altered by oppression (Pooley & Beagan, 2021; Ramugondo; 2015) - Consider sharing shared experiences of oppression to help develop trust with clients (Pooley, 2020) - Explore and incorporate "occupational potential (Wicks, 2001) and occupational consciousness (Ramugondo, 2015), as well as attention to disability theory (Chacala et al., 2014), human capabilities (Bailliard, 2016), postcolonial theory, and liberation philosophy (Ramugondo, 2015) into your practice" (Pooley, 2020, p. 127) - The Anti-Racism Starter Kit - Racial equity resources for healthcare, education, and communities - Teaching about race, racism, and police violence - List of resources to support combatting police brutality and systemic racism - Recognize everyday occupations are infused with structural racism and white supremacy, with everyday occupations being tools of oppressors to fabricate a society meant to control and commit violence against BIPOC individuals (Lavalley & Johnson, 2020) - Occupational science must recognize how occupations manifest racism, and occupations contribute to promoting and reproducing injustice. "...occupation can play a role in just *or* unjust formation of doing, being, becoming, and belonging among communities" (Lavelley et al., 2020. p. 496).

	- Reconsider the utilization of “minoritized” or “excluded identities” in place of “underrepresented minorities.” BIPOC individuals make up the majority of the world’s population but are marginalized or minoritized in ways that overrepresent white individuals (Johnson & Lavalley, 2020).
Justice, Equity, Diversity, and Inclusion (JEDI)	- The JEDI principles were created to improve an individual or organization’s ability to improve justice, equity, diversity and inclusion (UNC School of Medicine, 2023). The Health Sciences Department within the University of North Carolina at Chapel Hillhas created a free JEDI toolkit, which includes: • Initial steps (this author’s current stage in completing the toolkit) • Self-reflection • Next steps/suggestions for practice • Microaggressions/microaffirmations • Education • Implicit bias and what to do about it - Cultural humility is defined as the practice of attempting to understand an individual’s identities related to education, race, gender, socioeconomic status, sexual orientation, ethnicity, and others coupled with continuous self-reflection and awareness of one’s self informs how they perceive these identities (Khan, 2021) - Use culturally relevant pictures, occupations, and assessments, and adjust as needed (Gordon-Burns & Paraneha Walker, 2015; Thorley & Lim, 2011) - Utilize the Kawa Model (Nelson, 2009) - Use inclusive and culturally accurate language, and listen to and believe BIPOC clients (Gibson, 2020) - Focus on interdependence or collective co-occupations (Gerlach, 2008; Yam et al., 2020) **The occupational therapy profession needs to (Sterman et al., 2021):** • Support cultural well-being as an occupation (Gibson, 2020) • Integrate the voices and perspectives of Indigenous peoples and Indigenous ways of knowing in theory development (Grenier, 2020; Jull & Giles, 2012), incorporate Palestinian ways of being into a cognitive justice framework (Simaan, 2017) • Occupational therapy and science practitioners and researchers need to challenge that there is a singular objective reality within their perceptions of occupations (Gerlach, 2008) • Consider the ways Western societies privilege and value Western occupations, and actively recognize and value non-Western occupations (Ryan et al., 2020) • Add anti-racism and cultural humility as part of the Occupational Therapy Practice Framework (Taff & Blash, 2017) • Advocate for workplaces to provide cultural humility training (Taff et al., 2017) and training for practitioners to engage with BIPOC clients in a culturally safe way (Nelson, 2009)

	- It is recommended within educational settings that students participate in volunteer experiences as a method of disruptive their ideas of what is considered “normal”, and so teaching includes attention to racism, justice, and human rights (Pooley, 2020) - Assume older adults are impacted by ageism (Trentham & Neysmith, 2018; Pooley, 2020) - Engage in critical self-appraisal; critique the profession, institutions, and society; implement learning climate surveys to collect evaluation data in respects to diversity; and become members in multicultural organizations and groups focused in diversity, equity, and inclusion, such as the Coalition of Occupational Therapy Advocates for Diversity (COTAD) (Taff et al., 2017) - We must rebuild occupational therapy with and for marginalized communities; occupational therapy has not yet confronted the effects of White supremacy and colonization that has influenced its frameworks. OTPs must hold occupational therapy and occupational science accountable (Zafran & Hazlett, 2022).
Disability Justice	- Disability justice centers the voices of disabled individuals and emphasizes disability as its own culture (Hudson, 2023). - Embrace disability justice principles as outlined by Sins Invalid (2019): 1. Intersectionality 2. Leadership of the most impacted (the movement must be led by the those who are the most impacted by the oppressive systems) 3. Anti-capitalist politics 4. Commitment to cross-movement organizing (social justice must contextualize disability) 5. Recognizing wholeness (disabled individuals have inherent worth, and are full of vivid life experiences; this must be explicit secondary to our capitalist society. 6. Sustainability 7. Commitment to cross-disability solidarity 8. Interdependence 9. Collective access 10. Collective liberation - Consider having your workplace incorporate an occupational justice quality improvement program. Riegel & Eglseder (2009) outline how they created an occupational justice program (components included occupational justice, discussion of and creation of qualitative improvement measures for targeting societal and physical barriers). - Manifestations and categorizations of disability and impairments vary across cultures with disability and impairment not being easily separated categories (Snyder et al., 2006; Waldschmidt, 2018; Twardowski, 2022) - Disability has been present throughout history, and its reality undergoes constant change (Gebhardt et al., 2022; Watson et al., 2020) - Social participation can be increased by highlighting and uncovering culturally developed processes of exclusion (Gebhardt et al., 2022)

	- There is not one universal interpretation of disability because the definition of disability varies across culture, time, and has various meanings for anyone (Snyder et al., 2006; Twardowski, 2022; Waldschmidt, 2018) - Disability is not a negative aspect of an individual but is a valid form of the human experience and is embodied differently, even by disabled individuals within the same culture (Snyder et al., 2006; Twardowski, 2022; Waldschmidt, 2018) - Disability is seen as a source of pride and belonging for disabled individuals (Twardowski, 2022; Waldschmidt, 2018; Watson et al., 2020) - Social, political, historical, physical, and psychological dimensions contribute to disability, which is ultimately defined by the disabled individual (Twardowski, 2022; Waldschmidt, 2018; Watson et al., 2020) - Yao et al. (2022) highlights the following proposed practices for how OTPs can create a more inclusive occupational therapy practice and apply disability justice: • **Destigmatize dependency:** Dependency is an essential aspect of humanity, and it is valid and beautiful for an individual to not need learn how to be independent in activities and benefit from support from a caregiver. We must be okay and validate the inevitable dependency of being human and reimagine what this this looks like from a disabled individuals experience. • **Acknowledging crip time**: *Crip* is a reclaimed slur by disabled individuals. Disabled individuals benefit from extra time and effort secondary to the plethora of barriers that exist within an ableist world. Crip time is a concept that recognizes and embraces that disabled individuals benefit from more flexibility, time, and accommodations. Crip time also signifies liberation, such that the disabled individual reclaims their time and experience and celebrates how time is experienced differently by disabled individuals compared to non-disabled individuals (and that is beautiful and okay) • **Co-creating inclusive curricula** • **Utilizing non-ableist narratives:** Allow and empower disabled individuals to tell their stories and include disabled individuals in all aspects of healthcare service creation, including creation of supports, services, and research to illustrate disability as an identity. • **Align with the disability justice movement** • **Promoting critical reflexivity**

References for APPENDIX I

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APPENDIX J – Conversation and Application on Models of Disablement and Rehabilitation

Over the last forty years, models of disability have shaped how rehabilitation professionals and society view disabled individuals (Lawson & Beckett, 2021). Models of disability shape healthcare service provision, and they shape language ideologies, maintaining power structures between disabled persons and persons without disabilities (Bottema-Beutel et al., 2021). The medical model of disability has been the established perspective illustrating the lives of disabled persons since the beginning of health history and currently remains the dominant mindset when discussing the lives of disabled individuals (Bottema-Beutel et al., 2021). The medical model traditionally places people on a "non-disabled/healthy" or a "disabled/sick" binary, construing all differences in mental and physical health as deficits (Bottema-Beutel et al., 2021).

When examining autism through the lens of the medical model of disability, autism itself is viewed as disabling (Bottema-Beutel et al., 2021). Society is not required to remove barriers to participation, such as accommodating the autistic individual for communication differences (Bottema-Beutel et al., 2021). Scholars and activists have identified the primary limitation of the medical model of disability being the unintended consequence of pathologizing disability, resulting in viewing disability as a tragic and deficient condition (Holler et al., 2021; Shakespeare, 2013). The assumptions of the medical model are that the "problem" lies within the person without any reference to the societal systems and environmental barriers that references the "problem" meaningfully (Bottema-Beutel et al., 2021).

In contrast, the social model of disability is described as a sociopolitical construct (Holler et al., 2021; Shakespeare, 2013). Holler et al. (2021) described two central components of the social model of disability as being: “(1) the origin of disability lies primarily in the social structures and attitudes, and (2) people with disabilities have the right to meaningful control over their own lives” (pp. 1–2). Disability is due to social structures creating environmental barriers to participation, with the goal to reduce environmental barriers and ableist social processes (Bottema-Beutel et al., 2021; Holler et al., 2021). The social model of disability emphasizes there is a difference between impairment and disability (Bottema-Beutel et al., 2021; Goering, 2015). Disability is defined as restrictions placed on disabled individuals imposed by society (political focus), whereas impairment is a negative effect resulting from their medical condition (health focus) (Bottema-Beutel et al., 2021; Goering, 2015). Disability is defined as a result of social oppression, and disability is not related to the individual’s impairment (Waldschmidt, 2018).

Though the social model of disability has exhibited many political successes for disabled individuals, the initial framework of the social model of disability proposed in 1981 has been identified as requiring further development (Haegele & Hodge, 2016; Owens, 2014). The primary criticisms of the initial framework of the social model of disability involve embodiment, intersectionality, and its theoretical foundations (Owens, 2014). Critics report the initial social model of disability attempts to separate illness and impairment, resulting in omitting the dynamic relationship between illness and impairment (Haegele et al., 2016; Owens, 2014). By failing to address or meaningfully recognize impairment as an attribute of the individual, critics suggest the model neglects this aspect of the individual's lived experience or that impairments should be ignored (Haegele et al., 2016). Counter arguments have been made by disability activists that current conceptions of the social model of disability recognizes the individual's contributions (e.g., impairments such as chronic pain) within the context of a disabling society (Bottema-Beutel et al., 2021; Goering, 2015; Watson & Vehmas, 2020). A historical analysis completed by Watson et al., (2020) hypothesized that the social model of disability was linked to many sociological theories of disability (often preferring an approach deviating from the norms of society) which then have become popularized, leading to a diminished version of the social model. This has been illustrated in United States and Canadian DS in the last forty years, leading to a heightened focus to separate impairment and disability, which advocates have shared excludes vital aspects of the disabled lived experience (Watson et al., 2020). Waldschmidt (2018) elucidated how the social model of disability has become a "victim of its own success" (p. 72). The social model of disability has been widely adopted into transnational policies, including the World Health Organization (WHO) and the UN CRPD, with resulting policies promoting that disability can essentially be "solved" via increased human rights policies and increased accessibility (Waldschmidt, 2018, p. 72). In short, the social model of disability has been criticized to focus too much on how the capitalist society is the cause of disability (Waldschmidt, 2018). Shakespeare and Watson (1997) have shared that the social model's heavy focus to separate impairment from disability has led to an emphasis on removing barriers without providing a sustainable space for disabled individuals whose impairments significantly affect their lives. To reiterate, the social model of disability does not deny that for many disabled individuals that their impairments limit their daily lives (Watson et al., 2020). How individuals handle their impairment is determined often by means of access to material and social resources, much due to the globalization priority of pursuit of profit over social justice and equity (Watson et al., 2020). The social model of disability does not aim to illustrate the extent of impairment as a feature of disability identity, but how disability is a political experience of oppression (Watson et al., 2020). Throughout the history of DS, various disability communities find the social model of disability inaccessible or not meaningful given the reduced focus on personal factors, including those with learning differences, communication and hearing differences, and those with mental conditions (Watson et al., 2020). Disability activists highlight that even in a world where disability (defined by the social model) did not exist, impairments may have such negative impacts on individuals (such as those with chronic pain), that the impairment can be in fact, disabling to the individual (Goering, 2015).

Disability scholars and activists challenge the foundational premise of the social model of disability that impairment and disability are clearly two different concepts as false (Shakespeare, 2014; Watson et al., 2020). Paul Longmore, a disability historian and disability rights activist, advocated that his lived experience from living with polio was not authentically illustrated by the social model and how the model attempts to separate impairment from disability (Longmore, 2016). Longmore (2016) advocated for disability scholars to focus beyond the impairment/disability separation to a more historically accurate and productive interpretation of the lived experiences of those living with a wide spectrum of disabilities. Secondly, non-Western and Eurocentric disability scholars advocate the social model of disability neglects culture and how various cultures define disability (Waldschmidt, 2018). This is apparent in Oliver's (coined originator of the social model) consideration of cultural values, stating them to not be a critical consideration if disabled individuals are still experiencing material deprivation and poverty (Oliver, 2009; Waldschmidt, 2018). The underestimation of cultural practices and how they influence a community's definition and understanding of disability may consequently not prepare the social model of disability for the increased recognition of the neurodiversity movement across cultures (Waldschmidt, 2018).

Ideas about impairment and disability vary over region, social class, and culture (Waldschmidt, 2018; Watson et al., 2020). A study examining the perspectives of American veterans who have been exposed to Agent Orange during the Vietnam War and who began fighting for state support for their children born with disabilities illustrates that the social and biological cannot be simply separated (Reagan, 2016; Watson et al., 2020). The lines between disability and impairment are frequently blurred and complicated (Reagan, 2016; Watson et al., 2020). Reagan's study (2016) demonstrates how the various spheres of cultural, social, biological, legal, and political all intersect in a way that may not be readily interpreted in a meaningful way by the social model of disability (Watson et al., 2020). Watson et al. (2020) advocated that Reagan was successful in capturing the complex lived experiences of the veterans by allowing race, gender, developmental disability, and impairment converge. Disability historian Susan

Burch extends this need to understand the interplay of these factors with a study exploring the perspectives of women with borderline personality disorder (BPD) (Burch, 2014). Burch's study (2014) elucidates how the social model can analyze the physical and emotional pain experienced by the women living with BPD.

Recent disability historians have shown that disability and impairment are inseparable for many cultures outside of the United States and Europe, such as the Ottoman Arab world. In the Ottoman context, it is impossible to understand disability without first comprehending impairment because the Arab-speaking community did not have a word to characterize anything remotely close to notions of disability. Often, Arabic sources utilized a term called "blights" that included modern views of impairment and more (e.g., flat noses, bad breath). There were also causes of impairment that were unique or more prevalent to a specific geographical region or time, and in Ottoman society, impairments had cultural and social values accommodated in ways unexplainable by modern definitions of disability and the social model (Scalenghe, 2014; Watson et al., 2020).

Cultural Model of Disability. Defining the reality for many disabled individuals through a dichotomous lens separating disability from impairment may not capture the complexity and richness of the disabled lived experience (Watson et al., 2020). Disability scholars and activists have suggested the cultural model of disability, a model of disability that would prioritize the lived experience of disabled individuals across contexts, an attempt to merge socio-cultural, physical, political, and psychological dimensions (Twardowski, 2022; Waldschmidt, 2018; Watson et al., 2020). Though there remains ongoing work to understand and emphasize cultural determinants in relation to disability, the cultural model offers many advantages compared to the social model of disability (Twardowski, 2022; Waldschmidt, 2018).

The originators of the cultural model of disability are David Mitchell and Sharon Snyder from the University of Chicago (Twardowski, 2022). One of the reasons the authors developed the model was in response to highly publicized models, such as the bio-psycho-social model employed by the WHO for the ICF and the social model of disability (Snyder & Mitchell, 2006; Twardowski, 2022). Snyder and Mitchell (2006) reported these models do not take into consideration the plethora of differences existing between cultures, often missing critical components that are inherent for disabled individuals and their identity. The cultural model eliminates the disability and impairment division due to understanding “both biology and culture as factors remaining in mutual relations, but also in conflict” (Twardowski, 2022, p. 53). The cultural model highlights that disability must be considered in a given culture and ultimately how the disabled individual illustrates their lived experience and function within that culture (Twardowski, 2022). It is essential to note that the cultural model of disability is not an attempt to specifically define disability but is instead meant to allow various ideologies of disability and impairment to be considered coupled with cultural characteristics ultimately to maximize disabled identity defined on their terms (Twardowski, 2022). For many disabled individuals, their impairment is disabling enough to significantly impact their lives (Watson et al., 2020). Though there remains no consistent definition, there are assumptions of the cultural model of disability consistent within the literature:

1. Manifestations and categorizations of disability and impairments vary across cultures with disability and impairment not being easily separated categories (Snyder et al., 2006; Twardowski, 2022; Waldschmidt, 2018)
2. Disability has been present throughout history, and its reality undergoes constant change (Gebhardt et al., 2022; Watson et al., 2020)
3. Social participation can be increased by highlighting and uncovering culturally developed processes of exclusion (Gebhardt et al., 2022)
4. There is not one universal interpretation of disability because the definition of disability varies across culture, time, and has various meanings for anyone (Snyder et al., 2006; Twardowski, 2022; Waldschmidt, 2018)
5. Disability is not a negative aspect of an individual but is a valid form of the human experience and is embodied differently, even by disabled individuals within the same culture (Snyder et al., 2006; Twardowski, 2022; Waldschmidt, 2018)
6. Disability is seen as a source of pride and belonging for disabled individuals (Twardowski, 2022; Waldschmidt, 2018; Watson et al., 2020)
7. Social, political, historical, physical, and psychological dimensions contribute to disability, which is ultimately defined by the disabled individual (Twardowski, 2022; Waldschmidt, 2018; Watson et al., 2020).

Given the cultural model of disability is a relatively newer concept and with the reformed social model of disability gaining notoriety within society, a legitimate question arises: does applying the cultural model of disability better authenticate the lived experiences of disabled individuals more so than the social model of disability? Waldschmidt (2018) postulated an example pertaining to how support independent living for disabled individuals would be defined by the social model and the cultural model of disability. If a policymaker or researcher applied the social model of disability, the study would highlight the societal restrictions preventing the disabled individual's self-determination to independent living, with policies focusing on accessible environments and supporting arrangements. A study with a cultural model of disability lens would attempt to understand what independent living and autonomy means within a culture or society, with policies aimed at undoing dominant cultural assumptions of what independent living looks like, including constraints and normative expectations. The cultural model of disability does support the emancipation of disabled individuals, though it aims to inspire us to reflect on how disability and impairment are defined by the disabled individual and how these experiences vary across societies and cultures to challenge harmful and dominant cultural norms (Waldschmidt, 2018).

Scholars have criticized theories of disability that are deemed to be more "abstract" (including the cultural model), citing continuously pondering how to theorize the lives of disabled individuals may diminish the impact of DS to influence society (Longmore, 2016). However, it is critical to remember the most fruitful theories emerge and are grounded in the lived experience and dismissing theories deemed too complex for practicality may be a disservice to the lived experiences of disabled individuals (Watson et al., 2020). Watson et al. 2020 eloquently described the inventiveness of the cultural model of disability:

> Rather than thinking of disabled people as non-existent or at best suffering under the weight of ideology, I would like to propose that we instead think of disabled people…as agents in their own lives, as people capable of formulating their own ideas about the social, cultural and historical forces that both produce and contain their disability, and as people capable of shaping their own identities. None of us, disabled and non-disabled alike, can completely control how we are read and represented, and for those of us living at the edges of society it can be more challenging to craft our own narratives about who and what we are. Yet I would argue that it is more accurate and more powerful to think of impairment/disability and the formation of ideas about impairment/disability as a dynamic and situated process, rather than an imposition. (p. 388)

Much of which is due to the social model of disability, DS flourished and supported interdisciplinary research and activism to support the lives of disabled individuals in society. It appears it may be time for a new disability paradigm shift, one that integrates social, political, cultural, bodily, and psychological dimensions to illustrate the rich lived experiences of disabled individuals. Though the cultural model is still being developed, the cultural model offers an innovative lens to explore disability and may produce essential new ways of seeing, learning, and thinking about disability (Twardowski, 2022; Waldschmidt, 2018).

Work has been completed applying the reformed social model of disability within healthcare and research, though little has been found applying the cultural model of disability within rehabilitation (Bottema-Beutel et al., 2021; Holler et al., 2021; Shore et al., 2020). This author will offer recommendations on how to apply the cultural model of disability within rehabilitation based on previous work completed by disability advocates, historians, and partners. When applying the cultural model of disability, this author postulates the following is necessary:

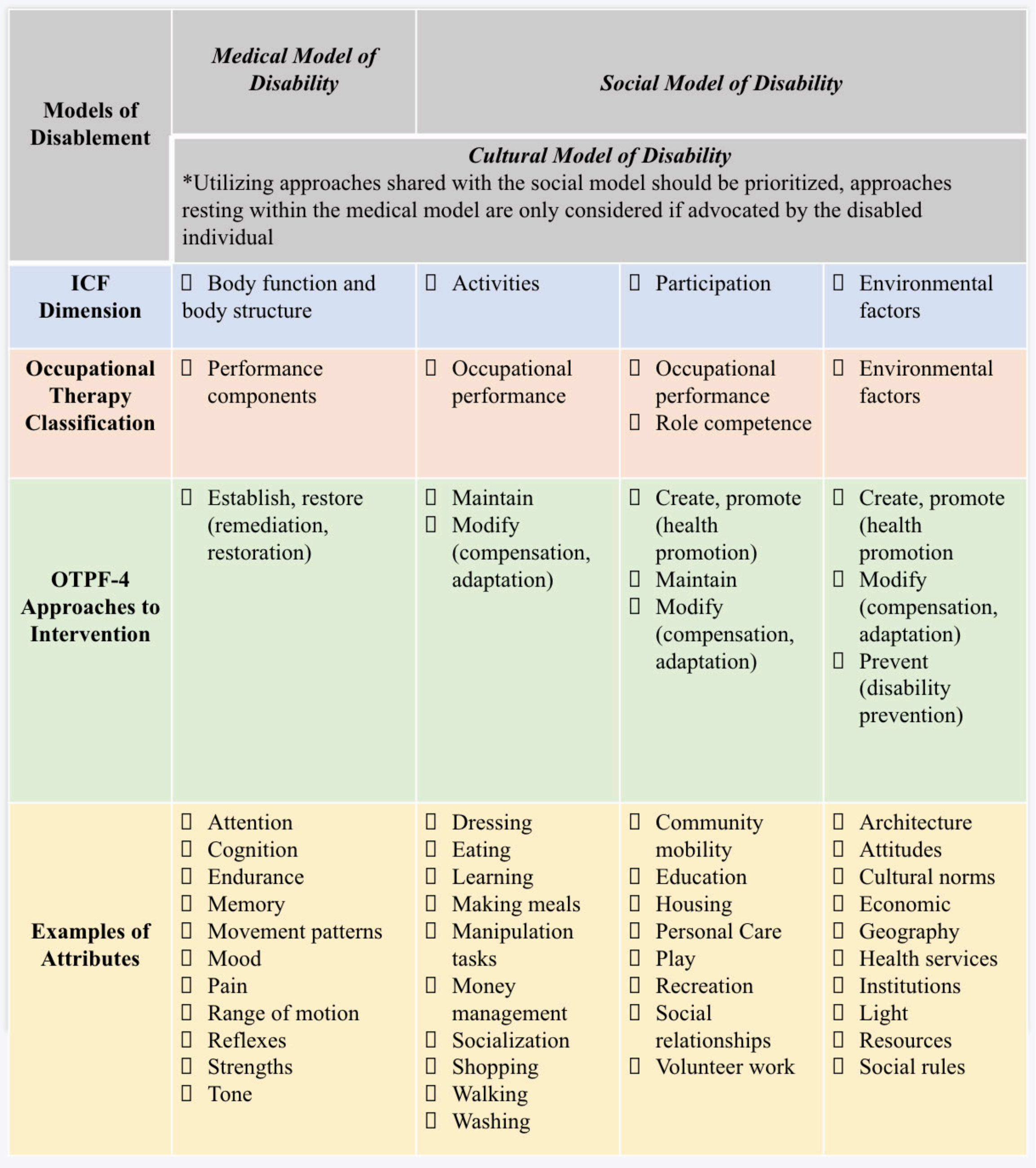
1. The cultural model of disability is grounded in the disabled person's story, highlighting the lived experience as the focus of data gathering and disability is the outcome of the interactions between the disabled individual and their context (Patten, 2022; Shakespeare et al., 2018)
2. The cultural model emphasizes intersectionality, such as understanding the impact of race, gender, sexuality, and other cultural determinants are essential to the individual's identity (Patten, 2022; Shakespeare et al., 2018)
3. The cultural model is an attempt to stop the "normalcy" narrative, and is applying strengths-based approaches (Patten, 2022)
4. Rehabilitation strategies should emphasize reduction of societal barriers, but also attempt a wider goal of reducing stigma of disability and changing aspects of dominant culture to honor and validate disability (Gebhardt et al., 2022)
5. Focus on disability-led publications to emphasize the lived experiences of disabled individuals, such as the research article highlighting an individual within the community of study was included throughout the process (Patten, 2022)

Practical Example Applying the Cultural Model of Disability. Within a practical sense, applications of the reformed social model and cultural models of disability within rehabilitation can appear quite similar and often individuals applying the reformed social model of disability are also applying the cultural model of disability. Though autistic and non-autistic individuals have communication differences, the reformed social model and cultural models of disability would emphasize understanding the autistic community as having its own culture, and how shared experiences can lead to a better mutual understanding between both communities (Bottema-Beutel et al., 2021). As viewed through the cultural model of disability, the person's nature is mainly evident in how the autistic community advocates for identity-first language. The autistic community advocates that being autistic is an inherent aspect of their identity, the same way an individual prefers to be identified as “Lesbian/Gay/Transgender/Queer,” “Chinese,” or “Muslim” (Brown, 2020).

In utilizing the medical model of disability, occupational therapy approaches as defined within the *Occupational Therapy Practice Framework-Fourth Edition* (OTPF-4) (AOTA, 2020) are establish, restore, and remediate (Shore et al., 2020). A practitioner attempting to remediate a child’s sensory processing differences as a “pathology” that needs fixing or “improving” a child’s “restricted” interests are strategies embedded within the medical model of disability (Shore et al., 2020). In contrast, an occupational therapy practitioner providing strategies ingrained within the reformed social model and cultural models of disability are defined by the OTPF-4 are create/promote, modify (compensate/adapt), and prevent (Shore et al., 2020). It is vital to always remember the disabled lived experience and priorities always come first; if a disabled individual self-advocated for wanting to alleviate effects of their impairment, this would be labeled within the OTP-4 as establish, restore, and remediate. This scenario would be an appropriate application of the cultural model due the plan of care is focusing on the disabled individual's lived experience. Figure J1 visualizes the intersection of the OTPF-4, ICF-CY, and models of disablement to promote critical reflection of how the three conceptualizations intertwine.

Figure J1

Intersection of ICF-CY, OTPF-4, and Models of Disablement



Models of Disablement	***Medical Model of Disability***	***Social Model of Disability***		
	Cultural Model of Disability *Utilizing approaches shared with the social model should be prioritized, approaches resting within the medical model are only considered if advocated by the disabled individual			
ICF Dimension	Body function and body structure	Activities	Participation	Environmental factors
Occupational Therapy Classification	Performance components	Occupational performance	Occupational performance Role competence	Environmental factors
OTPF-4 Approaches to Intervention	Establish, restore (remediation, restoration)	Maintain Modify (compensation, adaptation)	Create, promote (health promotion) Maintain Modify (compensation, adaptation)	Create, promote (health promotion Modify (compensation, adaptation) Prevent (disability prevention)
Examples of Attributes	Attention Cognition Endurance Memory Movement patterns Mood Pain Range of motion Reflexes Strengths Tone	Dressing Eating Learning Making meals Manipulation tasks Money management Socialization Shopping Walking Washing	Community mobility Education Housing Personal Care Play Recreation Social relationships Volunteer work	Architecture Attitudes Cultural norms Economic Geography Health services Institutions Light Resources Social rules

Note. Adapted from AOTA, 2020; Gebhardt et al., 2022; Law et al., 2017; Shore et al., 2020; WHO, 2007

Given the cultural model of disability has been named as a more holistic and wider version of the social model of disability, it can be argued the approaches labeled within Shore et al.'s (2020) illustration could be designated as applications of the cultural model of disability. Additionally, much of current healthcare research examining the reformed social model of disability into practice has expanded upon the original principles outlined by Oliver, much of which resemble tenets of the cultural model of disability (Shore et al., 2020). A practitioner focusing on strengths and matching interests to existing opportunities within the school or home setting, modifying the environment and tasks as needed for success, and considering ways to enhance participation without changing the child are also appropriate applications of the cultural model of disability (Shore et al., 2020). A concrete example with autism and the cultural model of disability is the double empathy problem suggesting that non-autistic individuals and autistic individuals have challenges understanding each other due to communication differences, and the dominant culture prioritizing the non-autistic perspective. For a comparison of the medical, traditional social, and cultural models of disability, see Table J1.

Table J1

A Visualization and Comparison of the Medical, Traditional Social, and Cultural Models of Disability

Medical Model of Disability	**Traditional Social Model of Disability**	**Cultural Model of Disability**
- Disability is strictly the result of impairments and is an individual problem - Approaches are focused on changing the individual to be "less disabled" or more neurotypical - Impairments as defined by non-disabled individuals need to be remediated or "fixed" - No change required by the ableist society - Impairments of the body are "deficiencies" or "deficits," and being disabled is a deviation from the societal norm - Historically, the medical model contributed to the creation and proliferation of prejudices against disabled individuals - The medical model is the dominant model used to inform policy and healthcare within the United States and much of the world	- Disability is a social construction and is a result of societal barriers, such as the prejudices and attitudes of non-disabled individuals leading to social inequality - Focus on changing social policies - Impairment and disability are two separate categories, with impairment being natural and disability unnatural and there being no causal relation between the two - Plan of care is focused on reducing environmental barriers and supporting accessibility - There is one universal definition and understanding of disability - Culture is not an essential component when examining and understanding disability - While it has been helpful for attaining political successes, has been critiqued as an outdated ideology	- Disability is a natural and valid form of human diversity - Disability comprises social, cultural, historical, psychological, bodily dimensions - Disability is situated as a complex interaction between the individual and their wider context - Plan of care is focused on empowerment of the disabled individual and highlighting their lived experience, which can include adaptations to their environment or remediation of their impairment as defined on their terms - Cultural model emphasizes challenging of cultural norms within society - Consideration of intersectionality (e.g., race, gender, class, sexuality) must occur to grasp an accurate picture of the disabled lived experience - Various cultural groups exist within the disabled universe, with their own interpretations of impairment and disability

Note. Adapted from Gebhardt et al. (2022); Haegele & Hodge, 2016; Owens, 2014; Twardowski (2022); Waldschmidt et al. (2018); Watson et al. (2020)

Complementing the Cultural Model of Disability. As previously mentioned, the traditional social model of disability illustrates disability as a system of social oppression (Bottema-Beutel et al., 2021) whereas the cultural model defines disability as the dynamic relationship of psychological, social, cultural, and physical components ultimately defined by the individual within their given culture (Watson et al., 2020). Research exists illustrating how to apply principles of the reformed social model of disability within rehabilitation which can be extended by principle to the cultural model such as goal-setting primarily based on the client's priorities and fostering authentic collaboration (Holler et al., 2021; Shore et al., 2020); services targets reduction of neurodiversity stigmatization and fostering self-determination (Shore et al., 2020); removing environmental and social barriers impacting participation (Holler et al., 2021; Shore et al., 2020); strength-based assessment and reporting (TNC, 2022b); and supporting sensory processing differences through accommodation and self-advocation with no expectations for tolerance (Shore et al., 2020; 2022b).

If practitioners want to grade up their advocacy and empowerment of neurodivergent individuals beyond applying the reformed social model or the cultural model of disability within clinical practice, practitioners are encouraged to explore the human rights model of disability policy or apply tenets of disability justice. The human rights model builds upon and extends the cultural model of disability, providing a roadmap on how practitioners can support disability activists in policy and law, and frameworks on how to monitor community and system progress towards human-rights-consistent law. All three models (reformed social model, cultural model, and human rights model) have the same goal of supporting disabled people and their allies in combating oppressive systems and practices, with the reformed social model attempting to define disability, the cultural model illustrating the complex richness of the disabled lived experiences across culture, and the human rights model as a model of disability policy (Lawson & Beckett, 2021; Watson & Vehmas, 2020).

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APPENDIX K – Assessment Tool Information

Affirming Assessment Tools

Measure	Details
Canadian Occupational Performance Measure (COPM)	• Any age, any client • Identify occupational performance problems, and guide goal setting • Measures clients' perceived occupational performance in three areas: self-care, productivity, and leisure • Typically takes 15 – 30 minutes • Semi-structured interview by therapist • High inter-rater reliability • Supports collaborative goal setting **Where to locate**: https://www.thecopm.ca/

Sensory Profile 2 (SP-2)	- Birth – 14 years, 11 months - Five versions available depending on the child's age and setting. Earlier editions for adults are also available. - Identifies how sensory processing differences may affect a child's participation at home, school, and community. - Caregiver and teacher reports on child's response to sensory events throughout the day - Typically takes 5 – 20 minutes - Questionnaire completed by caregiver, teacher, and/or the child. - Each form produces a sensory system score, behavior score, and sensory pattern score. The school companion version produces a school factor score - Includes a theoretical foundation based on strengths-based research and ecological frameworks. - Contains items that are familiar for caregivers, making this assessment relevant to everyday life. - The SP-2 is widely recognized as an affirming measure of sensory processing differences within the neurodiversity community. **Where to locate:** https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Motor-Sensory/Sensory-Profile-2/p/100000822.html

Young Child's Participation and Environment Measure (YC – PEM) **&** **Participation and Environment Measure - Children and Youth Version (PEM-CY)**	• YC-PEM: Birth to 5 • PEM-CY: 5 to 17 years • Assess participation in the home, in daycare/preschool and in the community as well as environmental factors of participation • Home, daycare/preschool, and community participation • Administration time: 25 – 40 minutes • Parent report questionnaire • Rating scale of participation frequency, involvement and desire for change, and environmental support • High reliability and validity • Measure captures the interaction between participation and the environment **Where to locate YC-PEM:** https://www.canchild.ca/en/shop/23-yc-pem-young-children-s-participation-and-environment-measure#:~:text=What%20is%20it%3F,which%20these%20activities%20take%20place. **Where to locate PEM-CY:** https://canchild.ca/en/shop/2-pem-cy-participation-and-environment-measure-children-and-youth
Perceived Efficacy and Goal Setting System (PEGS)	• Children self-assesses their perceived efficacy using pictures of daily activities and then set goals. Parallel parent and teacher questionnaire can be used. • Cards demonstrate children performing self-care tasks, school tasks, and leisure activities. • Administration time: 15 – 20 minutes • Interview, card sort, and questionnaires • Adequate test-retest reliability and high validity • Primary use is to allow children to articulate what is important to them • Helps parents and teachers understand occupational therapy scope • Supports collaborative goal setting **Where to locate:** https://www.canchild.ca/en/resources/48-perceived-efficacy-and-goal-setting-pegs

Pediatric Interest Profiles (PIP)	• 6 – 21 years of age • Provides an easy way to gain a profile of the play interests of children and adolescents • Children/adolescents respond to questions regarding interest, participation, and enjoyment in leisure/play activities typical of peers • Administration time: 15 – 30 minutes • Interview, questionnaire • Identify activities used to engage child in therapeutic or educational interventions
Child Occupational Self-Assessment (COSA)	• The Child Occupational Self-Assessment (COSA) is a client directed assessment tool and an outcome measure designed to capture children's and youth's perceptions regarding their own sense of occupational competence and the importance of everyday activities. Using the instrument in therapy provides a young client with an opportunity to identify and address their participation in important and meaningful occupations. • Consider: how competent does a child feel engaging in and completing activities? • Administration: 25 minutes • Self-report, structured interview • Importance rating scale, priorities for change • The COSA does not produce a "score". Rather, therapists use MOHO theory to interpret the COSA and then identify the most successful way to convey that interpretation to others. • COSA assists the therapist in understanding the child's sense of competence and facilitates collaborative goal setting with the child **Where to locate:** https://moho-irm.uic.edu/productDetails.aspx?aid=3
Self-Perception Profile for Children and Adolescents (Two Different Questionnaires)	• 10 – 18 years • Aids in garnering an understanding of a child and adolescent's self-worth as it relates across school and IADL participation • Perceived competence and self-worth regarding global self-worth, academics, social acceptance, job competence, friendships, and behavior • Administration time: 5 – 10 minutes • Youth self-report **Where to locate:** https://portfolio.du.edu/SusanHarter/page/44210

Heart Drawing Tool	• No specified age group • The Heart Drawing is a new, easy to use, and efficient tool that allows the clinician to assess a child's affect regulation functioning, affective range, and experience in a non-threatening manner. It can also be used to assess a child's insightfulness and capacity to identify internal affective experiences. • The child is asked to select colors for the feelings expressive of mad, sad, glad, and scared from a group of nine primary colors. The child is then asked to draw a heart and to fill in the heart with the amount of each feeling that the child usually feels. • Administration time: 10 - 15 minutes • Youth self-report **Where to locate:** https://pdfs.semanticscholar.org/b4f7/b19da1677b8f6714f45b742d9a7a2bb2dbc4.pdf
Visual Activity Sort (previously known as the Occupation Participation Sort)	• Not specified age group • The Visual Activity Sort is a client-centered tool used to build rapport and connect with clients about their interests and goals. • Practitioner goes through the picture cards and asks about the client's participation with the activity, satisfaction with the activity, motivation to participate in the activity, and perceived competence with the activity, then the client selects activities they would like to improve upon • 20 - 30 minutes • Self-report tool • Is identified as a strengths-based assessment tool **Where to locate:** https://www.visualactivitysort.com/

Pictured Child's Quality of life Self-Questionnaire (AUQUEI)	• There are versions pending on client's age (e.g., 3-6 years, 6-11) • To assess the child's subjective quality of life. • Self-administered • Duration time: 15 - 20 minutes • Self-report tool **Where to locate:** https://eprovide.mapi-trust.org/instruments/pictured-child-s-quality-of-life-self-questionnaire
The Dynamic Assessment of Social Emotional Learning (DASEL)	• Not specified age group; likely most neurodivergent students • Strengths-based assessment to support examining a student's self-advocacy skills, problem-solving, making inferences, and relationship skills. • Teacher feedback forms • Caregiver questionnaire • Therapist observation checklist • Student strengths survey • Administration time: under 30 minutes • Created by a neurodivergent speech therapist (Chris Wenger). • Includes a sample strengths-based IEP report to guide future IEP reports • Lifetime updates to the assessment • Research supporting the assessment included 68 young autistic adults and their input in formulating the assessment. **Where to locate:** https://chris-wenger.mykajabi.com/dasel-masterclass-offer-1

Note. Adapted from Law, M. C., Baum, C. M., & Dunn, W. (2017). *Measuring occupational performance: supporting best practice in occupational therapy* (3rd ed.).Thorofare, NJ: SLACK Incorporated.

Standardized Assessments Focusing on Occupation

If standardized measure needs to be utilized, consider utilizing a top-down or occupation-based measure to minimize harm (listed below)

Measure	Details
Pediatric Evaluation of Disability Inventory – Computer Adaptive Tests (PEDI-CAT)	• Age group specified by assessment tool: birth – 20 years of age with any diagnosis in any setting • Intended to provide a description of a child's functional status or progress in the ability to perform functional skills in everyday life • Measures capability and performance of functional activities in the domains of self-care, mobility, and social function • Administration time: 15 – 30 minutes • Standardized • Questionnaire completed by caregiver • High test-retest reliability and validity • Examines functional performance in daily life **Where to locate:** https://www.pedicat.com/
Miller Function and Participation Scale (M-FUN)	• Age group specified by assessment tool: 2 year 6 months – 7 years 11 months • Assess a child's performance related to school participation, with a focus on motor skill performance • Assess visual-motor, fine motor, and gross motor skills relating to academic participation. • Administration time: 20 – 30 minutes per subset, 45-60 minutes for entire assessment • Standardized • Workbook/task format • Can be re-administered for progress scores **Where to locate:** https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Developmental-Early-Childhood/Miller-Function-and-Participation-Scales/p/100000557.html

School Function Assessment (SFA)	• Age group specified by assessment tool: Grades K – 6 • Measures a student's performance of functional tasks that support their participation in the academic and social aspects of an elementary school program • Participation, task supports, and activity all as they relate to academics • Administration time: 25-10 minutes per scale, 1.5 – 2 hours for total time • Assessment completed by a team that regularly works with the student • Very comprehensive of a child's school participation • Identifies the need for adaptations, and helps prioritize interventions for students • Child should be at the school for at least one month **Where to locate:** https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Behavior/Adaptive/School-Function-Assessment/p/100000547.html
Goal-Oriented Assessment of Lifeskills (GOAL)	• Age group specified by assessment tool: 7 – 17 years • Assess functional motor skills required for daily living skills • Measures seven tasks requiring fine or gross motor skills: utensils, locks, paper box, notebook, carry tray, ball play, manage clothing • Administration time: 45 – 60 minutes • Standardized • Option to document progress over time • Observation of seven occupation-based activities • High reliability and validity • Examines functional performance in activities related to home and school participation **Where to locate:** https://www.wpspublish.com/goal-goal-oriented-assessment-of-lifeskills.html
Roll Evaluation of Activities of Life (REAL)	• Age group specified by assessment tool: 2 years and 18 years, 11 months • Assesses a child's ability to care for themselves at home, school, and in the community. • Constructs for ADLs include dressing, hygiene and grooming, feeding, toileting, and other functional mobility skills. Constructs for IALDs include housework/chores, managing money and shopping, meal preparation, personal safety, traveling, and school-related skills • Administration time: 15 - 20 minutes • Standardized **Where to locate:** https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Behavior/Adaptive/The-Roll-Evaluation-of-Activities-of-Life/p/100000762.html

Note. Adapted from Law, M. C., Baum, C. M., & Dunn, W. (2017). *Measuring occupational performance: Supporting best practice in occupational therapy* (3rd ed.).Thorofare, NJ: SLACK Incorporated.

APPENDIX L - Comparing Ableist Goals and Neurodiversity-Affirming Goals

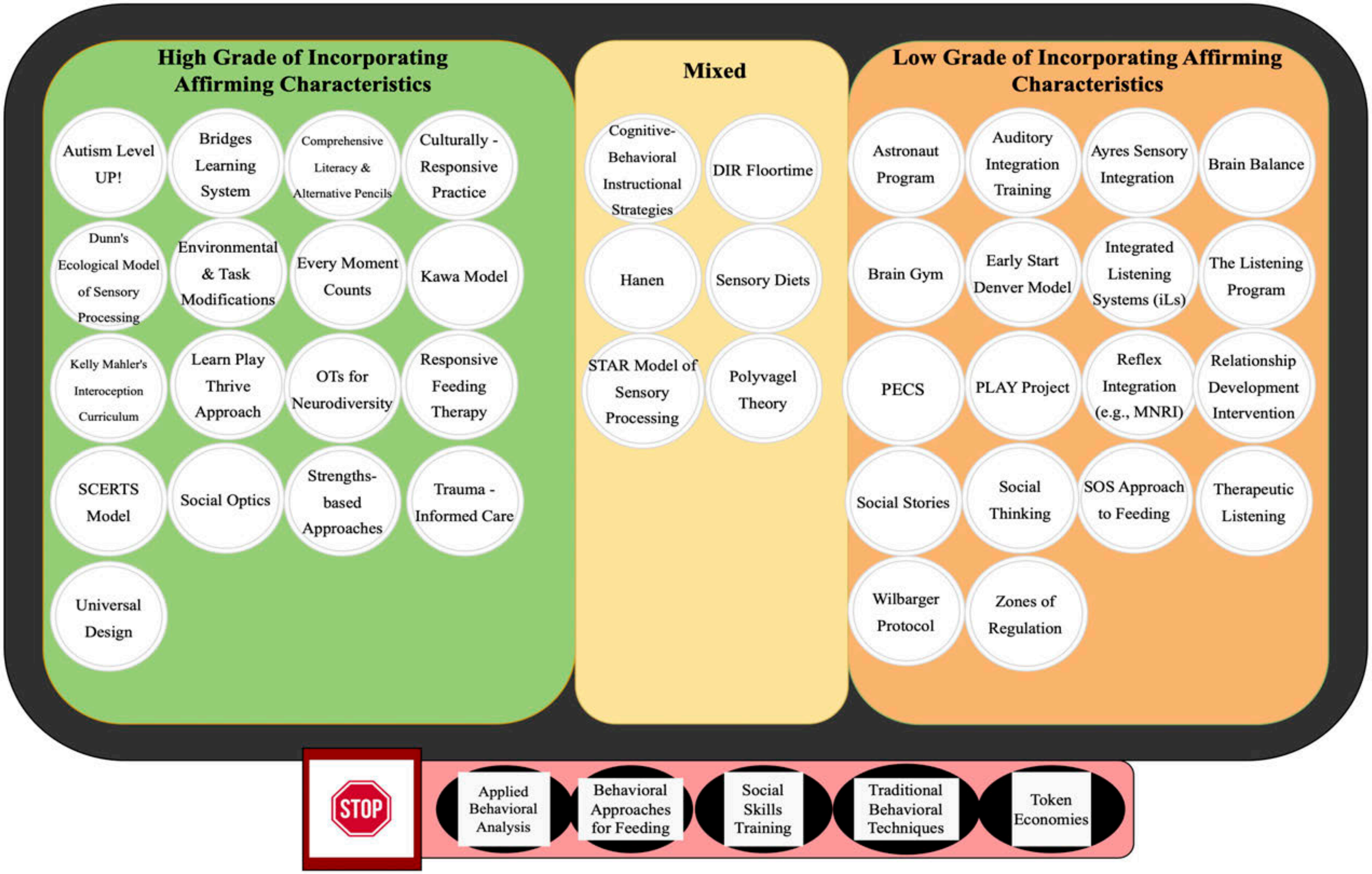
Ableist Objectives	Affirming Alternative	Explanation
"Sora will tolerate five minutes of messy hand play without refusal or minimal finger splaying." OR "Sora will tolerate five minutes of sensory input and demonstrated decreased sensory sensitivity during sensory activities."	"...Sora will self-advocate refusal using multi-modal communication to express preference or disapproval…" (Dorsey et al., 2022)	As previously mentioned, sensory desensitization (without communicated approval by the learner) is not an affirming objective target. Additionally, the goal teaches the child to ignore their sensory sensations and reduces their chances for self-advocacy, which decreases their safety (you are teaching the child to dissociate from their bodily sensations to tolerate input that hurts or is aversive, leading to a catastrophic impact on their mental health. The updated goal teaches the specific skill of self-advocating, and self-determination is a health and well-being priority designated by the autistic community. This goal also further protects the child by teaching them to self-advocate for their needs instead of "accepting" things to happen to them, especially since disabled individuals are much more likely to be abused or taken advantage of then non-disabled children (Dorsey et al., 2022).
"Sora will demonstrate socially appropriate play skills with peers without disruptive behavior." OR "Sora will demonstrate more compliant behaviors in socially appropriate activities to increase their positive interactions with others."	"…Sora will participate in interactions with others that are focused on common activities of interests…Partners (staff/peers) will support the learner's efforts by interacting with them in supportive and accessible ways (e.g., honoring preferred communication efforts, providing space/time as needed, etc.)." (Fede et al., 2023)	There is nothing educational about the ableist goals. There is no mention of the skill Sora will learn, and the ableist goals really place Sora's mental health at risk. Instead, the affirming goals focus on social participation as deemed meaningful by the individual in a neurodiversity-affirming way. It is important to note that the inclusion of social participation goals really needs to be desired by the learner, as the learner likely has ideas on who they want to interact with and who they do not want to interact with (Fede et al., 2023).
"Sora will demonstrate an improved frustration	"...Sora will partner with caregiver/teacher	This goal highlights the importance of contextual supports that are meaningful to the

tolerance as evidenced by their ability to transition from preferred to non-preferred activities with little to no displays of disorganized behavior." OR "Sora will refrain from demonstrating aggressive behaviors throughout their school day." OR "When presented with a problem (e.g., non-preferred task, frustration), Sora will accurately determine the size of the problem (little, big problem) and match their emotional response appropriately to the size of the problem."	and utilize regulation strategies to power up or power down their energy levels when experiencing difficulty during an activity. Partners will support their efforts by recognizing signs of dysregulation and offering individualized and useful supports. Partners will respect and honor unique strategies used by the individual to support their engagement without interruption as long as they are not dangerous, damaging, or disruptive." (Fede et al., 2023) OR "...Sora will describe their own bodily feelings/sensations and their associated feeling/emotion in a way that is meaningful to them…" (Dorsey et al., 2022)	individual. Fede et al. (2023) eloquently states how as human beings we are learning skills all of the time and learning useful skills that are functional to the learn will support their health and well-being. However, it is important that we as partners teach within the context of who the learner is, and how they learn. There is accountability of the partner to provide such supports and embed the supports within the learner's natural contexts. Goals absolutely should never be about making the teacher or family's lives easier; they are always about empowering the individual with skills they find vital to living a life in a meaningful way as deemed by them. Additionally, "size of problem" activities are problematic due to this goal teaching the learner that their feelings are not valid and that the practitioner is more attuned to what the individual is feeling than the individual themselves. Teaching the learner react to situations how the practitioner would react or deem "appropriate" provides no functional skills or realistically support learners and their regulation. Instead, attempt to solve the "why" behind the emotional expression and teach the learner how they can self-advocate for their regulation needs (Fede et al., 2023). Autism Level Up!'s "WHY's Not Size" resource is a fantastic start for reflecting on this concept.
"Sora will demonstrate functional toy actions with preferred play items." OR "Sora will expand their play interests to other play categories or play items."	"Sora's family will report satisfaction with their ability to connect with them during shared meaningful play tasks. "	This goal really places the work on Sora's family. Instead of teaching Sora how they play is wrong and "not functional" (always remember if play brings joy, no matter what it looks like, it is functional; all play is valid play). Autistic or neurodivergent play should never be attempted to be shaped into neurotypical play! With the affirming goal, the work is on the family and partners to embrace and encourage their play style. This will not only support Sora's trust in others as play partners but will promote positive self-esteem and positive mental health.

For more resources on neurodiversity-affirming evaluations and goal writing, consider the following:

- Learn Play Thrive's "Goal Writing for Autistic Students" course -> https://learnplaythrive.com/goals/
- Autism Level Up!'s "Individualized Goals: A Leveled Up! Framework" -> https://www.autismlevelup.com/#events
- Therapist Neurodiversity Collective's "Neurodiversity-Affirming Therapy: Positions, Therapy Goals, and Best Practices" **FREE** -> https://therapistndc.org/neurodiversity-affirming-therapy/
- NeuroWild's "Neurodiversity-Affirming IEP Accommodations, Autistic and ADHDer Students" **FREE** -> https://www.teacherspayteachers.com/Product/Neurodiversity-Affirming-IEP-Accommodations-Autistic-and-ADHD-Students-FREE-9219767

APPENDIX M – Visualization of Graded Techniques and Supports Utilized by OTPs Level of Neurodiversity-Affirming Application



High Grade of Incorporating Affirming Characteristics

- Autism Level UP!
- Bridges Learning System
- Comprehensive Literacy & Alternative Pencils
- Culturally - Responsive Practice
- Dunn's Ecological Model of Sensory Processing
- Environmental & Task Modifications
- Every Moment Counts
- Kawa Model
- Kelly Mahler's Interoception Curriculum
- Learn Play Thrive Approach
- OTs for Neurodiversity
- Responsive Feeding Therapy
- SCERTS Model
- Social Optics
- Strengths-based Approaches
- Trauma - Informed Care
- Universal Design

Mixed

- Cognitive-Behavioral Instructional Strategies
- DIR Floortime
- Hanen
- Sensory Diets
- STAR Model of Sensory Processing
- Polyvagel Theory

Low Grade of Incorporating Affirming Characteristics

- Astronaut Program
- Auditory Integration Training
- Ayres Sensory Integration
- Brain Balance
- Brain Gym
- Early Start Denver Model
- Integrated Listening Systems (iLs)
- The Listening Program
- PECS
- PLAY Project
- Reflex Integration (e.g., MNRI)
- Relationship Development Intervention
- Social Stories
- Social Thinking
- SOS Approach to Feeding
- Therapeutic Listening
- Wilbarger Protocol
- Zones of Regulation

STOP

- Applied Behavioral Analysis
- Behavioral Approaches for Feeding
- Social Skills Training
- Traditional Behavioral Techniques
- Token Economies

APPENDIX N – Determination Summary for Ayres' Sensory Integration

Upon completion of the *Embracing Neurodivergent Occupations* and adapted into a website, summaries determining the service or resources as having a low or mixed grade will be detailed for explanation. For introductory purposes, an evidence summary is provided below.

Intervention: Ayres' Sensory Integration

WHO's ICF Designated Category: Improve sensory processing (ICF body structures level)

Primary Target of Technique as Defined by OTPF-4: Client Factor (Body Function) -> Sensory Functions

Definition(s): "Ayres Sensory Integration® (ASI) is a well-established and growing area of therapeutic practice with applications in various settings including the home, school, and community. Developed by A. Jean Ayres, PhD, OTR, FAOTA, an occupational therapist, psychologist, and neuroscientist, this framework was originally shown to be effective with children with learning and behavior difficulties and has since emerged as an evidence-based practice for use with children with autism…It is designed to improve sensory perceptual abilities, self-regulation, motor skills, and praxis. In doing so, it supports the client's ability to show improved behavior, learning, and social participation." (CLASI, n.d., para. 1)

"Ayres Sensory Integration® (ASI®, Ayres, 1989) is a theory and practice that targets a person's ability to process and internally integrate sensory information from their body and environment, including visual, auditory, tactile, proprioceptive, and vestibular input.

ASI® uses individually tailored activities that challenge sensory processing and motor planning, encourage movement and organization of self in time and space, utilize “just right” challenges, and incorporate clinical equipment in purposeful and playful activities in order to improve adaptive behavior.” (Steinbrenner et al., 2020, p. 120)

Primary Outcomes / Measurements Targeted within Research:

- “Steinbrenner and colleagues (2020) concluded that ASI was an evidence-based practice for children between the ages of 3 and 14 with an autism spectrum diagnosis to address the following outcomes: communication, social skills, cognitive skills, academic/pre-academic skills, adaptive/self-help skills, motor skills, family quality of life, community participation, and reduction in harmful behaviors that limit skill acquisition…In addition, 88.6% of participants showed statistically significant improvements in sensory processing, such as sensory seeking, sensitivity, distractibility, and tolerance for different types of sensory experiences…” (Cahill, 2022, para. 2 - 3)
- “...the Sensory Profile (SP) was used to assess sensory problems.” (Kashefimehr et al., 2018, abstract)
- “ASI could become an evidence-based intervention for improving play, an important outcome for autistic children and the profession of occupational therapy.” (Kuhaneck et al., 2023, abstract)
- "The evidence is strong that ASI intervention demonstrates positive outcomes for improving individually generated goals of functioning and participation as measured by Goal Attainment Scaling for children with autism. Moderate

evidence supported improvements in impairment-level outcomes of improvement in autistic behaviors and skills-based outcomes of reduction in caregiver assistance with self-care activities." (Schaaf et al., 2018, abstract)

- “Visual analysis of the baseline phase, ASI phase, and ASI with parent training phase shows that all 3 fathers demonstrated an increase in the way they supported their child’s playfulness *(neurotypical play descriptions emphasized within the article)*; however, this change was not maintained. Children’s playfulness fluctuated, reaching a peak after fathers received training, but none of the children maintained that change.” (Waldman-Levi & Kuhaneck, 2023, abstract)
    - “Children on the autism spectrum present with complex and varied issues, including difficulty in communicating and interacting with others and difficulty in processing sensory information that influences multiple aspects of everyday and family life…In particular, children on the spectrum exhibit play skills that differ from those of typical children, with limited play content, diversity, and frequency. Their play is characterized by repetitive manipulations; a lack of spontaneity; and limited expression of joy, creativity, and engagement that can challenge the parent–child play experience.” (Waldman-Levi & Kuhaneck, 2023; para. 1)

Other Notes:

- No indication autistic or neurodivergent individuals were involved in creation or modification of the intervention, and none of the literature found incorporated autistic or neurodivergent individuals in research study creation.

- Professional organizations (Steinbrenner et al., 2021) are often utilizing Schaaf et al. (2018), Kashefimher et al. (2018), Pfeiffer et al. (2011), and Schaaf et al., (2014) to designate ASI as an evidence-based intervention, though there are a plethora of problematic issues relating to quality and neurodiversity within the studies.
- The Kashefimher et al. (2018) article utilized the Sensory Profile as a pre- and post- measure, and the Sensory Profile is not meant to be used as an outcome measure secondary to the theoretical models guiding the Sensory Profile emphasizing sensory processing differences are not meant to be changed.
- Within Pfeiffer et al. (2011), the following is stated: " Results identified significant positive changes in Goal Attainment Scaling scores for both groups; more significant changes occurred in the SI group, and a significant decrease in autistic mannerisms occurred in the SI group.” (abstract)
    - This statement does not align with the neurodiversity movement.
- Schaaf et al. (2014) rates children using the Autism Diagnostic Observation Schedule (ADOS) which is highly problematic secondary to the ADOS often equating “high autism severity” to “lower IQ” (para. 8) and is a very ableist assessment. Though the GAS was incorporated to support parent-prioritized goals, these goals can be influenced by the dominant medical model of disability which is apparent within the study, with types of goals including play (neurotypical play), decreasing sensory sensitivities related to daily life (decreasing oral sensitivity to support toothbrushing, decreasing tactile sensitivity

for feeding or to decrease the child’s avoiding contact with others to tolerate playing with others), sitting still when requested, and reducing self-stimulatory behaviors.

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APPENDIX O – Overview of Services and Resources with a High Grade of Being Neurodiversity-Affirming

Autism Level UP! *(https://www.autismlevelup.com/)*.

Autism Level UP! is an autistic-allistic partnership aimed to promote, not just autistic acceptance, but autism appreciation, empowerment, and advocacy (Autism Level Up!, 2020). Autism Level UP! was founded by an autistic advocate and developmental psychologist, Dr. Jacquelyn Fede, and an allistic occupational therapist and researcher, Dr. Amy Laurent. Dr. Fede and Dr. Laurent consult with individuals, schools, families, and organizations to support neurodiversity training, support policy development central to autistic and neurodivergent communities, and create free tools and supports for regulation, communication, and positive self-identity. A few tools utilized by this author include:

- "Heightened Perception: Challenge? Strength? Both!" -> This advocacy tool proposes to challenge the idea of sensory processing differences always being described as deficits or hypersensitivities. This support proposes sensory processing differences can pose real challenges and it also creates remarkable strengths. By reframing how we describe sensory processing differences and consider the context, practitioners can support an individual's positive self-identity relating to their sensory processing differences. For example, this author has sensory processing differences relating to auditory input. Instead of saying I have deficits in auditory input relating to hypersensitivity (incredibly pathologizing-sounding and deficit-based), this support has the "leveled-up" concept of hi-definition hearing. I embrace that I perceive noises at a higher volume more likely than most of my peers, which may cause discomfort depending on the environment, but also I hear sounds most others do not and pick up nuanced sound characteristics that are easily missed, making music that much more of a creative and colorful exploration.

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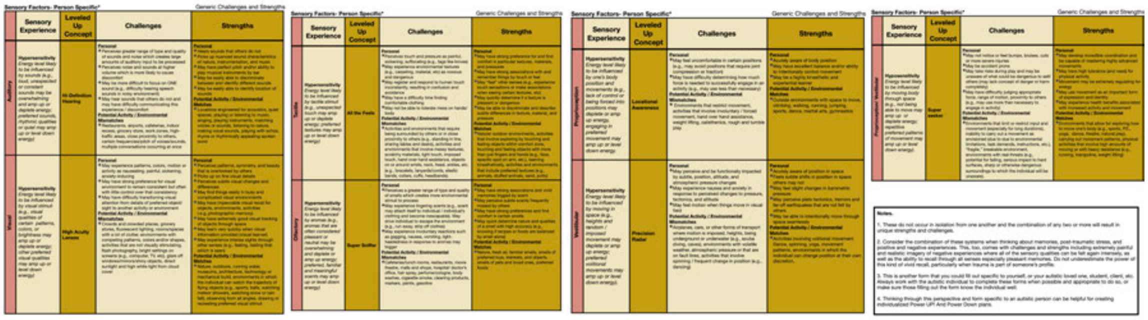
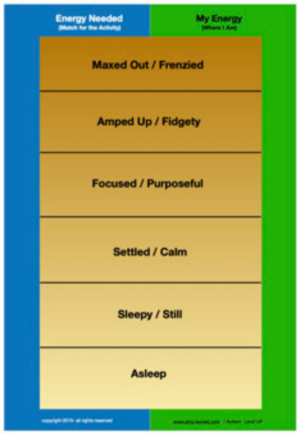


- “Regulator 2.0” -> The Regulator 2.0 is designed to support trialing various regulatory tools within the context of how the tool supports self-regulation, ultimately to identify a list of preferred soothing and alerting strategies the individual can utilize when dysregulated. For example, if an individual has sensory processing differences relating to proprioception, the Regulator 2.0 reports emphasizing having the individual trial tools such as carrying heavy items, using a chewy, or using a weighted blanket and reporting how the tool changes their energy and how much they like the tool.

  https://cdn.sanity.io/files/p6bm7moz/production/2dfd3bde5fec4d4e79397d82b1ab98469e0a857f.pdf

- “Energy Meter” -> This tool is designed to help the individual and their conversational partners identify their internal energy and the energy expectation of the activity, ultimately to support the individual’s self-advocacy and understanding how to adjust their energy level to successfully engage in activities. Autism Level UP! Has various versions on their website, such as:
    - Student-Language Version: https://cdn.sanity.io/files/p6bm7moz/production/85276159f456c3e5a3ff2964eae9a325d72dd171.pdf




ENERGY METER

Generic Regulating Strategies*

Sensory System | Soothing | Alerting

Vestibular (movement/position in space)

Proprioceptive (muscle and joint input position/ pressure… often considered the universal regulatory same input can increase arousal or decrease arousal)

Tactile (touch)

Auditory (sound)

Gustatory (taste)

Visual (sight)

Olfactory (smell)

- Disney Princess Version: https://cdn.sanity.io/files/p6bm7moz/production/1e3fd8e2f50f0eadc49afa9a349e46537fdae07f.pdf

Energy Needed
(Match for the Activity)

My Energy
(Where I Am)

Ariel
"Up where they walk, up where they run!"

Jasmine
"Unbelievable sights. Indescribable feelings. Soaring, tumbling, freewheeling…"

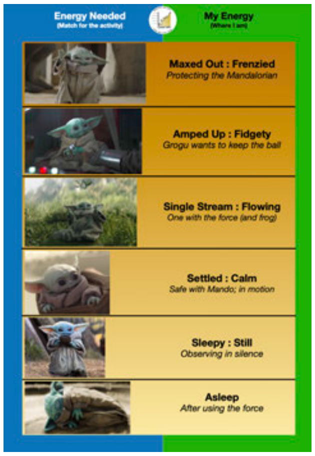
Mulan
"Let's get down to business…"

Pocahontas
"You know your path, child. Now follow it."

Cinderella
[yawn]

Sleeping Beauty
"If you dream a thing more than once, it's sure to come true."

- Grogu (the Child) Version: https://cdn.sanity.io/files/p6bm7moz/production/5b57aa2371580b18b172f20d6139734f02869bc3.pdf



Energy Needed
(Match for the activity)

My Energy
(Where I am)

Maxed Out : Frenzied
Protecting the Mandalorian

Amped Up : Fidgety
Grogu wants to keep the ball

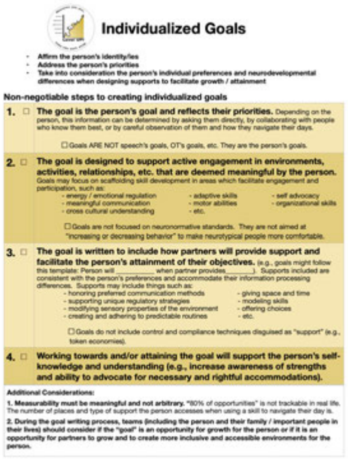
Single Stream : Flowing
One with the force (and frog)

Settled : Calm
Safe with Mando; in motion

Sleepy : Still
Observing in silence

Asleep
After using the force

- "Checklist for Individualized Goals" -> https://cdn.sanity.io/files/p6bm7moz/production/655952605356f5964e9a83e8bbe4b97887dda51c.pdf



Individualized Goals

- Affirm the person's identity/ies
- Address the person's priorities
- Take into consideration the person's individual preferences and neurodevelopmental differences when designing supports to facilitate growth / attainment

Non-negotiable steps to creating individualized goals

1. ☐ **The goal is the person's goal and reflects their priorities.** Depending on the person, this information can be determined by asking them directly, by collaborating with people who know them best, or by careful observation of them and how they navigate their days.

   ☐ Goals ARE NOT speech's goals, OT's goals, etc. They are the person's goals.

2. ☐ **The goal is designed to support active engagement in environments, activities, relationships, etc. that are deemed meaningful by the person.** Goals may focus on scaffolding skill development in areas which facilitate engagement and participation, such as:
   - energy / emotional regulation
   - meaningful communication
   - cross cultural understanding
   - adaptive skills
   - motor abilities
   - etc.
   - self advocacy
   - organizational skills

   ☐ Goals are not focused on neuronormative standards. They are not aimed at "increasing or decreasing behavior" to make neurotypical people more comfortable.

3. ☐ **The goal is written to include how partners will provide support and facilitate the person's attainment of their objectives.** (e.g., goals might follow this template: Person will __________ when partner provides________). Supports included are consistent with the person's preferences and accommodate their information processing differences. Supports may include things such as:
   - honoring preferred communication methods
   - supporting unique regulatory strategies
   - modifying sensory properties of the environment
   - creating and adhering to predictable routines
   - giving space and time
   - modeling skills
   - offering choices
   - etc.

   ☐ Goals do not include control and compliance techniques disguised as "support" (e.g., token economies).

4. ☐ **Working towards and/or attaining the goal will support the person's self-knowledge and understanding (e.g., increase awareness of strengths and ability to advocate for necessary and rightful accommodations).**

Additional Considerations:

1. Measurability must be meaningful and not arbitrary. "80% of opportunities" is not trackable in real life. The number of places and type of support the person accesses when using a skill to navigate their day is.

2. During the goal writing process, teams (including the person and their family / important people in their lives) should consider if the "goal" is an opportunity for growth for the person or if it is an opportunity for partners to grow and to create more inclusive and accessible environments for the person.

- "Fidgets are Tools" -> This is an advocacy tool to teach learners why and how to use fidgets as tools, and how to advocate to the learner's partners (e.g., teacher) to support access to fidgets while combating misperceptions of fidgets. https://cdn.sanity.io/files/p6bm7moz/production/f05844ee3e2bc6e127a39640d49b49e54330535f.pdf

Fidgets are Tools – "GOs" and "NOs" for Partners of Neurodivergent Individuals

✓	Use this framework to explore how your neurodivergent loved one or learner uses fidgets to engage and participate.	☒	Do NOT assume sitting quietly equates to engaging and participating.
✓	Actively teach your neurodivergent loved one or learner WHY and HOW to use fidgets as TOOLS.	☒	Do NOT assume that your neurodivergent loved on or learner Knows WHY or HOW to use a fidget as a tool rather than a toy.
✓	Respect difference. Different people will use tools differently.	☒	Do NOT assume the same fidget will always be the right tool.
✓	Offer fidget choices. Use multimodal communication; objects, pictures, words to support processing in a busy environment.	☒	Do NOT assume that if your learner or loved one is visually focused on the fidget that they are not attending.
✓	Watch for signs of changes in energy and provide support. Fidgets are just one regulation tool to be considered.	☒	Do NOT assume your loved one is processing your spoken words easily in a sensory rich environment.

Fidgets are Tools

Why use a Fidget:
Fidgets can be used to help you to focus on and more easily participate in activities.

What are Fidgets:
Fidgets can be almost anything. Often they are objects, but they could be your own body/body parts. For example:

When to use a Fidget:
Your energy doesn't match the energy you need to participate. For example:
- You are having a hard time paying attention.
- You want to settle or calm your body or mind.
- You want to touch or hold something.
- You feel like you need something interesting to look at.
- You just want to use it.

Where to use a Fidget:
Fidgets are tools used within your personal space. Your personal space is anywhere you can reach without making contact with someone else. You might use a fidget in your hand, on your desk, in your pocket. But, you also might use a fidget under your desk, your mouth, or on the floor.

How to use a Fidget:
Fidgets can be used in many ways. As long as the way you use a fidget does not harm or distract you or anyone else, it is probably okay!

How to know if a fidget is the right tool for you and is helping you

Fidgets are Tools

When to use a Fidget:
- You are having a hard time paying attention.
- You want to settle or calm your body or mind.
- You want to touch or hold something.
- You feel like you need something interesting to look at.
- You just want to use it.

Where to use a Fidget:
- In your hand
- On the floor
- On or under your desk
- In your pocket
- In your mouth (depending on the fidget)

How to use a Fidget:
Fidgets can be used in many ways. As long as the way you use a fidget does not harm or distract you or anyone else, it is probably okay!
- Head/neck - chew, suck, tongue, rub, scratch
- Arm/hand/fingers - rub, squeeze, stretch, pinch, pull
- Leg/foot/toes - bounce, roll, stretch, squish, rub, shake

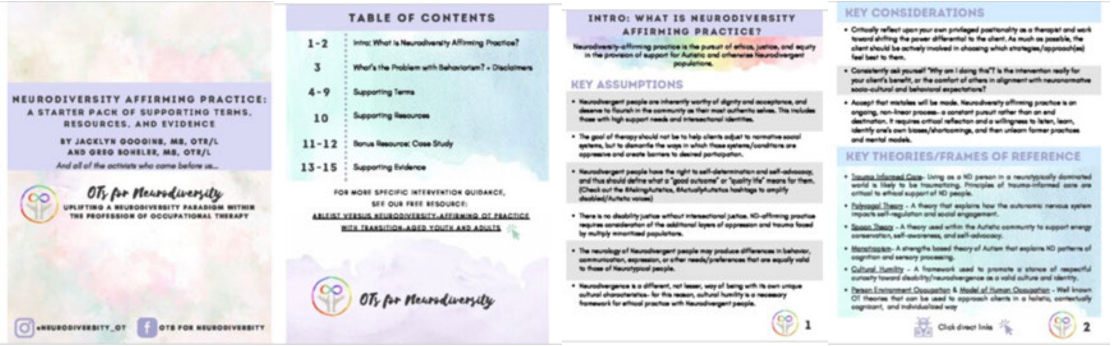
How to know if a fidget is the right tool for you and is helping you

✓ YES	☒ NO
It is helping you to focus on or participate in an activity. It is shifting your energy in a helpful way. It is helping you process information / understand. It is helping you pay attention. It is helping you to complete work/activity.	All of your attention is focused on the Fidget. Using it is increasing your energy mismatch and decreasing your participation. You are distracting others. You feel like it is not helping / not what you need.
Keep using the Fidget	Try a different Fidget / Tool

OTs for Neurodiversity (https://www.teacherspayteachers.com/Store/Ots-For-Neurodiversity?fbclid=IwAR3Lm_UtpeZKBbxnhJIysh3QD56Dh_dKEUU--qfjD5zGy3pQMfFUvhBMCHs)

OTs for Neurodiversity is a social media movement with contributors Jacklyn Boheler, Greg Boheler, and Monica Huang (Boheler et al., 2023). The collaborative creates resources in collaboration with neurodivergent individuals for healthcare professionals working with neurodivergent clients. A few tools created by OTs for Neurodiversity utilized by this author include:

- "Neurodiversity Affirming Practice in Occupational Therapy: A Starter Pack of Supporting Terms, Resources, and Evidence" -> This tool outlines what constitutes neurodiversity-affirming practice, ethical issues and concerns of behaviorism, and a plethora of explanations defining key theories, considerations, and applications of neurodiversity-affirming practice. https://www.teacherspayteachers.com/Product/Neurodiversity-Affirming-OT-Practice-Starter-Pack-7604519



NEURODIVERSITY AFFIRMING PRACTICE: A STARTER PACK OF SUPPORTING TERMS, RESOURCES, AND EVIDENCE

BY JACKLYN GOOGINS, MS, OTR/L
AND GREG BOHELER, MS, OTR/L

And all of the activists who came before us...

OTs for Neurodiversity
UPLIFTING A NEURODIVERSITY PARADIGM WITHIN THE PROFESSION OF OCCUPATIONAL THERAPY

@NEURODIVERSITY_OT
OTS FOR NEURODIVERSITY

TABLE OF CONTENTS

FOR MORE SPECIFIC INTERVENTION GUIDANCE, SEE OUR FREE RESOURCE:
ABLEIST VERSUS NEURODIVERSITY-AFFIRMING OT PRACTICE WITH TRANSITION-AGED YOUTH AND ADULTS

OTs for Neurodiversity

INTRO: WHAT IS NEURODIVERSITY AFFIRMING PRACTICE?

Neurodiversity-affirming practice is the pursuit of ethics, justice, and equity in the provision of support for Autistic and otherwise Neurodivergent populations.

KEY ASSUMPTIONS

1

KEY CONSIDERATIONS

KEY THEORIES/FRAMES OF REFERENCE

Click direct links

2

- "Neurodivergent Identity Workbook" -> A collection of worksheets to support neurodivergent individuals to explore and nurture their identity.

https://www.teacherspayteachers.com/Product/Neurodivergent-Identity-Workbook-6896772

MY IDENTITY (WHO AM I?)

Name

2-3 words or images that describe me best:

My race and/or ethnicity

My culture / heritage

My sexuality (who I am attracted to)

My pronouns (ex. he/him, she/her, they/them)

How I refer to my disability (see person first versus identity first language)

How I describe disability to

My strengths (things I like about myself, or things I am good at)

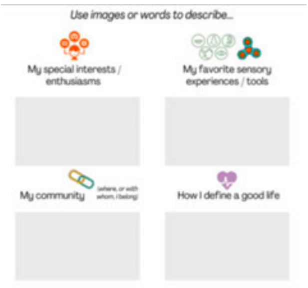
My spirituality (what I feel connected to)

My values (what's important to me)

Things that bring me joy (add images if you want!)

Things that bring me comfort (add images if you want!)

Things I really don't like (add images if you want!)



Use images or words to describe...

My special interests / enthusiasms

My favorite sensory experiences / tools

My community (where, or with whom, I belong)

How I define a good life

SELF ACTUALIZATION (WHO AM I BECOMING?)

Use images or words...

Based on the identity work above...

What am I proud of about who I am? These are the seeds I have planted...

In what way(s) do I still want to grow?

How can I nurture (or care for) my identity to keep growing?

- "What's Next: College!? NC Inclusive Postsecondary Education Exploration Handbook" -> A comprehensive handbook to support students with intellectual disabilities interested in pursuing college. The resource is embedded with links to videos, and is meant to maximize self-determination in the transition planning process.

https://www.teacherspayteachers.com/Product/Whats-Next-College-NC-Inclusive-Postsecondary-Education-Exploration-Handbook-7393367

1 IS COLLEGE THE RIGHT FIT FOR ME?

College could be the next step toward your goals for adult life. It is an exciting opportunity to learn, make friends, and do more on your own. But it's not for everyone, and there are other great options for people who are not interested. You may also decide you are not ready to go right after high school, but maybe later on. Even if it is something you are just thinking about, it always helps to explore your options. Whatever you decide, just make sure it's truly **your decision**.

COLLEGE INTEREST INVENTORY ☑

	Yes	No	Maybe
Do I want to meet new people?	☐	☐	☐
Do I like the idea of more classes and homework after high school?	☐	☐	☐
Do I need more career training or exploration?	☐	☐	☐
Am I ready to take on more responsibility?	☐	☐	☐
Do I like the idea of doing more on my own?	☐	☐	☐
Am I ready to make big decisions about my future?	☐	☐	☐
Do I want to start exploring my college options?	☐	☐	☐

2 IS COLLEGE THE RIGHT FIT FOR ME?

As you explore college options, you begin to wonder, "What will it be like?" or "How hard will it be?"

Here's what to expect...

HIGH SCHOOL	COLLEGE
Your parents and teachers advocate for you	You advocate for yourself
Classes usually meet in the same building	Classes are in different buildings around the campus
Attendance is taken	Professors do not always take attendance. It's your responsibility to attend class
Teachers and parents remind you about homework and assignments	You are responsible for keeping track of due dates on the syllabus
Your time is scheduled by others	You manage your own time
Parents can access your educational information	You give permission for parents to get information about your services and grades
You are automatically enrolled in most classes	You register for classes online. There are more choices of classes and instructors
Modifications and accommodations are included in your IEP	You request your own supports through Disability Services or a person-centered plan
You receive a free and appropriate education through public schools	College students pay tuition and fees
Your make friends with your classmates	You make friends mostly outside of class

Student Life 12

In college, there are lots of fun ways get involved in **student life**. The college experience is more than just taking classes - it is an opportunity to make friends and participate **on-campus** or in your **community**. For example, you may want to...

Some University programs will pair you with a **peer support**: a college student who can help you meet new people and find fun things to do on campus.

21 DISABILITY SERVICES AND SUPPORTS

In high school, you may have received supports and services to help you succeed through an Individualized Education Program (IEP). There is no IEP in college, but you will have access to **accommodations.** Some programs also allow **modifications**.

An **accommodation** is a change to **how** you are learning. Many college students with disabilities use accommodations such as:

- Extra time on tests
- Copies of notes from a classmate
- Assistive technology (ex. text-to-speech, spelling software)
- Permission to make audio recordings of classes
- Access to audiobooks
- Use of calculators on tests
- Seating at front of class to limit distractions

HOW TO GET ACCOMMODATIONS

Some programs provide accommodations through a person-centered plan. You may be expected to write an email to your professors to let them know what accommodations you will need.

You can also request accommodations through your on-campus **Disability Services office.** This is an opportunity to identify your own support needs and practice **self-advocacy**.

- "Neurodiversity-Affirming Versus Ableist Practice with Transition-Aged Clients" -> This resource eloquently illustrates and compares ableist approaches to neurodiversity-affirming approaches to support practitioners in their ability to apply neurodiversity-affirming concepts into practice. Specific aspects of daily life highlighted within the comparisons include emotional regulation, sensory processing, participation, social skills, communication, executive functioning, employment, higher education/training, independent living, community participation, and self-actualization.
    - As of August 2023, this resource is free.

https://www.teacherspayteachers.com/Product/Neurodiversity-Affirming-Versus-Ableist-Practice-with-Transition-Aged-Clients-7178751

- "A Guide for Understanding Neurodivergent Communication Styles" -> This guidebook aims to bridge the gap between neurodivergent and neurotypical communication styles. This resource can be used as a professional development resource to increase neurotypical understanding of how autistic individuals think and learn. Recommendations are based on the perspectives of autistic individuals to promote an anti-ableist, strengths-based lens.
    - As of August 2023, this resource is free.

https://www.teacherspayteachers.com/Product/A-Guide-for-Understanding-Neurodivergent-Communication-Styles-6196205

Series 1:
Bridging the Gap in Neurotypical/
Neurodivergent Communication styles

In a society that idealizes constructs of normality, differences are often viewed as something that should be "fixed." Autistic people face social expectations conform in ways that contradict their fundamental neurology.

As allistics*, we can do better to uplift the value of neurodiversity and form meaningful connections across neurotypes. It's time we meet in the middle, with an acknowledgment that genuine connection involves two-way understanding of communication differences. This series will feature our tips for allistics on how to adjust to, and appreciate, neurodivergent styles of communication.

Autistic people are refreshingly honest. Profoundly insightful. Deeply feeling. Unrestrictedly passionate. Wonderfully authentic and worth knowing. When we broaden our perspectives to embrace different ways of communicating, we create space for neurodiversity to flourish.

*allies to neurodivergent individuals

OTs for Neurodiversity

Bridging the Gap in Neurotypical/
Neurodivergent Communication styles

Series 1, Tip #1

Ditch the small talk. Try initiating a conversation with a simple greeting, and quickly direct the conversation to a specific insight or observation. Even better, relate to autistic individuals through shared experiences or elicit their expertise on a topic of interest.

OTs for Neurodiversity

Bridging the Gap in Neurotypical/
Neurodivergent Communication styles

Series 1, Tip #2

Go with the flow. Autistic conversational patterns are not often linear. Autistic people may backtrack, unexpectedly change the subject, or fixate in conversation. When this is the case, it is usually because they have profound knowledge on a topic that they feel inspired to share. Be willing to adapt and engage in ways that spark enthusiasm. You may be pleasantly surprised with the compelling direction the conversation will take.

OTs for Neurodiversity

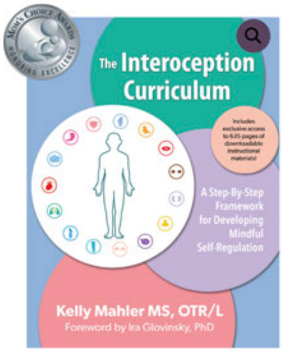
Kelly Mahler's Interoception Curriculum (https://www.kelly-mahler.com/product/the-interoception-curriculum-a-step-bystep-guide-to-developing-mindful-self-regulation/?gclid=CjwKCAiA85efBhBbEiwAD7oLQFnjPUqlQWblnYE1FFjbN7oECshGy7MqdyTaEKm3bxZOEqwVBSFomRoCAFcQAvD_BwE)

Kelly Mahler is an occupational therapist who has collaborated with neurodivergent individuals to create supports that not only validate an individual's interoception experience, but empower them to facilitate self-understanding, health, and well-being (Mahler, 2023). Mahler has created various trainings and tools to implement neurodiversity-affirming practice:

- "On-Demand Course: Interoception Through the Lens of an Autistic Adult" -> https://www.kelly-mahler.com/product/on-demand-course-interoception-through-the-lens-of-an-autistic-adult/
    - Description: "Very frequently, in an effort to promote self-regulation, autistic learners are subject to approaches that do not account for their inner interoceptive experience. For example, they are generically taught to use

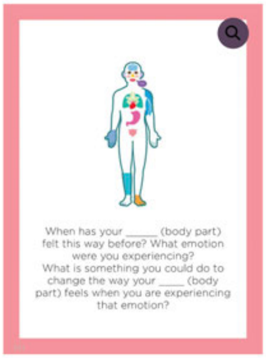
coping skills, but never taught to understand the messages coming from their body indicating when to use a certain regulation strategy. In this live online course, we explore interoception through the lens of an autistic adult, Chloe Rothschild. Chloe will share all about her life-changing interoception journey, including the ups and the downs (Mahler, 2023, para. 3)”

- “The Interoception Curriculum Starter Bundle” -> https://www.kelly-mahler.com/product/the-interoception-curriculum-bundle/
    - The Interoception Curriculum provides a framework for building independent self-regulation, by sequentially teaching a learner to notice body signals, connect body signals to emotions, and then determine what action to take to promote comfort within the body. Additionally within the bundle, practitioners get access to 170 interoception-building activity cards illustrating activities requiring no spaced materials, tools, or equipment.
    - Note from Mahler: “It is strongly recommended that any instructor who wants to use the Interoception Curriculum should study the concepts presented in Interoception: The Eighth Sensory System, first, in order to gain a strong understanding of what research tells us about this sense.” (Mahler, 2023, para. 5)




HANDS AND FINGERS

Rub your hands back and forth together quickly for 10 seconds. How does that make your hands feel?


When has your _____ (body part) felt this way before? What emotion were you experiencing? What is something you could do to change the way your ____ (body part) feels when you are experiencing that emotion?


IA ON THE FLY: BRAIN AND HEAD

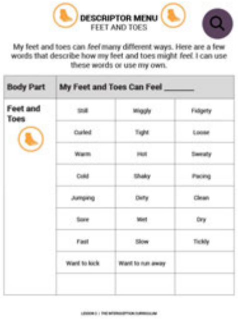
BEGINNER

INTERMEDIATE

ADVANCED

PROFICIENT

DAILY ACTIVITY LIST

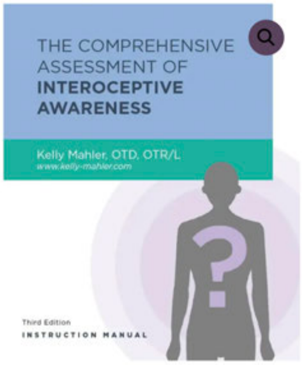

DESCRIPTOR MENU
FEET AND TOES

My feet and toes can *feel* many different ways. Here are a few words that describe how my feet and toes might feel. I can use these words or use my own.

Body Part	My Feet and Toes Can Feel ______		
Feet and Toes	Still	Wiggly	Fidgety
	Curled	Tight	Loose
	Warm	Hot	Sweaty
	Cold	Shaky	Pacing
	Jumping	Dirty	Clean
	Sore	Wet	Dry
	Fast	Slow	Tickly
	Want to kick	Want to run away	

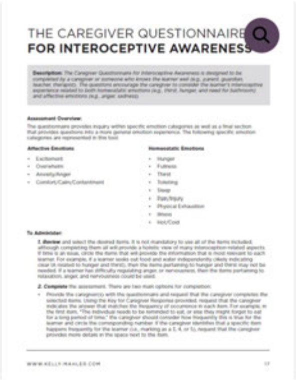
- "The Comprehensive Assessment of Interoceptive Awareness, 3rd Edition" -> https://www.kelly-mahler.com/product/the-comprehensive-assessment-of-interoceptive-awareness-3rd-edition/
  - Description: "You might know that enhancing interoceptive awareness is good for all people, including your clients, but it can be confusing to know what exactly what to do, where to start, and/or how to do it. The Comprehensive Assessment of Interoceptive Awareness helps you start from the beginning, providing 3 sub-assessments that can be flexibly used to allow you gain valuable understanding regarding interoceptive experience in a variety of clients. The following three sub-assessments are provided to provide a flexible approach when seeking to understand a client's interoceptive experience:

1. **The Interoceptive Awareness Interview (self-report):** A series of open-ended and Likert-Scale questions used to gain information about a learner’s experience noticing and understanding body signals.
2. **The Assessment of Self-Regulation + Picture Cards (self-report):** A series of picture cards and corresponding questions used to gain information about a learner’s perspective and experience regulating a variety of emotions. Seeks to gain insight regarding body signals, emotions, and regulation actions.
3. **The Caregiver Questionnaire for Interoceptive Awareness (observation/caregiver report):** A questionnaire designed to gain interoception-related information from a caregiver or someone that knows the learner well. Questions explore a variety of interoception experiences and observations related to emotions such as hunger, thirst, toileting, anxiety, etc.” (para. 3)


THE COMPREHENSIVE ASSESSMENT OF INTEROCEPTIVE AWARENESS

Kelly Mahler, OTD, OTR/L
www.kelly-mahler.com

Third Edition
INSTRUCTION MANUAL

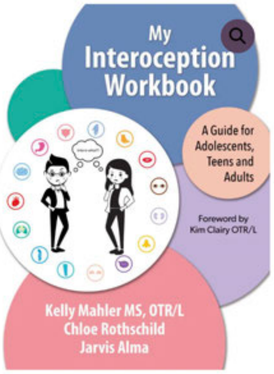

THE CAREGIVER QUESTIONNAIRE FOR INTEROCEPTIVE AWARENESS


INTERPRETATION AND REPORT WRITING


THE INTEROCEPTIVE AWARENESS INTERVIEW

- “My Interoception Workbook: A Guide for Adolescents, Teens and Adults” -> https://www.kelly-mahler.com/product/my-interoception-workbook-a-guide-for-adolescents-teens-and-young-adults/
    - Description: This interactive workbook is co-written by Kelly Mahler, OT and two self-advocates, Chloe Rothschild and Jarvis Alma. This valuable resource is carefully designed to help the reader: (1) gain a better understanding of interoception, (2) learn more about their personal interoception experiences, (3) discover ways to outsmart interoception challenges, and (4) develop methods for identifying and sharing their interoception needs to specific people (e.g., doctor,

teacher, boss, etc.).

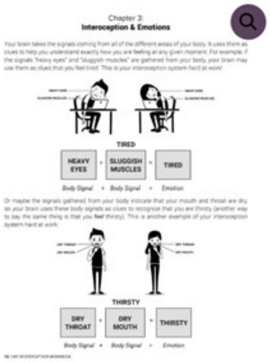


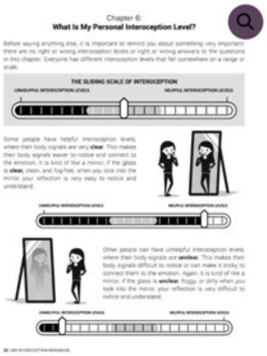
My Interoception Workbook

A Guide for Adolescents, Teens and Adults

Foreword by Kim Clairy OTR/L

Kelly Mahler MS, OTR/L
Chloe Rothschild
Jarvis Alma

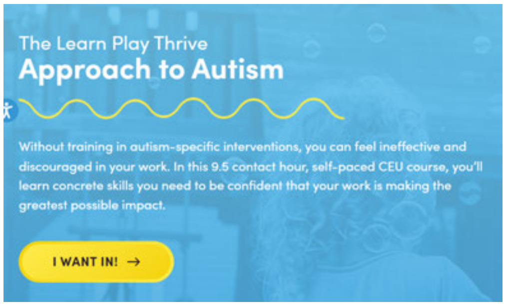




Learn Play Thrive (https://learnplaythrive.com/)

Learn Play Thrive is a resource and continuing education hub owned by an allistic occupational therapy practitioner, Meg Proctor. Proctor's work promotes education emphasizing strengths-based and autistic/neurodiversity-affirming treatment strategies and frequently partners with autistic and neurodivergent individuals to inform her education and resources. Proctor's values for Learn Play Thrive include listening to autistic voices (all courses are either reviewed or developed by autistic professionals), respect for neurodiversity (celebrating differences while validating their barriers in current society), and openness to change (continuously updating content to ensure it matches the neurodiversity movement). This author has utilized a plethora of Learn Play Thrive's trainings and resources including:

- **FREE** "Webinar - Four Essential Steps Towards a Strengths-Based Approach to Autism" -> https://learnplaythrive.com/masterclass/
    - Proctor's free masterclass discusses why many speech and occupational therapists are utilizing the wrong lens when supporting autistic individuals, the latest research regarding autistic learning styles, how to let go of outdated ideas and connect with autistic clients authentically, and how to begin shifting to a strengths-based approach.
- "The Learn Play Thrive Approach to Autism" -> https://learnplaythrive.com/approach/
    - This continuing education attempts to teach practitioners how to move away from deficits-based ideas about autism to promoting the quality of life of autistic individuals by learning how to embrace autistic ways of life and utilize their strengths when supporting them. Components include an introduction to how to be a strengths-based practitioner, the therapy process, making meaningful visual supports, supporting self-care skills, play and leisure, and community integration.


The Learn Play Thrive
Approach to Autism

Without training in autism-specific interventions, you can feel ineffective and discouraged in your work. In this 9.5 contact hour, self-paced CEU course, you'll learn concrete skills you need to be confident that your work is making the greatest possible impact.

- "Goal Writing for Autistic Students" -> https://learnplaythrive.com/goals/
  - "In this course, Autistic SLP Rachel Dorsey teaches you how to set your therapy on the right track with strengths-based goals and a neurodiversity-affirming approach. This comprehensive guide will allow you to tackle goal setting with confidence and enthusiasm so that you can make a greater impact on your autistic students' lives." (para. 1)
  - Course components include an introduction to goal writing in the schools, the neurodiversity paradigm, traditional vs. strengths-based goals, and a multitude of guided case studies ranging from preschool through high school.

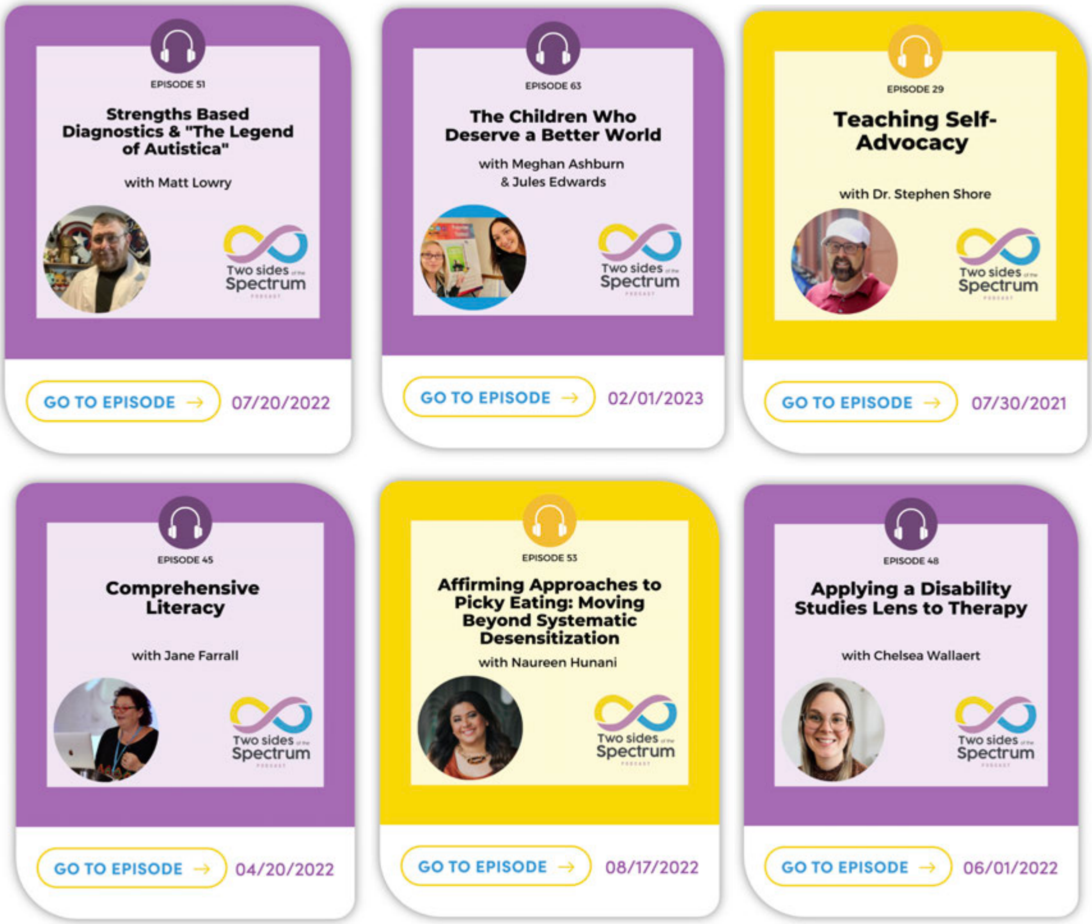
Goal Writing
For Autistic Students

In this course, Autistic SLP Rachel Dorsey teaches you how to set your therapy on the right track with strengths-based goals and a neurodiversity-affirming approach. This comprehensive guide will allow you to tackle goal setting with confidence and enthusiasm so that you can make a greater impact on your autistic students' lives. This course is 10.5 contact hours, including over 7 recorded hours and approximately 3.5 hours of guided self-paced work to truly hone your goal writing skills.

- **FREE** "Two Sides of the Spectrum" Podcast -> https://learnplaythrive.com/podcast/
  - The *Two Sides of the Spectrum* podcast is a twice-monthly podcast where Proctor explores research, amplifies autistic voices, and challenges listeners to reflect and change the way they support autism in life. For most podcasts, Proctor invites a neurodivergent individual to join in exploring a particular topic while providing practical knowledge that can

be easily applied in practice. For every episode, Proctor includes a transcript for accessibility and note-taking, and links resources mentioned by the guest(s).

- A few of the episodes that have completely revamped this author’s practice include:



EPISODE 51
Strengths Based Diagnostics & "The Legend of Autistica"
with Matt Lowry
GO TO EPISODE → 07/20/2022

EPISODE 63
The Children Who Deserve a Better World
with Meghan Ashburn & Jules Edwards
GO TO EPISODE → 02/01/2023

EPISODE 29
Teaching Self-Advocacy
with Dr. Stephen Shore
GO TO EPISODE → 07/30/2021

EPISODE 45
Comprehensive Literacy
with Jane Farrall
GO TO EPISODE → 04/20/2022

EPISODE 53
Affirming Approaches to Picky Eating: Moving Beyond Systematic Desensitization
with Naureen Hunani
GO TO EPISODE → 08/17/2022

EPISODE 48
Applying a Disability Studies Lens to Therapy
with Chelsea Wallaert
GO TO EPISODE → 06/01/2022


EPISODE 58

When Autistic Kids Become Adults: Authentic Participation & Community Access

with Dr. Kristy Coxon & Dr. Caroline Mills

11/02/2022


EPISODE 42

Inclusive, Strengths-Based Preschool

with Corrie Price

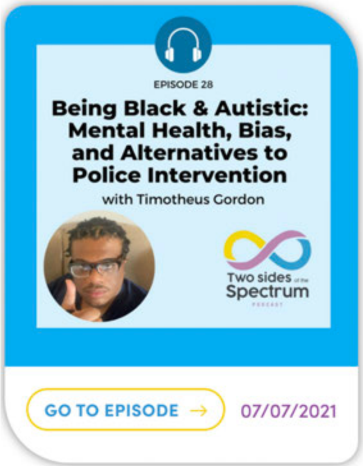
03/02/2022


EPISODE #37

How Behaviorism Hurts Kids

with Greg Santucci

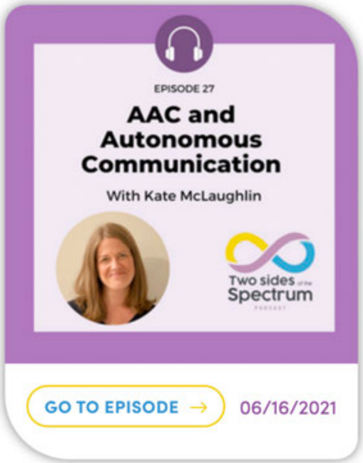
11/17/2021


EPISODE 28

Being Black & Autistic: Mental Health, Bias, and Alternatives to Police Intervention

with Timotheus Gordon

07/07/2021


EPISODE 27

AAC and Autonomous Communication

With Kate McLaughlin

06/16/2021


EPISODE 16

Navigating Sensory Processing Differences

with Dr. Winnie Dunn

01/06/2021


EPISODE 15

Fostering Positive Autistic Self-Identity

with Sarah Selvaggi Hernandez

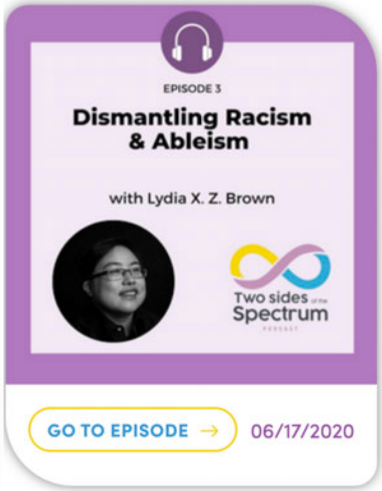
12/02/2020


EPISODE 7

A Different Approach to Self Regulation

with Autism Level Up

08/12/2020


EPISODE 3

Dismantling Racism & Ableism

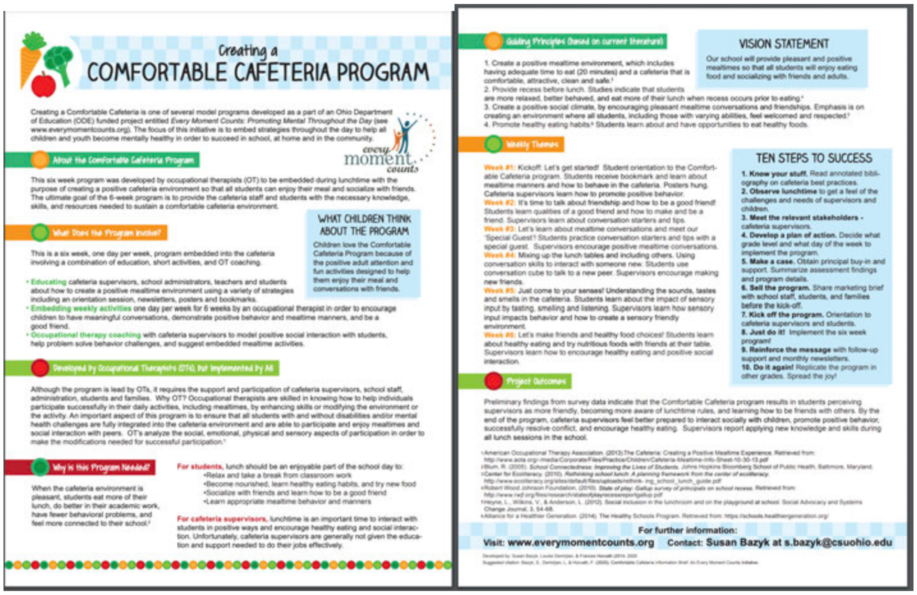
with Lydia X. Z. Brown

06/17/2020

Every Moment Counts (https://everymomentcounts.org/)

Every Moment Counts (EMC) is a mental health promotion initiative created by Dr. Susan Bazyk, and aims to support positive mental health for children and youth at home, school, and the community. EMC educates partners how to create environments that foster participation and enjoyment for all children, how to promote inclusion of disabled children and youth within school, and integrate positive mental health supports in natural school and community contexts. Each program includes handouts and resources educating how to implement the program. The multi-tiered public health approach programs and strategies are all free to download, including:

- Comfortable Cafeteria (https://everymomentcounts.org/comfortable-cafeteria) → helps build capacity of cafeteria supervisors and students to create a positive environment so that all students enjoy their lunch and socializing with peers. Weekly themes focus on friendship promotion, mealtime conversations, including everyone, and healthy eating.



Creating a

COMFORTABLE CAFETERIA PROGRAM

Creating a Comfortable Cafeteria is one of several model programs developed as a part of an Ohio Department of Education (ODE) funded project entitled *Every Moment Counts: Promoting Mental Throughout the Day* (see www.everymomentcounts.org). The focus of this initiative is to embed strategies throughout the day to help all children and youth become mentally healthy in order to succeed in school, at home and in the community.

every moment counts

About the Comfortable Cafeteria Program

This six week program was developed by occupational therapists (OT) to be embedded during lunchtime with the purpose of creating a positive cafeteria environment so that all students can enjoy their meal and socialize with friends. The ultimate goal of the 6-week program is to provide the cafeteria staff and students with the necessary knowledge, skills, and resources needed to sustain a comfortable cafeteria environment.

What Does the Program Involve?

This is a six week, one day per week, program embedded into the cafeteria involving a combination of education, short activities, and OT coaching.

- **Educating** cafeteria supervisors, school administrators, teachers and students about how to create a positive mealtime environment using a variety of strategies including an orientation session, newsletters, posters and bookmarks.
- **Embedding weekly activities** one day per week for 6 weeks by an occupational therapist in order to encourage children to have meaningful conversations, demonstrate positive behavior and mealtime manners, and be a good friend.
- **Occupational therapy coaching** with cafeteria supervisors to model positive social interaction with students, help problem solve behavior challenges, and suggest embedded mealtime activities.

WHAT CHILDREN THINK ABOUT THE PROGRAM

Children love the Comfortable Cafeteria Program because of the positive adult attention and fun activities designed to help them enjoy their meal and conversations with friends.

Developed by Occupational Therapists (OTs), but Implemented by All

Although the program is lead by OTs, it requires the support and participation of cafeteria supervisors, school staff, administration, students and families. Why OT? Occupational therapists are skilled in knowing how to help individuals participate successfully in their daily activities, including mealtimes, by enhancing skills or modifying the environment or the activity. An important aspect of this program is to ensure that all students with and without disabilities and/or mental health challenges are fully integrated into the cafeteria environment and are able to participate and enjoy mealtimes and social interaction with peers. OT's analyze the social, emotional, physical and sensory aspects of participation in order to make the modifications needed for successful participation.[1]

Why is this Program Needed?

When the cafeteria environment is pleasant, students eat more of their lunch, do better in their academic work, have fewer behavioral problems, and feel more connected to their school.[2]

For students, lunch should be an enjoyable part of the school day to:

- Relax and take a break from classroom work
- Become nourished, learn healthy eating habits, and try new food
- Socialize with friends and learn how to be a good friend
- Learn appropriate mealtime behavior and manners

For cafeteria supervisors, lunchtime is an important time to interact with students in positive ways and encourage healthy eating and social interaction. Unfortunately, cafeteria supervisors are generally not given the education and support needed to do their jobs effectively.

Guiding Principles (based on current literature)

1. Create a positive mealtime environment, which includes having adequate time to eat (20 minutes) and a cafeteria that is comfortable, attractive, clean and safe.[1]
2. Provide recess before lunch. Studies indicate that students are more relaxed, better behaved, and eat more of their lunch when recess occurs prior to eating.[4]
3. Create a positive social climate, by encouraging pleasant mealtime conversations and friendships. Emphasis is on creating an environment where all students, including those with varying abilities, feel welcomed and respected.[5]
4. Promote healthy eating habits.[6] Students learn about and have opportunities to eat healthy foods.

VISION STATEMENT

Our school will provide pleasant and positive mealtimes so that all students will enjoy eating food and socializing with friends and adults.

Weekly Themes

Week #1: Kickoff: Let's get started! Student orientation to the Comfortable Cafeteria program. Students receive bookmark and learn about mealtime manners and how to behave in the cafeteria. Posters hung. Cafeteria supervisors learn how to promote positive behavior.
Week #2: It's time to talk about friendship and how to be a good friend! Students learn qualities of a good friend and how to make and be a friend. Supervisors learn about conversation starters and tips.
Week #3: Let's learn about mealtime conversations and meet our 'Special Guest'! Students practice conversation starters and tips with a special guest. Supervisors encourage positive mealtime conversations.
Week #4: Mixing up the lunch tables and including others. Using conversation skills to interact with someone new. Students use conversation cube to talk to a new peer. Supervisors encourage making new friends.
Week #5: Just come to your senses! Understanding the sounds, tastes and smells in the cafeteria. Students learn about the impact of sensory input by tasting, smelling and listening. Supervisors learn how sensory input impacts behavior and how to create a sensory friendly environment.
Week #6: Let's make friends and healthy food choices! Students learn about healthy eating and try nutritious foods with friends at their table. Supervisors learn how to encourage healthy eating and positive social interaction.

TEN STEPS TO SUCCESS

1. **Know your stuff.** Read annotated bibliography on cafeteria best practices.
2. **Observe lunchtime** to get a feel of the challenges and needs of supervisors and children.
3. **Meet the relevant stakeholders** - cafeteria supervisors.
4. **Develop a plan of action.** Decide what grade level and what day of the week to implement the program.
5. **Make a case.** Obtain principal buy-in and support. Summarize assessment findings and program details.
6. **Sell the program.** Share marketing brief with school staff, students, and families before the kick-off.
7. **Kick off the program.** Orientation to cafeteria supervisors and students.
8. **Just do it!** Implement the six week program!
9. **Reinforce the message** with follow-up support and monthly newsletters.
10. **Do it again!** Replicate the program in other grades. Spread the joy!

Project Outcomes

Preliminary findings from survey data indicate that the Comfortable Cafeteria program results in students perceiving supervisors as more friendly, becoming more aware of lunchtime rules, and learning how to be friends with others. By the end of the program, cafeteria supervisors feel better prepared to interact socially with children, promote positive behavior, successfully resolve conflict, and encourage healthy eating. Supervisors report applying new knowledge and skills during all lunch sessions in the school.

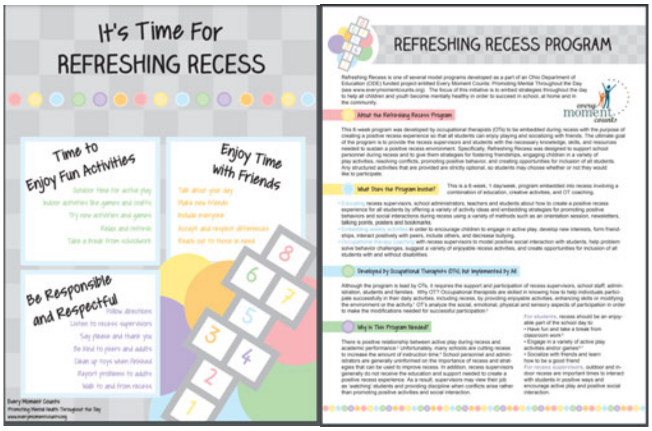
[1] American Occupational Therapy Association. (2013).The Cafeteria: Creating a Positive Mealtime Experience. Retrieved from: http://www.aota.org/-/media/Corporate/Files/Practice/Children/Cafeteria-Mealtime-Info-Sheet-10-30-13.pdf
[2] Blum, R. (2005). *School Connectedness: Improving the Lives of Students.* Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland.
[3] Center for Ecoliteracy. (2010). *Rethinking school lunch: A planning framework from the center of ecoliteracy.* http://www.ecoliteracy.org/sites/default/files/uploads/rethink- ing_school_lunch_guide.pdf
[4] Robert Wood Johnson Foundation. (2010). *State of play: Gallup survey of principals on school recess.* Retrieved from: http://www.rwjf.org/files/research/stateofplayrecessreportgallup.pdf
[5] Heyne, L., Wilkins, V., & Anderson, L. (2012). Social inclusion in the lunchroom and on the playground at school. Social Advocacy and Systems Change Journal, 3, 54-68.
[6] Alliance for a Healthier Generation. (2014). The Healthy Schools Program. Retrieved from: https://schools.healthiergeneration.org/

For further information:

Visit: www.everymomentcounts.org Contact: Susan Bazyk at s.bazyk@csuohio.edu

Developed by: Susan Bazyk, Louise Demirjian, & Frances Horvath (2014, 2020)
Suggested citation: Bazyk, S., Demirjian, L., & Horvath, F. (2020). Comfortable Cafeteria Information Brief: An Every Moment Counts Initiative.

- Refreshing Recess (https://everymomentcounts.org/refreshing-recess/) → helps build capacity of recess supervisors and students to create a positive environment so that all students enjoy active play and socializing with peers. Weekly themes focus on friendship promotion, including others, teamwork, active play, and conflict resolution.


It's Time For
REFRESHING RECESS

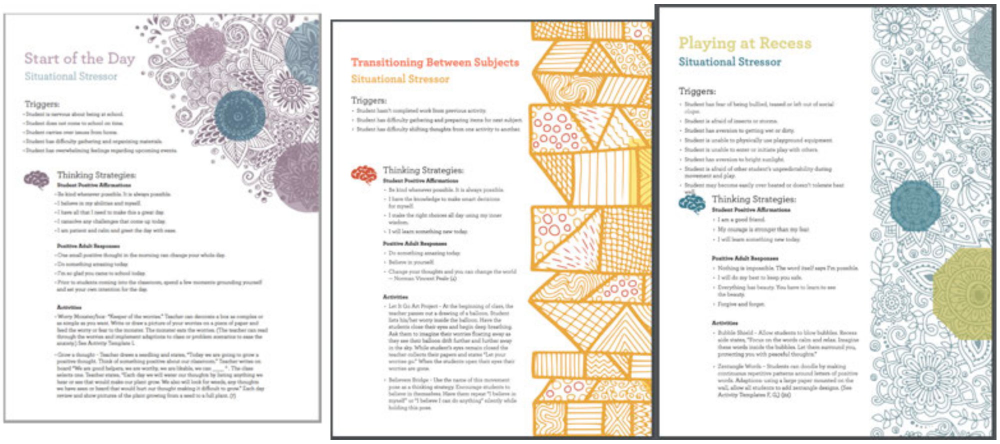
Time to
Enjoy Fun Activities

Enjoy Time
With Friends

Be Responsible
and Respectful

REFRESHING RECESS PROGRAM

- Calm Moments Cards (https://everymomentcounts.org/calm-moments-cards/) → designed to help teachers and other school personnel recognize signs of stress in students and embed thinking, relaxation and focusing, and sensory strategies to reduce stress and enhance emotional well-being during 17 situational stressors (e.g. taking a test, completing an assignment, etc.).


Start of the Day
Situational Stressor

Triggers:

Thinking Strategies:

Transitioning Between Subjects
Situational Stressor

Triggers:

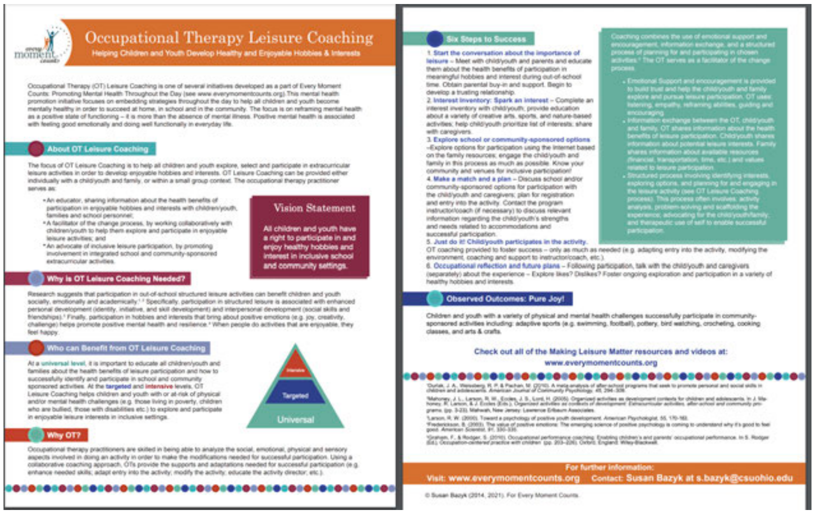
Thinking Strategies:

Playing at Recess
Situational Stressor

Triggers:

Thinking Strategies:

- Making Leisure Matter (https://everymomentcounts.org/making-leisure-matter/) → coaching strategies are used to explore interests in youth with limited or no leisure interests, find community options for participation, and foster participation.



Occupational Therapy Leisure Coaching

Helping Children and Youth Develop Healthy and Enjoyable Hobbies & Interests

Occupational Therapy (OT) Leisure Coaching is one of several initiatives developed as a part of Every Moment Counts: Promoting Mental Health Throughout the Day (see www.everymomentcounts.org). This mental health promotion initiative focuses on embedding strategies throughout the day to help all children and youth become mentally healthy in order to succeed at home, in school and in the community. The focus is on reframing mental health as a positive state of functioning – it is more than the absence of mental illness. Positive mental health is associated with feeling good emotionally and doing well functionally in everyday life.

About OT Leisure Coaching

The focus of OT Leisure Coaching is to help all children and youth explore, select and participate in extracurricular leisure activities in order to develop enjoyable hobbies and interests. OT Leisure Coaching can be provided either individually with a child/youth and family, or within a small group context. The occupational therapy practitioner serves as:

- An educator, sharing information about the health benefits of participation in enjoyable hobbies and interests with children/youth, families and school personnel;
- A facilitator of the change process, by working collaboratively with children/youth to help them explore and participate in enjoyable leisure activities; and
- An advocate of inclusive leisure participation, by promoting involvement in integrated school and community-sponsored extracurricular activities.

Vision Statement

All children and youth have a right to participate in and enjoy healthy hobbies and interest in inclusive school and community settings.

Why is OT Leisure Coaching Needed?

Research suggests that participation in out-of-school structured leisure activities can benefit children and youth socially, emotionally and academically.[1, 2] Specifically, participation in structured leisure is associated with enhanced personal development (identity, initiative, and skill development) and interpersonal development (social skills and friendships).[3] Finally, participation in hobbies and interests that bring about positive emotions (e.g. joy, creativity, challenge) helps promote positive mental health and resilience.[4] When people do activities that are enjoyable, they feel happy.

Who can Benefit from OT Leisure Coaching

At a universal level, it is important to educate all children/youth and families about the health benefits of leisure participation and how to successfully identify and participate in school and community sponsored activities. At the targeted and intensive levels, OT Leisure Coaching helps children and youth with or at-risk of physical and/or mental health challenges (e.g. those living in poverty, children who are bullied, those with disabilities etc.) to explore and participate in enjoyable leisure interests in inclusive settings.

Why OT?

Occupational therapy practitioners are skilled in being able to analyze the social, emotional, physical and sensory aspects involved in doing an activity in order to make the modifications needed for successful participation. Using a collaborative coaching approach, OTs provide the supports and adaptations needed for successful participation (e.g. enhance needed skills; adapt entry into the activity; modify the activity; educate the activity director; etc.).

Six Steps to Success

1. **Start the conversation about the importance of leisure** – Meet with child/youth and parents and educate them about the health benefits of participation in meaningful hobbies and interest during out-of-school time. Obtain parental buy-in and support. Begin to develop a trusting relationship.
2. **Interest Inventory: Spark an interest** – Complete an interest inventory with child/youth; provide education about a variety of creative arts, sports, and nature-based activities; help child/youth prioritize list of interests; share with caregivers.
3. **Explore school or community-sponsored options** –Explore options for participation using the Internet based on the family resources; engage the child/youth and family in this process as much as possible. Know your community and venues for inclusive participation!
4. **Make a match and a plan** – Discuss school and/or community-sponsored options for participation with the child/youth and caregivers; plan for registration and entry into the activity. Contact the program instructor/coach (if necessary) to discuss relevant information regarding the child/youth's strengths and needs related to accommodations and successful participation.
5. **Just do it! Child/youth participates in the activity.** OT coaching provided to foster success – only as much as needed (e.g. adapting entry into the activity, modifying the environment, coaching and support to instructor/coach, etc.).
6. **Occupational reflection and future plans** – Following participation, talk with the child/youth and caregivers (separately) about the experience – Explore likes? Dislikes? Foster ongoing exploration and participation in a variety of healthy hobbies and interests.

Coaching combines the use of emotional support and encouragement, information exchange, and a structured process of planning for and participating in chosen activities.[5] The OT serves as a facilitator of the change process.

- Emotional Support and encouragement is provided to build trust and help the child/youth and family explore and pursue leisure participation. OT uses listening, empathy, reframing abilities, guiding and encouraging.
- Information exchange between the OT, child/youth and family. OT shares information about the health benefits of leisure participation. Child/youth shares information about potential leisure interests. Family shares information about available resources (financial, transportation, time, etc.) and values related to leisure participation.
- Structured process involving identifying interests, exploring options, and planning for and engaging in the leisure activity (see OT Leisure Coaching process). This process often involves: activity analysis, problem-solving and scaffolding the experience; advocating for the child/youth/family; and therapeutic use of self to enable successful participation.

Observed Outcomes: Pure Joy!

Children and youth with a variety of physical and mental health challenges successfully participate in community-sponsored activities including: adaptive sports (e.g. swimming, football), pottery, bird watching, crocheting, cooking classes, and arts & crafts.

Check out all of the Making Leisure Matter resources and videos at: www.everymomentcounts.org

[1] Durlak, J. A., Weissberg, R. P. & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. American Journal of Community Psychology, 45, 294-309.

[2] Mahoney, J. L., Larson, R. W., Eccles, J. S., Lord, H. (2005). Organized activities as development contexts for children and adolescents. In J. Mahoney, R. Larson, & J. Eccles (Eds.), Organized activities as contexts of development: Extracurricular activities, after-school and community programs. (pp. 3-23). Mahwah, New Jersey: Lawrence Erlbaum Associates.

[3] Larson, R. W. (2000). Toward a psychology of positive youth development. American Psychologist, 55, 170-183.

[4] Fredrickson, B. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. American Scientist, 91, 330-335.

[5] Graham, F., & Rodger, S. (2010). Occupational performance coaching: Enabling children's and parents' occupational performance. In S. Rodger (Ed.), Occupation-centered practice with children (pp. 203–226). Oxford, England: Wiley-Blackwell.

For further information:
Visit: www.everymomentcounts.org Contact: Susan Bazyk at s.bazyk@csuohio.edu

- Tier 1 Embedded Strategies (https://everymomentcounts.org/embedded-strategies/) → a variety of evidence-based strategies for promoting mental health based on research from positive psychology are provided on the EMC website.

Every Moment Counts
10 Approaches Supporting School Mental Health

Every Moment Counts
10 Approaches Supporting School Mental Health

Bridges Learning Systems (https://bridgeslearningsystem.com/)

Bridges Learning Systems are resource and curriculum developers led by neurodivergent individuals to support neurodivergent individuals. Programs within the

Bridges Learning Systems have frequent autistic and neurodivergent collaborators, such as NeuroClastic, Autism in Black, and Neurodiversity Training International. Bridges Learning Systems has various curriculums pending on the user:

- Sea Bridge for educators and clinicians (https://bridgeslearningsystem.com/sea-bridge/) -> An online neurodiversity and strengths-based curriculum for educators and individual service providers to support teaching and guide neurodivergent youth ages five to ten.
- Haven Bridge for parents and caregivers (https://bridgeslearningsystem.com/haven-bridge/) -> Teaches parents, caregivers, and families how to authentically support children of all neurotypes, including understanding communication differences, different ways of thinking, and differences in authentically being.
- **FREE** resources on Bridges Learning Systems' website include a sensory-friendly space checklist, reframing autism using the neurodiversity paradigm, assessment of individual ableism, supporting your child in neurodivergent pride, and ABC's of neurodiversity, all located at https://bridgeslearningsystem.com/free-resources/

ABCs of NEURODIVERSITY

A

AA
An acronym for Actually Autistic.

AAC
An acronym for Augmentative and Alternative Communication. AAC is a type of communication that doesn't rely on mouth words. Some autistic or neurodivergent folks may use an AAC device for communication.

ABA
An acronym for Applied-Behavior Analysis. ABA is a school of thought where all behavior is believed to occur (and can be changed) as a result of rewards and consequences. ABA is disliked by the majority of the neurodivergent community.

Abled
A non-disabled person.

Ableism
A discriminatory attitude or belief that prioritizes of abled and neurotypical ways of interacting with the world.

Access needs (support needs)
Anything a person needs to participate in different aspects of the world (e.g. space, event, or relationship). All people have access needs, but because the world was designed for non-disabled folks and thus their access needs are met by default, we tend to only associate access needs with disabled people.

ADHD
An acronym for Attention-Deficit/Hyperactivity Disorder.

Alexithymia
A difficulty in recognizing and identifying feelings in oneself.

Allistic
A person who is not Autistic. This includes people who are neurodivergent but not Autistic.

AuDHD
A person who is both Autistic and ADHD.

Autist
An Autistic person. Used synonymously with Autistic.

Autistiphobia
A fear or prejudice against Autistic people.

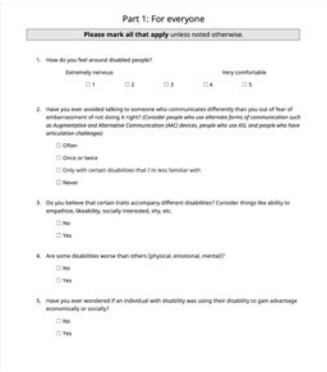
Autistic
An identifier for a person who is professionally or self-diagnosed on the autism spectrum. Identity-first language (i.e. "an autistic person") is preferred by the majority of the Autistic community over person-first language (i.e. "a person with autism").

B

Burnout
A state of stress and exhaustion in an autistic person, often due to prolonged periods of masking and/or unmet needs.

C

Camouflaging (masking)
The process in which an Autistic or neurodivergent person suppresses their natural tendencies and replaces them with unnatural ones to conform to societal expectations.



Part 1: For everyone

Please mark all that apply unless noted otherwise.

1. How do you feel around disabled people?

Extremely nervous ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 Very comfortable

2. Have you ever avoided talking to someone who communicates differently than you out of fear of embarrassment of not doing it right? *(Consider people who use alternate forms of communication such as Augmentative and Alternative Communication (AAC) devices, people who use ASL and people who have articulation challenges)*

☐ Often
☐ Once or twice
☐ Only with certain disabilities that I'm less familiar with
☐ Never

3. Do you believe that certain traits accompany different disabilities? Consider things like ability to empathize, likeability, socially interested, shy, etc.

☐ No
☐ Yes

4. Are some disabilities worse than others (physical, emotional, mental)?

☐ No
☐ Yes

5. Have you ever wondered if an individual with disability was using their disability to gain advantage economically or socially?

☐ No
☐ Yes

Sensory Friendly Space Checklist
A Bridges Learning System resource for professionals working with neurodivergent youth

Creating a sensory-friendly space (i.e. classroom, office, area, room) is a great strategy to increase access for autistic and neurodivergent individuals.

There are two key points to keep in mind when creating a space that is truly sensory-friendly:

1. **The space and the items within it need to be catered to the unique needs of the individuals it serves.** Sensory needs vary greatly from one person to the next. Getting to know the neurodivergent individuals you serve and their unique sensory needs is key to creating a space that works for them.
2. **Minimize the sensory input that individuals cannot disengage from without leaving the space.** Think of it as a buffet in which the space is an empty plate. Individuals are not simply handed a plate filled with food they didn't want or ask for. They choose what to add to their plate (i.e. playing with a fidget toy, smelling a scented marker, bouncing on a yoga ball, etc.) but can also choose to leave their plate empty.
   a. Examples of important sensory input to minimize: Noise pollution, harsh lighting, and inescapable smells (good or bad)

With those key points in mind, review your space and use the checklist that follows to aid you in making your space more sensory-friendly. While this list is a great starting point, it is not exhaustive and may not encompass individual needs. Remember to work closely with individuals to create a space that benefits all!

Lighting and visuals

☐ The space takes advantage of any natural light available.
☐ The space avoids use of fluorescent overhead lighting. If fluorescent lights must be used, they are covered by fire-safe filters that soften their impact.
☐ There are multiple options of lighting within the space. In a classroom or large office, this could look like leaving the larger space open to natural light and/or with lights on as well as including a sectioned off area using curtains or fabric with darker or softer lighting.

APPENDIX P – Resources for Caregivers

<u>Questions to Ask Provider</u>

1. Do they utilize any practices resembling Applied Behavioral Analysis (ABA) or behaviorism techniques, such as reinforcement or token boards?
2. Do they attempt to write goals about "fixing" the neurodivergent child?
3. Do they emphasize neurotypical developmental skills, such as eye contact, neurotypical joint attention, etc.?
4. How has the practitioner supported advocacy for neurodivergent individuals?
5. Do they support exploring accommodations and modifications and unrestricted access to these supports?
6. Do they attempt to utilize a strengths-based approach? What does it look like in their words?
7. Do they attempt to teach an individual to embrace their sensory differences by teaching self-advocacy skills, explore various tools, and adapting the environment instead of teaching the individual to "tolerate" the input (e.g., no exposure therapy, wet/tactile play to desensitize to messy textures)?
8. Do they respect bodily autonomy, such as not touching or physically manipulating the individual without consent including hand-over-hand?
9. Are goals or interventions supporting empowerment, self-determination, or positive self-identity instead of compliance?
10. Do they support and validate the individual's methods of stimming?

11. Do they support all forms of communication, and push for AAC evaluations for individuals that don't have consistent methods of communication? No prerequisites for AAC?

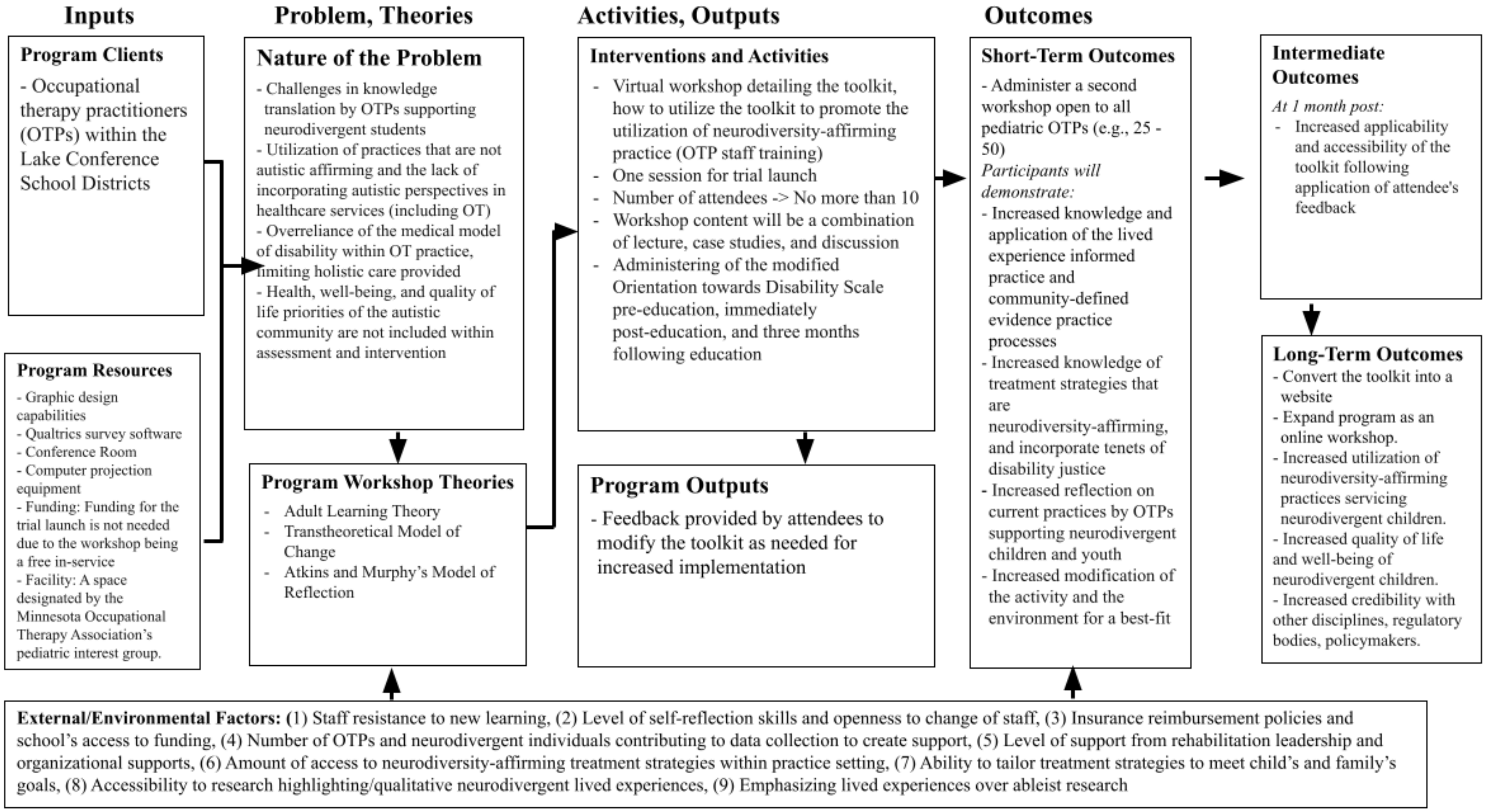
Additional Resources

Therapist Neurodiversity Collective's "8 Signs of a Respectful and Empathetic Therapist" -> https://therapistndc.org/wp-content/uploads/2020/08/8-Signs.pdf

Emily Harvey's "A Parent's Introductory Guide to Neurodiversity-Aligned Therapy and Educational Practices for Autistic Children" -> https://static1.squarespace.com/static/614f7b8e6b8ec433331a77a4/t/631e4a4d854ced2ee5e8ec34/1662929486573/Autism+Guidebook+2.0.pdf

APPENDIX Q – Logic Model of Embracing Neurodivergent Occupations

Program title: ***Embracing Neurodivergent Occupations – A Trial Launch***



Inputs

Program Clients

- Occupational therapy practitioners (OTPs) within the Lake Conference School Districts

Program Resources

- Graphic design capabilities
- Qualtrics survey software
- Conference Room
- Computer projection equipment
- Funding: Funding for the trial launch is not needed due to the workshop being a free in-service
- Facility: A space designated by the Minnesota Occupational Therapy Association's pediatric interest group.

Problem, Theories

Nature of the Problem

- Challenges in knowledge translation by OTPs supporting neurodivergent students
- Utilization of practices that are not autistic affirming and the lack of incorporating autistic perspectives in healthcare services (including OT)
- Overreliance of the medical model of disability within OT practice, limiting holistic care provided
- Health, well-being, and quality of life priorities of the autistic community are not included within assessment and intervention

Program Workshop Theories

- Adult Learning Theory
- Transtheoretical Model of Change
- Atkins and Murphy's Model of Reflection

Activities, Outputs

Interventions and Activities

- Virtual workshop detailing the toolkit, how to utilize the toolkit to promote the utilization of neurodiversity-affirming practice (OTP staff training)
- One session for trial launch
- Number of attendees -> No more than 10
- Workshop content will be a combination of lecture, case studies, and discussion
- Administering of the modified Orientation towards Disability Scale pre-education, immediately post-education, and three months following education

Program Outputs

- Feedback provided by attendees to modify the toolkit as needed for increased implementation

Outcomes

Short-Term Outcomes

- Administer a second workshop open to all pediatric OTPs (e.g., 25 - 50)

Participants will demonstrate:

- Increased knowledge and application of the lived experience informed practice and community-defined evidence practice processes
- Increased knowledge of treatment strategies that are neurodiversity-affirming, and incorporate tenets of disability justice
- Increased reflection on current practices by OTPs supporting neurodivergent children and youth
- Increased modification of the activity and the environment for a best-fit

Intermediate Outcomes

At 1 month post:

- Increased applicability and accessibility of the toolkit following application of attendee's feedback

Long-Term Outcomes

- Convert the toolkit into a website
- Expand program as an online workshop.
- Increased utilization of neurodiversity-affirming practices servicing neurodivergent children.
- Increased quality of life and well-being of neurodivergent children.
- Increased credibility with other disciplines, regulatory bodies, policymakers.

External/Environmental Factors: (1) Staff resistance to new learning, (2) Level of self-reflection skills and openness to change of staff, (3) Insurance reimbursement policies and school's access to funding, (4) Number of OTPs and neurodivergent individuals contributing to data collection to create support, (5) Level of support from rehabilitation leadership and organizational supports, (6) Amount of access to neurodiversity-affirming treatment strategies within practice setting, (7) Ability to tailor treatment strategies to meet child's and family's goals, (8) Accessibility to research highlighting/qualitative neurodivergent lived experiences, (9) Emphasizing lived experiences over ableist research

APPENDIX R - Attitudes and Perspectives Questionnaire (Pre-Workshop, Immediately Post-Workshop, and Three-Months Post-Workshop)

Using the survey instrument below, please mark an "x" for each question, and please complete all pages of the survey (three total pages; completion time is ~2 minutes).

		Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
1	My work as an occupational therapy practitioner should include removing societal barriers (e.g., reduce stigma) impacting disabled individuals.					
2	Assessment of social barriers in the child's meaningful environments (such as negative attitudes of autism in school or family) must be a core part of the assessment process when assessing neurodivergent children and youth.					
3	I mostly use assessments that evaluate sensory-motor and physical deficits (e.g., Peabody, BOT-2, SPM-2) during the assessment process.					
4	I mostly use assessments that analyze barriers and supports within the child's environment, interests and priority of the child, or the child's performance in occupations (e.g., REAL, COPM, YC-PEM).					

5	Goal setting is based mainly on deficits identified by the practitioner and/or results from standardized testing than the child and family priorities.					
6	Goal setting is based mainly on the child and their family’s preferences and priorities than deficits identified by the practitioner and/or results from standardized testing.					
7	In treatment, I focus mostly on improving the child’s body structural factors (e.g., physical skills, cognition, sensory processing).					
8	In treatment, I focus mostly on adapting the learning environment and occupation, addressing societal barriers impacting performance.					
9	At the conclusion of intervention, I mostly assess outcomes using measures that show evidence of the child’s improvement compared to standardized norms.					
10	At the conclusion of intervention, I mostly assess outcomes based on the child and their family’s satisfaction and preferences.					

11	My work as an occupational therapy practitioner should include removing societal barriers (e.g., reduce stigma) impacting disabled individuals.					
12	I know or have the resources to remove societal barriers (e.g., reduce stigma) impacting disabled individuals.					
13	I know the health and well-being priorities shared by most of the autistic community.					
14	I am confident in my ability to apply neurodiversity-affirming concepts in both the evaluation and treatment process.					

APPENDIX S – Workshop Survey (Post Initial Workshop)

Presentation Evaluation Form

Participants - Your opinion matters to me. Using the survey instrument below, please mark an “x” for each question. There is space below for additional comments, and **please make sure to fill out the questions on both pages**. Thank you for attending the session!

<u>Feedback Specific for Presenter</u>

		Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree	Comments
1	The presenter delivered the material in a clear and structured manner.						
2	The presenter maintained my interest during the entire presentation.						
3	The presenter answered questions effectively.						
4	The presenter was knowledgeable about the topic.						

Feedback Specific for Presentation

		Strongly Disagree	**Somewhat Disagree**	**Neutral**	**Somewhat Agree**	**Strongly Agree**	**Comments**
5	The presentation was concise and informative.						
6	The presentation contained practical examples and useful techniques that can be applied to practice.						
7	Overall, I would rate this presentation as:						
8	I would recommend this presentation to others.						

What I liked most about this presentation was:

Areas I would suggest for improvement are:

APPENDIX T – Single-Subject Design Layout for *Embracing Neurodivergent Occupations*

Purpose of the SSD

Clinical interests of the author applying disability justice principles, neurodiversity-affirming practices, and mental health promotion to support the rigor if *Embracing Neurodivergent Occupations*. Much of the author's clinical interests derive from what autistic adults have shared as health and well-being priorities, including positive mental health, reducing stigmatization of disability and societal barriers (Benevides et al., 2020), accessibility and acceptance of accommodations within the learning environment (Pfeiffer et al., 2017), and self-advocacy skills (Warner et al., 2019). Given the incorporation of environmental adaptations and fostering positive self-identity are important for autistic individuals, the posed single-subject design (SSD) will incorporate these two priorities. Often autistic students have sensory processing, learning, and communicative differences that may impact their ability to participate within an academic setting (Bottema-Beutel et al., 2021).

Much of the occupational therapy research investigating regulation and sensory processing capacities with autistic children and youth emphasizes tenets of the medical model of disability (e.g., Ayres' Sensory Integration, listening therapies, and behavioral modification) (Shore & Benevides, 2020). Health service provision focusing on improving an underlying performance factor without reference to the societal barriers rendering disability reduces the meaningfulness of the service being provided to neurodivergent individuals (Bottema-Beutel et al., 2021; Shore & Benevides, 2020).

Autistic adults advocate for the incorporation of the reformed social model of disability within healthcare services, including occupational therapy (Bottema-Beutel et al., 2021; Shore & Benevides, 2020). The purpose of the study is to fulfill the need for more literature investigating neurodiversity-affirming strategies incorporating the reformed social model of disability with autistic students, principles of disability justice and neurodiversity-affirming practice, and provide credible application of *Embracing Neurodivergent Occupations*.

Practice Scenario and Research Study

The SSD takes place within an elementary school. The study aims to examine the effectiveness of teaching self-advocacy skills with autistic students to support their ability to regulate themselves and promote self-advocacy when experiencing challenges within the school setting. The research question posed by the author is what effect do self-advocation strategies have on regulation and academic participation for autistic students (incorporating services with a high grade of being neurodiversity-affirming as outlined by *Embracing Neurodivergent Occupations*. Participants would be autistic children within the grades of 4th through 5th grade. Autistic students will be assessed using the Self-Perception Profile for Children (SPPC). The SPPC is an assessment tool where students within grades three to eight rate their performance across the following domains: scholastic competence, social competence, athletic competence, physical appearance, behavioral conduct, and global self-worth (Harter, 2012). Students have the opportunity to rate themselves and how they think they perform the activities instead of adults answering questions about their performance, maximizing incorporation the students' lived experiences (Harter, 2012). The tool has been created to be utilized as a classroom screener, and there is a parallel teacher version if the OTP wants to compare ratings between the student and the teacher regarding the student's performance (Harter, 2012). Autistic students who rate themselves as "low" when rankings are quantified for scholastic competence, behavioral conduct, and/or global self-worth will be included within the study. Both baseline and intervention data collection will take place within the classrooms of the autistic students who meet the eligibility criteria.

Dependent Variable

The dependent variables are the student's utilization of a regulatory strategy and their self-advocation of a tool when experiencing dysregulation. A well-defined numerical scoring system will be created outlining objectively what is defined as a self-advocacy behavior and utilizing a regulatory strategy, and the dependent variables will be recorded numerically within a graph and are anticipated to change quickly in response to intervention. Examples of observing the dependent variables include the students' selecting to use a hand fidget during learning tasks, utilizing adapted seating such as a therapy ball, wearing noise-cancelling headphones, and utilizing other neurodiversity-affirming supports and accommodations. The data collection measure would support collecting the baseline performance of the students and recording the frequency, duration, and intensity of the observed dependent variables.

Change in the Dependent Variables

Both baseline and intervention data collection would occur for eight weeks, with data collection lasting for a full 16 weeks for each student. For data collection, all participants will be video-taped during including mathematics, reading, and social studies six times per week. The videotapes would be coded by a trained, blinded reader that is not participating in any other aspects of the study (OTS). Given the number of observation units will likely be high, a mean will be calculated with each participant by finding the mean percentage of self-regulatory behaviors of the day divided by the total observed observations for the week. For example, if the student self-advocated for a regulatory tool six times on the first day, four on the second, and five on the third, the student would have an average of 50% self-regulatory behaviors for the week. To maximize understanding of variability and recognize patterns of change, this author plans to graph raw frequency data points within the baseline phase. Semi-structured interviews with the participating students and their teacher will be included at the end to further incorporate their lived experiences into the SSD. This author plans to also pair trained rater observations with self-rating that will reflect changes in the student's inner state, such as perceived comfort and/or confidence, on a one to ten numerical scale. The data will be plotted on the same chart to visualize the two corresponding dependent variables which may exhibit similar patterns of chance.

Inclusion of Health Measures

As previously mentioned, the SPPC will be utilized as a screening measure for identification of participants and will also be included following service delivery as an outcomes measure. Given the SPPC measures a student's self-worth, the SPPC is adequate pre and post measure to include within the SSD. Goal attainment scaling (GAS) will be completed with the student pre and post intervention to further corroborate data of the SSD. The GAS is a tool meant to blend the individualized goals of the student with client-centered care, creating a meaningful measuring system (Mailloux et al., 2007). Using the GAS in conjunction with the SPPC will support the incorporation of top-down approaches within assessment, an approach advocated by neurodivergent scholars within healthcare practices (Shore et al., 2020).

Independent Variable

Underlying Theory of Intervention

One strategy that has a high grade of being neurodiversity-affirming is mental health promotion, prevention, and intervention for children and youth (Arbesman & Bazyk, 2013; Cordier et al., 2021; Novak et al., 2019). Three systematic reviews and meta-analyses strongly recommend health promotion strategies, including social-emotional strategies within school settings (Arbesman et al., 2013; Cordier et al., 2021; Novak et al., 2019). Mental health promotion often addresses four qualities: competence of a learner, social system modification, resilience, and empowerment (Arbesman et al., 2013). Mental health promotion aligns with neurodivergent health and well-being priorities, increasing the meaningfulness of the strategy (Benevides et al., 2020). The planned service provision will innervate components incorporated within *Embracing Neurodivergent Occupations,* such as, Autism Level Up! resources (Laurent & Fede, 2022), and Dunn's Ecological Model of Sensory Processing (Dunn, 2014).

SSD Fidelity

To promote the efficacy of the service delivery, the author will create a fidelity measure and a written procedure for the practitioner. The fidelity measure will incorporate the components of mental health promotion (mentioned above) through the *Embracing Neurodivergent Occupations* program. Occupational therapy services will target the student's self-advocation strategies while modifying the learner's activities and environment in-alignment with the student's strengths and support needs.

One of the first steps of the intervention will be the practitioner administering the Sensory Profile-2 (SP-2) and the GAS with the learner. The SP-2 would be selected due to the measure's ability to examine a child's sensory processing patterns within the context of everyday life while also being neurodiversity-affirming (Dunn, 2014). The GAS will allow the learner the opportunity to formulate goals with the practitioner, promoting their empowerment and self-efficacy. Once the SP-2 is completed, the practitioner and the student learn together the student's sensory processing strengths and patterns, modifying the learner's environment and instructional tasks as needed. The practitioner would then collaborate with the learner to identify executive functioning supports that support emotional regulation and are meaningful to the student, such as the All the Feelz, Energy Meter, or the Power Plan (Laurent et al., 2022). The supports embrace components of *Embracing Neurodivergent Occupations* and focus on collaborating with individuals to provide person-specific supports to empower neurodivergent individuals (Laurent et al., 2022).

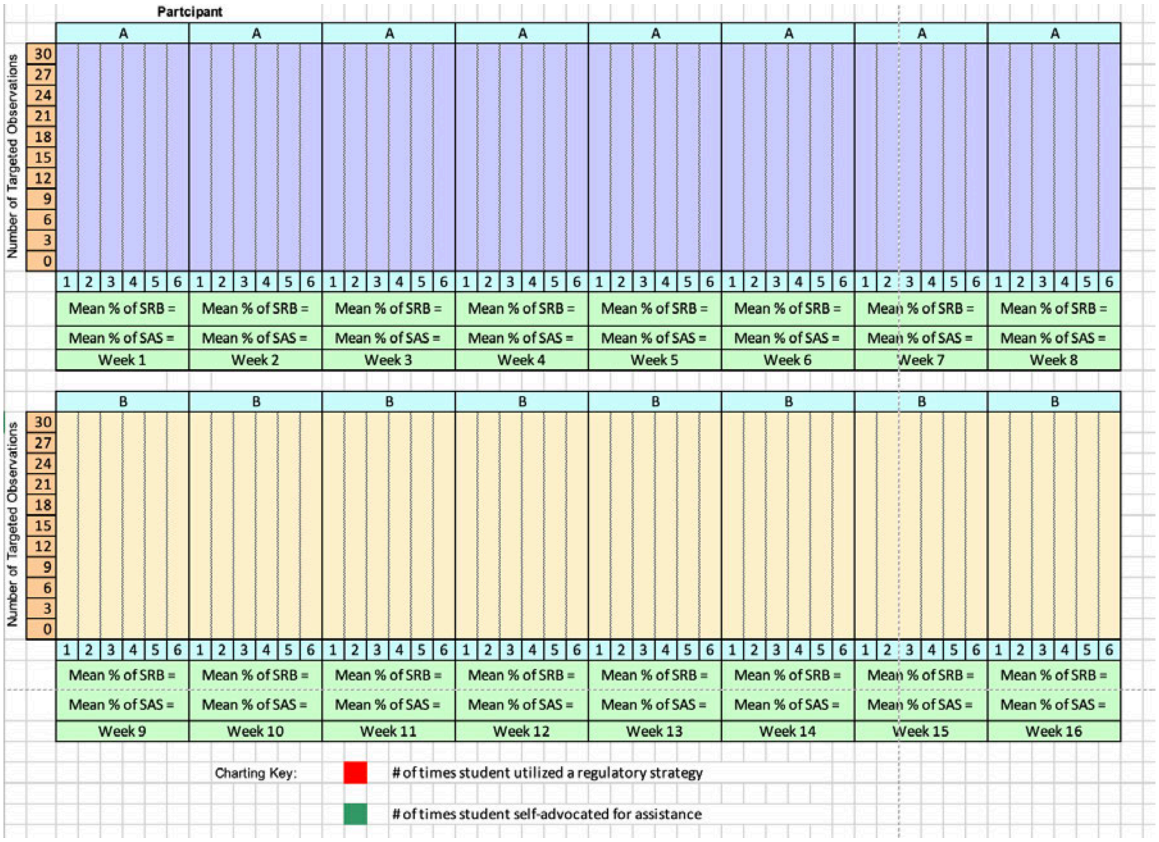
Through coaching and modeling at school, the practitioner further enhances the student's ability to utilize the supports within the natural environment. Strengths-based supports may be a visual of regulatory strategies laminated on the student's desk selected by the student, the creation of a calming corner the student has unrestricted access to, and empowerment activities. In the early stages of the program, the practitioner will provide education to the learner's teacher regarding sensory processing differences, the importance of unrestricted access to regulatory strategies, and neurodiversity within the classroom. A registered occupational therapy practitioner would be competent to administer the intervention, and an occupational therapy student (OTS) may be able to perform the intervention with a supervising practitioner.

Overview of Study

The SSD will be an AB concurrent multiple baseline design, which is designated as a level I, and with this design providing causal inferences between the independent and dependent variables (Logan et al., 2008). The hypothesis of the study is that neurodiversity-affirming mental health instruction delivered by OTP will increase the students' ability to self-advocate and utilize a regulatory strategy when experiencing dysregulation in the academic setting. The program (independent variable) would be a form of Tier III mental health promotion services, targeting the student's ability to self-advocate and utilize a regulatory strategy when experiencing dysregulation during an academic task. The OTP would provide direct services with the students once a week, collaborating with the student to learn about their sensory strengths and profile, self-advocacy skills for requesting/utilizing a regulatory tool, and provide coaching strategies with the teacher. Direct intervention would last eight weeks, with the OTP providing direct intervention once a week for 30 minutes and a 10-minute weekly consultation with the student’s teacher. The dependent variables will be measured for each student six times a week (students participate in reading, math, and social studies twice a week) for eight weeks for both the baseline and intervention phases, resulting in the SSD lasting a total of 16 weeks for each student. As previously mentioned, for data analysis a mean will be calculated with each participant by finding the mean percentage of self-regulatory behaviors of the day divided by the total observed observations for the week. For an illustration of the SSD collection diagram for a participant, see Figure T1.

Figure T1

Diagram of SSD Collection Data Sheet for a Student



Note. SRB = self-advocacy; SAS = self-advocating for assistance

It is important to note each participant will be beginning observation of baseline and intervention data collection at a different time from each other. For example, participant two will begin observation of baseline data collection one week after participant one.

Establishing Internal Validity

To help promote internal validity of the study, the author plans to address common threats to internal validity, including history, implementer bias, procedural infidelity, and multiple treatment interference. For addressing multiple treatment interference, the author plans to not modify the intervention besides the independent variable and requests to be notified if the student enrolls in another treatment program designed to target the same outcome and adjust that student's course in the study as needed. For addressing the threat of history, the author plans to include three or more potential demonstrations of effect and ensure the only difference in conditions is the therapist-designed program. To reduce implementer bias, the author plans to include data collection by a second observer simultaneously. The author plans to enlist either a colleagues or an OTS to collect data in adherence to the coding rules created by the author. For reducing procedural infidelity, the author plans to include observation and data collection for both the baseline and intervention procedures, such as having the second observer collects data regarding the steps of the intervention completed in each session. If after an intervention session the data suggests the therapist included unexpected steps and the error is identified, the therapist can better implement the intervention with fidelity (Lane et al., 2017).

Approach to Data Analysis

Kazin et al. (2021) outlines one of the most vital steps in analyzing data from an SSD is examining if there is a statistically significant trend in the baseline data. The author plans to use the *C*- and Z-statistics, which can be used if the baseline data has at least eight measurements. The conversion to a *Z*-statistic will also indicate the presence of a significant difference, and if there is, celeration-line analysis will be used. The celeration-line analysis can help determine if the significant difference presented is secondary to the intervention (significant change from the baseline). With the intent of the author to utilize the same number of measured units in both the baseline and intervention, and if the slopes of the celeration lines for both phases are not identical, *C*-statistics can also be used to examine if the trends between the two phases are significantly different. If no trend is present at baseline and the author is planning on having a minimum of five measurements in both phases, the binomial test will be used to examine if there is a significant difference between the baseline and intervention data (Kazdin et al., 2021).

Possible Challenges

A potential challenge to the study is acquiring a second observer and ensuring the second observer participates throughout the entire study to promote efficacy with rating. Differences in measuring the targeted behaviors can be a potential challenge secondary to the subjective nature of what "self-advocacy" and "self-regulatory" behaviors quantify as. Additionally, given that this is the first SSD conducted by the author (or second observer), the author may be hesitant to measure the abstruse concept of self-advocacy. The author will ensure the targeted construct is clearly measurable behavior or action, such as "utilizing a regulatory strategy when demonstrating dysregulation within 10 seconds of beginning to experience dysregulation." To help support inter-rater reliability, the author plans to write a clearly defined and well-written procedure outlining what constitutes as the targeted behaviors (Lane et al., 2017). Another challenge is maturation of a child, such as the development or progress occurring over time and not due to the intervention (Lane et al., 2017). To reduce the impact of maturation, the author plans to include three or more potential demonstrations of effect, and the dependent variables chosen are likely to change rapidly when the intervention is implemented (Lane et al., 2017).

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APPENDIX U – AOTA 2023 Proposal

Proposal Title

Utilization of the Medical Model and Social Model of Disability with Occupational Therapy Practice Supporting Autistic Children and Youth

Session Format

Short Course: 1-hour session with reflective time for attendees.

Speakers and Authors

Primary Speaker: Bryden Carlson-Giving, MAOT, OTR/L

Abstract Synopsis

This session will support occupational therapy's ability to incorporate the social model of disability within the assessment and treatment of autistic children and youth, and to provide treatment methods that are autistic-affirming.

Learning Objectives

Identify trends within occupational therapy assessment and treatment supporting autistic children and youth relating to the medical model and social model of disability.

Reflect on their current practices and consider how they utilize the medical model and social model when supporting autistic children and youth.

Abstract

Autistic individuals have vocalized concern with the overreliance of the medical model of disability within healthcare, including occupational therapy (OT). Language in models and theories are impactful ways for how OT practitioners view autism and perpetuate ideologies concerning their health, wellbeing, and quality of life (Bottema-Beutel et al., 2021). Scholars have reported OT remains embedded within the medical model of disability within adult rehabilitation, mostly focusing on occupational participation as being due to a deficit in body structures and function (Harrison et al., 2021; Heffron et al., 2021; Holler et al., 2021). When practitioners rely on the medical model for evaluating and treating autistic children and youth, this can lead to treatment methods focusing on analyzing an autistic child through a "deficit" lens, ultimately impacting the provision of client-centered care (Bottema-Beutel et al., 2021). OT practitioners may assess and provide treatment methods that do not incorporate the quality of life, health, and wellbeing priorities of the autistic community. Methods exist within OT practice that are more feasible to incorporate aspects of the social model of disability than others, better able to promote positive client collaboration, foster a positive self-identity, and reduce stigma and environmental barriers. A survey has been distributed to pediatric OT practitioners to garner insight into which therapy methods are most utilized and attitudes about the medical model and social model of disability. This session will provide an overview of the data analysis, and participants will have the opportunity to reflect and share their current practices in relation to the medical model and social model of disability. This session aims to promote practitioners' understanding of the impact of evaluation and treatment from a deficit-based lens and how to embed tenets of the social model of disability into practice.

Primary Topic Category

Children & Youth

Secondary Topic Category

General & Professional Issues

Level of Material

Introductory level is geared to practitioners with little or no knowledge of the subject matter. Focus is on providing general introductory information.

Level Rational

This information is relevant and accessible to all practitioners regardless of years of experience practicing.

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APPENDIX V – TEDxTalk Script (Co-Written with Katherine McGinly) (Carlson-Giving et al., 2023)

Introduction

Bryden: I first began my work as an occupational therapist five years ago, working to support autistic children and their ability to learn and grow. As someone who prioritized research-informed strategies, I was surprised to learn that I was using interventions that were not only unhelpful but actually quite harmful to the autistic community, such as conduct reinforcement, token economies, improving a child's sensory processing, and promoting neurotypical social skills. Autistic voices were missing from my education, training and research, and I had no idea how the autistic community felt about the methods I was using, let alone the harm I was causing.

Bryden: I was a pretty ableist-practicing therapist and was absolutely failing my autistic clients. It wasn't until I witnessed a child demonstrating excitement by flapping their hands and another therapist attempting to stop a child from stimming, that I began to, not only question what the stimming meant for the child, but began to explore autistic ways of living. Now as a neurodivergent OT, Katherine and I look forward to discussing how you can avoid making the same mistakes that I made, and reflect on how you work with or view autistic individuals. It can be an extremely arduous process but it's what our autistic clients and friends deserve, and is the only way we can support to make the world more validating of autistic ways of living.

Body

Katherine: Autism is a culture that needs to be recognized and celebrated, and that is why during this talk, we intentionally say autistic person rather than person with autism. The autistic community has asked that we use identity first rather than person first language (Taboas et al., 2022). Autistic individuals across the globe heavily prefer identity-first language (Bottema-Beutel et al., 2021; Kenny et al., 2016; Taboas et al., 2022). This shift recognizes autism as an essential part of a person's identity. Just as we recognize gender and sexuality as core parts of an individual's identity, it is important to recognize disability as it changes the way we move throughout the world (Lim, 2015). Autism is a part of many individuals' identities, so instead of a person with autism we say, autistic person (Taboas et al., 2022).

Bryden: Throughout this talk you will hear us use the term neurodiversity. Neurodiversity is described as the idea that people experience and interact with the world around them in many different ways, and these different ways are valid forms of living; there is no one "right" way of thinking and learning, and differences are not viewed as deficits (Baumer, Frueh, 2021). It's about switching the narrative, changing the story, and empowering.

Katherine: As practitioners, caregivers, and teachers we can shift our thinking to empower autistic individuals, incorporate their values and interests, and validate their identity within our goals and treatment. This process is called strengths-based practice. When incorporating strengths-based principles, goal writing and treatment becomes a partnership with the family, practitioner and the autistic individual. Some common traits of a strengths-based approach are (a) including environmental supports and accommodations in-line with the individual’s learning differences and preferences, (2) incorporating their interests to make learning more meaningful and not as reinforcers, (3) authentic collaboration with the autistic individual, (4) letting go of compliance and presuming competence, and (5) re-defining “deficits” as differences, such as sensory processing experiences. (Murthi et al., 2021). When it comes to strengths-based practice, our focus is less on changing the individual, and more on how we can change the environment and promote the individual’s embracing of their autistic identity (Murthi et al., 2021).

Bryden: : So what does applying this strengths-based practice actually look like? Well, today we want to introduce you to Kai. Kai is not a real child but rather a compilation of many children we have worked with and their stories. During this talk, we are going to use them to demonstrate concrete examples of how to move away from traditional models of thinking and viewing autistic individuals and towards ways that amplify and empower the autistic community.

Bryden: : We’ll start with language. Language is important and powerful. By simply switching our terminology to being more affirming and less impairment-focused, we are promoting a world that is more validating for all sorts of individuals. Two examples of how language can shape the way we practice are attention-seeking and functioning labels.

Bryden: : When referring to children, it is very common to use the term attention-seeking. This is usually seen as a negative thing. However, attention is a need we all have as human beings. When someone is trying to get your attention, they are trying to connect with you, and be validated that they are there, and are seen. By simply replacing attention-seeking with connection-seeking, we can reframe so-called “bad behavior “ to a child seeking a vital human need. Language is powerful, and this simple change can help us take a step towards understanding where the child is coming from and honoring their perspective.

Katherine: Many autistic individuals dislike the terms low or high-functioning. Low-functioning is a heavily reductionistic way to categorize someone, and when we say “they are low-functioning,” there is no semblance of what that individual **can** do, and what they need to be successful. High-functioning has often been used as someone who demonstrates neurotypicality, and doesn’t require many supports, which is often untrue. Instead, share the specific supports the individual benefits from, amount of support, and their strengths! For example, “Kai benefits from substantial support such as visual cues to participate in unstructured recess and benefits from minimal support (often a verbal cue) for self-advocating for a regulatory break.”

Bryden: Now, we are not saying simply modifying your language are all that is needed to be more neurodiversity-affirming. To be neurodiversity-affirming requires continuous self-reflection of what you think you know, active listening to the communities of individuals you are attempting to serve, increasing your comfort in being wrong, and receiving feedback to better your practice. It is a process, and not a single event.

Bryden: After modifying your language to reflect the needs and wants of the community you are working with, the next step towards being strengths-based is for you to learn how to regulate yourself. Regulation is an encompassing term for how our mind and body are feeling, such as emotions or having energy. As the saying goes, you can't pour from an empty cup, and if we are dysregulated (e.g., feeling mad or unwell), there is no way we will be the support partners our clients need. In order to assist others, it is important to take time to learn about your own sensory and regulation needs.

Bryden: Once you are regulated, we then determine if the learner is well-regulated. If the individual is not regulated, no meaningful learning or participation can occur. When they are not regulated, one strengths-based approach to support their regulation is demonstrating, encouraging or exploring the learners' favorite methods of stimming.

Katherine: As occupational therapy practitioners, we are experts in occupations, which are activities that we do every day that give our life meaning and purpose, such as your role as a student in school, getting ready for the day, or coping with life's challenges (American Occupational Therapy Association, 2020). When it comes to working with autistic individuals, we advocate that autistic behaviors are occupations, with stimming being an intentional reclamation posed by autistic individuals and should be normalized within our society. As mentioned above, we all need to be regulated and stimming helps many individuals do just that. (Kapp et al. 2019).

Katherine: As partners to autistic people we can assist them to co regulate. All people need assistance co regulating. However, some may need more assistance than others. Kai does a great job using self-regulatory strategies, they rock when they need movement and they flap their hands when their excited. However, sometimes the environment is too much for Kai to regulate on their own. This is where we get to come in as practitioners to collaborate and help co regulate. Kai enjoys movement and finds it incredibly soothing.

The trampoline and deep pressure have been regulating for Kai in the past so as practitioners we can offer these to Kai, maybe by using it ourselves or by placing an object related to the task within their view. If the learner is not regulated, no meaningful learning or participation can occur. So, it is essential for us to consider both our own and the learner's regulation.

Bryden: As we talked about earlier, we live in a society that emphasizes autistic people's deficits (Ciccarelli & White, 2014; Harris, 2018). So, the next step is to consider the strengths of being autistic. All autistic individuals have skills, abilities, and strengths (Huntley et al., 2019). Some common examples of autistic strengths are the ability to hyperfocus, honesty, technical abilities, high amounts of energy, loyalty, artistic talents, passionate, risk taker, and pattern finder.

Bryden: For example, Kai needed support in learning how to self-advocate for their needs when becoming overwhelmed. Traditional terminology for describing feelings, such as "mad, frustrated, happy, calm" is very abstract for Kai and provided no functional support in learning how feelings are expressed within themself and for communicating their needs. I learned right away Kai is a dinosaur wizard; Kai knows absolutely everything about dinosaurs. By partnering with Kai's interest of dinosaurs, we utilized a visual guide of various dinosaurs and their energy levels and they got to be the teacher and teach their family what the support means. Here is the energy meter already created by the fantastic advocacy organization, Autism Level Up! By creating a meaningful language using their interests, Kai was far more successful in self-advocating how they were feeling, and Kai's family was more able to connect with them by honing in on and cultivating their passion for dinosaurs.

Katherine: There are plenty of times an individual may need to work on developing skills, such as practicing using an alternative pencil for academic tasks, practicing using environmental supports, and learning how to self-advocate for needs. However, we need to ensure the task is not only meaningful for the client and their family, but that we are always learning what adaptive or environmental supports they may benefit from while incorporating their learning style, strengths, and interests.

Bryden: After identifying an individual's strengths, we can begin to think about our goals. Within my goals, I often include that unrestricted access to a support or accommodation is necessary prior to measuring the individual's performance to ensure the support is there (Dorsey & Miles, 2022). The goals do become longer, but in a way, it protects the learner and makes sure they have what they need. Switching our goals from deficit to strengths-based will require a lot of unlearning, and that is okay! I mean think about it; we are constantly reminded of and influenced by society's dominant perspective that autism is comprised of deficits, and that these deficits need fixing. Additionally, healthcare services often are administered without the knowledge of what the community prioritizes. To support amplifying autistic voices, I make sure my goals target what many within the autistic community have identified as health and well-being priorities, including the learner's self-esteem, self-advocacy skills, positive mental health, social participation on their terms, or quality of life (Benevides et al., 2020; Huntley et al., 2019; Monahan et al., 2021; Pfeiffer et al., 2017; Roche et al., 2020).

Bryden: Some examples of strengths-based goals are “Kai will self-advocate for a regulatory strategy during a challenging task” or “Kai’s family will demonstrate competency in embracing Kai’s play style and report satisfaction with their ability to connect with Kai in play.” These goals really highlight how they empower the learner and advocate to others how they can better understand and embrace Kai’s differences.

Katherine: Next, we need to think about how to include environmental supports and accommodations in-line with the individual’s learning differences and preferences. I like to think about how I can change the environment to allow a person to succeed. Are there sensory mismatches between the environment and the learner? Can I dim the lights or remove the background noise? If I can't change the environment can I add supports instead can I offer headphones to reduce noise, can I advocate for the learner to have movement breaks? Rather than changing the child to fit the environment, we get the opportunity to change the environment to fit the child.

Bryden: Once we have created an environment that supports the child and we have offered adequate accommodations, we get to do our favorite part: incorporating interests. Autistic people often have incredibly intense interests (Ciccarelli & White, 2014). Historically rather than incorporating interest and respecting these interests, we have decided that these interests are too intense, and need to be redirected or expanded because they are often described in the medical literature as harmful or meaningless (Ciccarelli & White, 2014). Participation in passionate interests have been shown to reduce anxiety, enhance activities, social bonding, higher reported autistic well-being, and quality of life. Instead, with this approach, we get to learn and enjoy these incredibly intense interests rather than removing something the autistic person loves (Ciccarelli & White, 2014).

Katherine: When incorporating interest, it is important to recognize why the person is so excited about this topic or item, and it may vary for different autistic people. One autistic person might be passionate about Sesame Street because of the way Elmo's voice sounds to their ears another may gain enjoyment from the consistency of characters and learning every fact about each one, this repetition may bring comfort and joy. Once I identify what is exciting about this interest, I can find a way to authentically engage it. If Kai loves sesame street, I am not putting sesame street characters on a worksheet so that they work on their handwriting. That is not incorporating interest. Instead, I might help Kai look up facts about the sesame street characters and suggest they write the facts down so they can bring them home. In both examples, Kai is working on writing. However, one expects them to get excited about a worksheet because of a picture on the worksheet the other learns why the person is excited about sesame street, in this case learning facts about each character brings them joy, and helps the Kai accomplish their goal of learning about the characters while also happening to work on writing.

Bryden: As we mentioned earlier, an essential part of being neurodiversity-affirming is letting go of compliance in favor of presuming competence and empowering. As previously mentioned by an incredible researcher we look up to, Dr. Amy Laurent, we need to stop focusing on controlling behaviors or behavior management. That should never be the goal. Presuming competence means to assume an autistic person has the capacity to think, learn, and understand. It’s assuming they are not inherently incapable and that they just need the right supports and systems to help them succeed. By making this shift from attempting to make autistic individuals indistinguishable from their peers to forming a partnership and supporting positive autistic identity and well-being, we acknowledge and empower.

Conclusion

Bryden: So what does strengths-based practice look like? It looks like learning to regulate ourselves, learning to use strengths rather than focusing on areas of deficits, reframing our goals to support the individual, changing our environment so the environment fits the person rather than changing the person to fit the environment, it looks like incorporating interests, presuming competency, and beginning to make changes to our language that help us reframe our mindset.

Katherine: Often, we think about autism as a horrible disease that needs to be cured through hundreds of hours of therapy (Ciccarelli & White, 2014). Or we think of rain man and we call it a superpower. However, autistic people have been asking us for years to recognize them not as a deficit or a superhuman but as people with different brains (Taboas et al., 2022). Not better, not worse, just different. Autistic characteristics can both be a valid form of human diversity while also acknowledging the need for support.

Katherine: Let go of neurotypical norms! An autistic or neurodivergent individual will never be neurotypical, and that is okay. When considering any supports or services, make sure the autistic individual is leading the conversation. What are their hopes and dreams? What does happiness look like for the person? How can we promote authentic autistic well-being and quality-of-life? Autistic people are more than the deficits and impairments society defines them. When we incorporate strengths-based approaches, we authentically collaborate with autistic individuals and promote autistic quality of life and well-being. We challenge you to join us and discover how strengths-based practice will not only support your ability to provide higher-quality of care with autistic individuals but build a better world for the autistic community.

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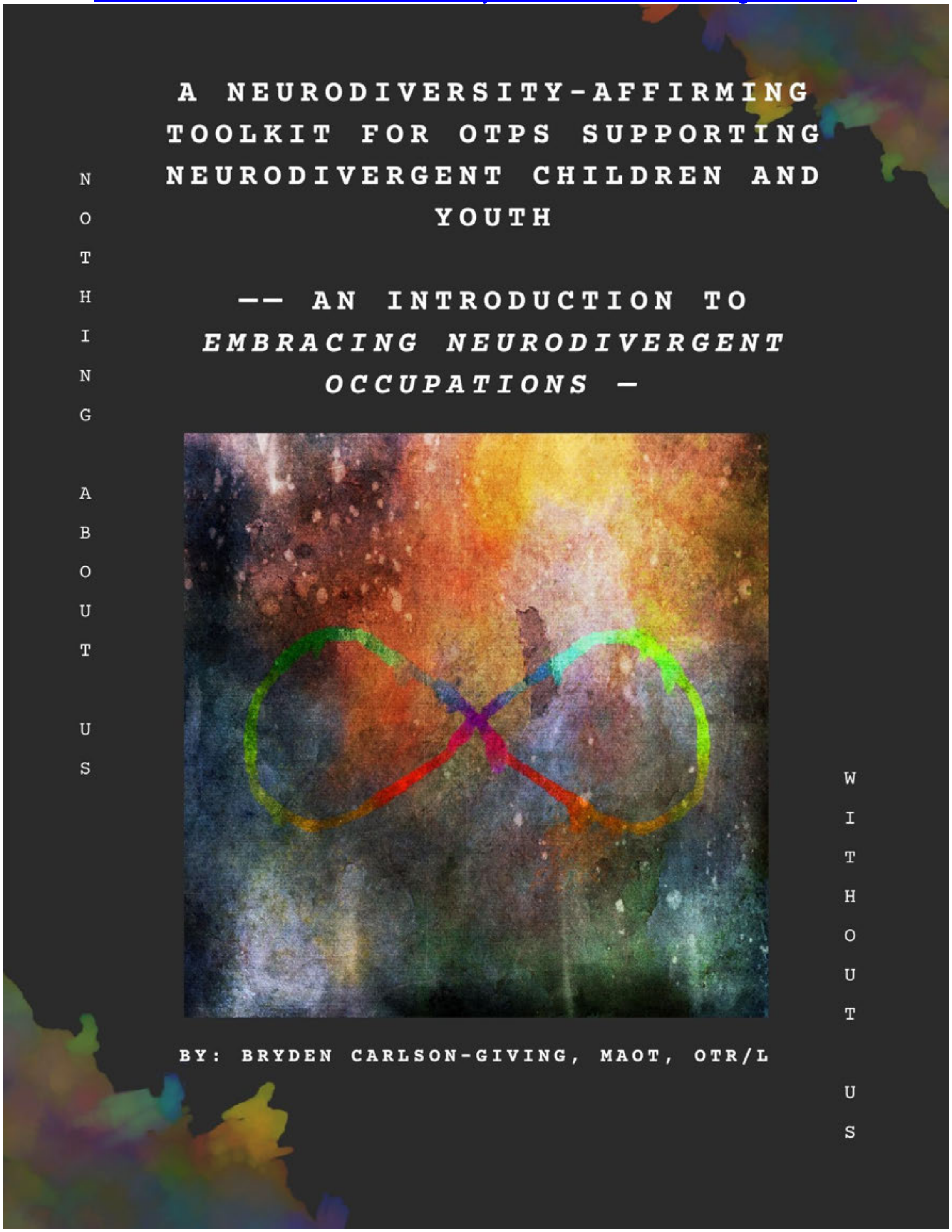
APPENDIX W – Introductory Manual for *Embracing Neurodivergent Occupations*

Click Here to Download Introductory Manual at Neurodivergent Nexus



A NEURODIVERSITY-AFFIRMING TOOLKIT FOR OTPS SUPPORTING NEURODIVERGENT CHILDREN AND YOUTH

-- AN INTRODUCTION TO *EMBRACING NEURODIVERGENT OCCUPATIONS* –

NOTHING ABOUT US

WITHOUT US

BY: BRYDEN CARLSON-GIVING, MAOT, OTR/L

AUTHOR BIO

Email: [redacted]

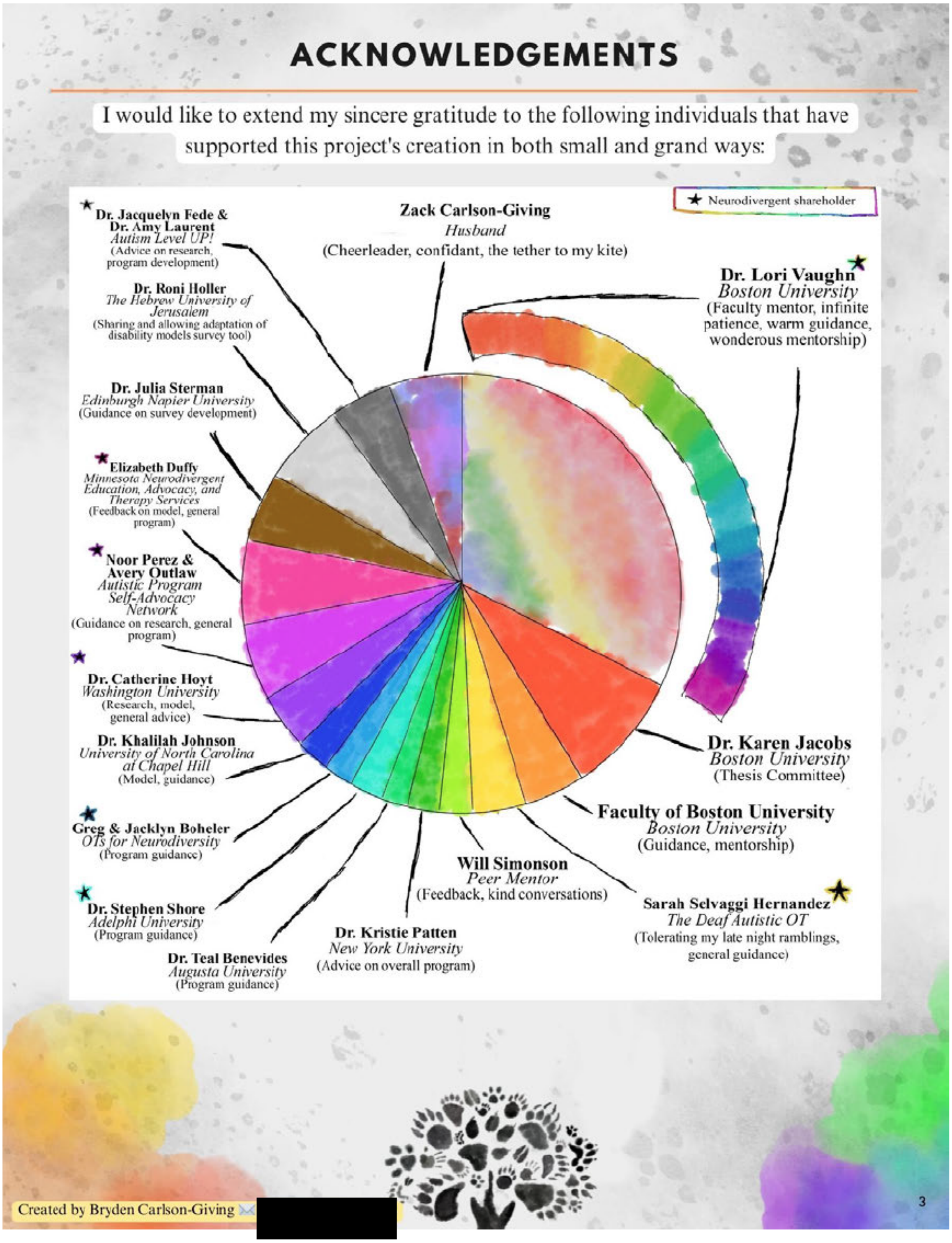
Bryden Carlson-Giving is a neurodivergent and disabled doctoral student at Boston University and a pediatric occupational therapy practitioner with experience in pediatric outpatient and inpatient rehabilitation settings. He is passionate about community-defined evidence practice, mental health promotion, trauma-informed care, and incorporating strengths-based approaches to promote a positive self-identity for his pediatric patients. Bryden's work includes encouraging a shift away from an impairment-based perspective and returning to strengths-based, occupation-centered practices, with his doctoral work including partnering with neurodivergent practitioners around the globe to create the first neurodiversity-affirming occupational therapy model. He seeks to promote neurodiversity-affirming practices, amplify the voices of the Disability community, and challenge ableism within healthcare and research. From helping individuals discover and embrace their sensory processing differences to collaborating with their family and education team to improve their ability to be neurodiversity-affirming, Bryden aims to maximize his client's quality of life and well-being to support authentic neurodivergent development.

DEDICATION

To the brave disabled advocates who fought and created a platform for disability studies and disability justice to infiltrate occupational therapy and occupational science — this work is for you.

Within an endless spring of gratitude, thank you. The future is disabled, and my goodness, it is beautiful.

Let us take this home.



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Created by Bryden Carlson-Giving [redacted]

PREFACE

Excerpts from *The Axioms of Inequality* by Bryden Carlson-Giving

I

I'm on the edge of a precipice,

looking down into the abyss   of myself.

It is breathtaking, because

it belongs to no one else.

II

I see tree roots turn into

kingdoms. Vibrant strings gift

a technicolor uproar, and I am

a mobile orchestra.

III

One day, we are going to look back and wonder

how did we survive that, survive ~~you.~~

IV

Somewhere, there is a place where the viperous shadows

cannot touch. Paper airplanes morph into stars,

where Crip[2] worlds   are not just dreams. Can it be here?

Will you be there?

---

[2] *Crip* is a reclaimed slur by disabled individuals. Crip has been transformed in a way that resembles disability pride unapologetically, and by taking back the word, disabled individuals can empower future generations of disabled individuals with the word (another example is how queer individuals reclaimed the word "Queer") (Kafai, 2023; Kuppers, 2014; Lew, 2021).

A NOTE ON LANGUAGE & PRIVILEGE

Throughout this work, identify-first language will be utilized when describing autistic individuals to validate and honor the wishes of the autistic community (Brown, 2020; Bottema-Beutel et al., 2021; Kenny et al., 2016; Taboas et al., 2022). This shift in language honors autism as a culture and recognizes autism a vital part of an autistic individual's identity. Additionally, this extends to utilizing identity-first language when describing disabled people instead of person-first language in support with the disability studies (DS) approach to viewing ableism and disability (Harrison et al., 2021). When in doubt, please ask the communities the language they prefer.

Sterman et al.'s study (2022) illustrates the importance of illuminating the identities of authors in relation to neurodivergence and recognizing privilege. This author is a white, cis-gender, queer, disabled, neurodivergent, and allistic occupational therapy practitioner (OTP). This author acknowledges that they have utilized strategies that are not recognized as autistic-affirming in the past, and will not recommend or utilize these services as they continue to learn and listen to autistic voices concerning healthcare services. This author recognizes they have been wrong in the past, especially concerning language and promoting ableist therapeutic approaches (Giving, 2018). This author also acknowledges intricate intersectionality exists regarding neurodivergence with other identities, such as BIPOC, sexual orientation, and Blind and Deaf communities, recognizing our privilege within this complex and oppressing system.

Always remember: ↴
Language is powerful and through language we make a case, take a particular stance, and acknowledge (or invalidate) identities.

Introduction & Purpose

The neurodiversity movement is a social justice initiative led by neurodivergent individuals embracing differences in executive, mental, or neurologic function as valid forms of human diversity (ASAN, n.d.; Dallman et al., 2022). Neurodivergent occupations are ways of living and embodying life that speaks true for their neurotype. Examples include autistic play, ADHDer concepts of attention, and sensory processing differences. Though the neurodiversity movement is beginning to infiltrate health care services, neurodiversity-affirming practices within occupational therapy remains to be lacking. Neurodivergent occupations continue to be pathologized within occupational therapy, evident within the profession's education, and all aspects of the occupational therapy process, including assessment, treatment, and targeted outcomes. Neurotypicality remains to be the benchmark for functioning within occupational therapy, much of which is secondary to the dominating medical model of disability and ableism proliferating the profession. These factors lead to OTPs creating occupational marginalization when attempting to support neurodivergent individuals, with neurodivergent OTPs pleading for the profession to reflect and modify current conceptualizations of occupational therapy.

This manual is for OTPs (and really any healthcare service provider) and introduces the initiative, **Embracing Neurodivergent Occupations**, a knowledge translation tool. The mission of the toolkit is to support the utilization of best practices by occupational therapy practitioners supporting neurodivergent children and youth. Best practices for supporting the neurodiversity community can be defined as supports and services strategies that incorporate the following characteristics: a) trauma-informed, b) strengths-based, c) anti-racist, d) principles of disability justice, and e) tenets of justice, equity, diversity, and inclusion (JEDI). Autistic and neurodivergent individuals have been incorporated throughout the creation of this program to maximize the empowerment of autistic and neurodivergent lived experiences.

The proposed program, **Embracing Neurodivergent Occupations**, aims to answer this call. **Embracing Neurodivergent Occupations** is a knowledge translation tool with foundations resting in tenets of disability justice, community-defined evidence practice, and lived-experience informed practice. The program intends to be an example of community-based participatory research (CBPR), with the program's creation incorporating neurodivergent OTPs, scholars, and advocates from around the world for a holistic view on neurodivergent ways of living. Components of **Embracing Neurodivergent Occupations** will include: (a) the first neurodiversity-affirming occupational therapy model (EMPOWER Model), (b) conversations on models of disablement and rehabilitation, (c) health and well-being priorities designated by autistic individuals, (d) steps for completing neurodiversity-affirming evaluations, (e) neurodiversity-affirming service and practitioner characteristics, and (f) a grading of commonly utilized occupational therapy programs and resources and their level of being neurodiversity-affirming. Feel free to peruse the manual, and begin to apply concepts that resonate with you!

Autistic and neurodivergent ways of participation are valid occupations!

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EPIDEMIOLOGICAL IMPACT LEADING TO OCCUPATIONAL INJUSTICE

- Research has shown that treatment strategies created without autistic input can lead to increased masking, a phenomenon where autistic individuals hide autistic traits and mirror social styles they observe in neurotypical individuals, which decreases their quality of life (Hull et al., 2017).
- About 70% of autistic adults have reported they consistently mask their autistic traits to avoid being bullied (Cage et a., 2019).
- The medical model of disability is the dominant model of viewing and supporting autistic individuals within healthcare (Bottema-Beutel et al., 2020; Cramm et al., 2012; Holler et al., 2021), including occupational therapy (Shore et al., 2020).
- Given autistic individuals are rarely incorporated into occupational therapy treatment and assessment creation, OTPs may be targeting health and wellness outcomes not meaningful to autistic individuals but potentially outcomes decreasing quality of life (Taylor, 2022).
- OTPs supporting autistic and neurodivergent individuals often target goals or incorporating practices dissented by neurodivergent individuals, such as attempting to remediate sensory processing function, attempting to expand play and interests, and targeting neurotypical social skills (Shore et al., 2020).
- It should be noted OTPs are at risk for validity with the autistic community for the continuation of utilizing services not meaningful or potentially harmful to the autistic community.

OCCUPATIONAL MARGINALIZATION

Taylor (2022), an autistic OTP, eloquently describes how much of the occupational science literature historically defined occupations emphasizing social and cultural norms which suppress minority perspectives, including the autistic community. The dominance of aiming for neurotypicality within healthcare has limited the occupational therapy profession's ability to reflect on how ableism has morphed into what constitutes a healthy occupation, often leading to OTPs inadvertently creating occupational marginalization. Occupational Marginalization, a form of occupational injustice, is the inability of an individual to participate in occupations due to being viewed as different from a larger or dominant population (Durocher et al., 2013). Autistic characteristics (e.g., self-stimulatory behaviors) have been frequently conceptualized by non-autistic individuals, often as pathological deficiencies (Grinker et al., 2020; Taylor, 2022). Within occupational therapy, autistic behaviors are often not considered occupations (Kiepek et al., 2014; Taylor, 2022). In alignment with disability scholars and activities, this author advocates autistic ways of being are occupations, such as autistic stims, and normalizing differences in social participation and occupational engagement (Taylor, 2022). By incorporating autistic behaviors into occupational frameworks and occupational science, occupational therapy can better honor and affirm autistic identity and diminish ableist assumptions prioritization of neurotypicality (Taylor, 2022).

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Occupational Marginalization	Occupational Marginalization, a form of occupational injustice, is the inability of an individual to participate in occupations due to being viewed as different from a larger or dominant population (Durocher et al., 2013).

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Individual Factors Impacting OTPs to Implement NA Practice

- Prioritization of NA practice within clinical decision-making
- Level of reflection and adaptability (Krueger et al., 2020)
- Knowledge of autistic health and well-being priorities and acceptable/unacceptable components of intervention as deemed by neurodivergent individuals
- Increased access to assessment and evaluation tools that maximize autistic identity and reduce potential for harm can support OTPs' ability to be NA. Acceptance and empowerment of autistic ways of being as valid occupations within the profession (Taylor, 2022)
- Level of importance designated by OTP for equity, inclusivity, and cultural competence Mallidou et al., 2018)
- Incorporation of the reformed social model of disability in place of the medical model of disability into assessment and treatment. Autistic advocates and scholars extremely prefer the social model of disability into healthcare decision-making, and the medical model is the predominant model embedded within occupational therapy (Heffron et al., 2019; Holler et al., 2021; Sheth et al., 2021; Shore et al., 2020)

Organizational Factors Impacting OTPs Implement NA Practice

- American Occupational Therapy Association's (AOTA) role in supporting neurodiversity both explicitly and implicitly. Currently, AOTA has not yet published a statement supporting neurodiversity, and the medical model of disability is prevalent within AOTA's research agenda for autism (Shore et al., 2020).
- Advocating for AOTA and AJOT to ensure autism research includes the autistic individual's experience of the intervention, and prioritizing research outcomes that matter to autistic people (ASAN, n.d.)
- Billing and reimbursement of assessment and treatment utilizing strengths-based language or treatments emphasizing the reformed social model of disability
- Workplace supports and barriers for NA practice and knowledge translation (Pellerin et al., 2019)
- Occupational therapy education incorporating disability studies and discussions on models of disablement (Bogart et al., 2022)

Example of Occupational Therapy Research Emphasizing the Medical Model of Disability

- Recent literature reviews published within the American Journal of Occupational Therapy regarding neurodivergent occupations emphasize strategies advocated against by the neurodiversity community, including social skills training or neurotypical social skills (Bernier et al., 2022; Le, Rodrigues, & Hess, 2021), reduction of autistic characteristics (Altoff et al., 2019), and parent coaching to improve sensory processing tolerance (Porter et al., 2023).
    - It should be noted that no inclusion of neurodivergent shareholders is mentioned in any of these literature reviews.

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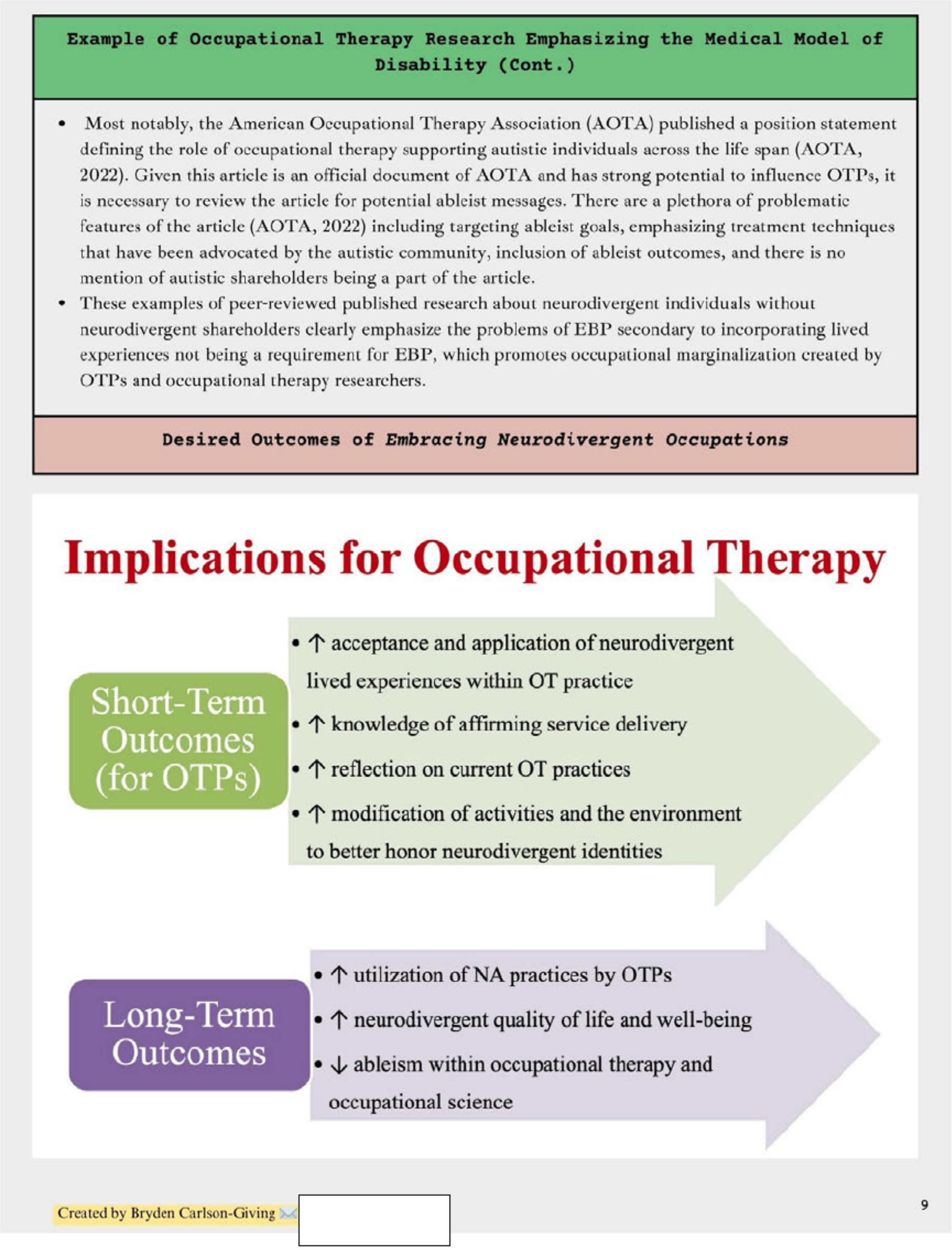

Example of Occupational Therapy Research Emphasizing the Medical Model of Disability (Cont.)

- Most notably, the American Occupational Therapy Association (AOTA) published a position statement defining the role of occupational therapy supporting autistic individuals across the life span (AOTA, 2022). Given this article is an official document of AOTA and has strong potential to influence OTPs, it is necessary to review the article for potential ableist messages. There are a plethora of problematic features of the article (AOTA, 2022) including targeting ableist goals, emphasizing treatment techniques that have been advocated by the autistic community, inclusion of ableist outcomes, and there is no mention of autistic shareholders being a part of the article.
- These examples of peer-reviewed published research about neurodivergent individuals without neurodivergent shareholders clearly emphasize the problems of EBP secondary to incorporating lived experiences not being a requirement for EBP, which promotes occupational marginalization created by OTPs and occupational therapy researchers.

Desired Outcomes of *Embracing Neurodivergent Occupations*

Implications for Occupational Therapy

Short-Term Outcomes (for OTPs)

- ↑ acceptance and application of neurodivergent lived experiences within OT practice
- ↑ knowledge of affirming service delivery
- ↑ reflection on current OT practices
- ↑ modification of activities and the environment to better honor neurodivergent identities

Long-Term Outcomes

- ↑ utilization of NA practices by OTPs
- ↑ neurodivergent quality of life and well-being
- ↓ ableism within occupational therapy and occupational science

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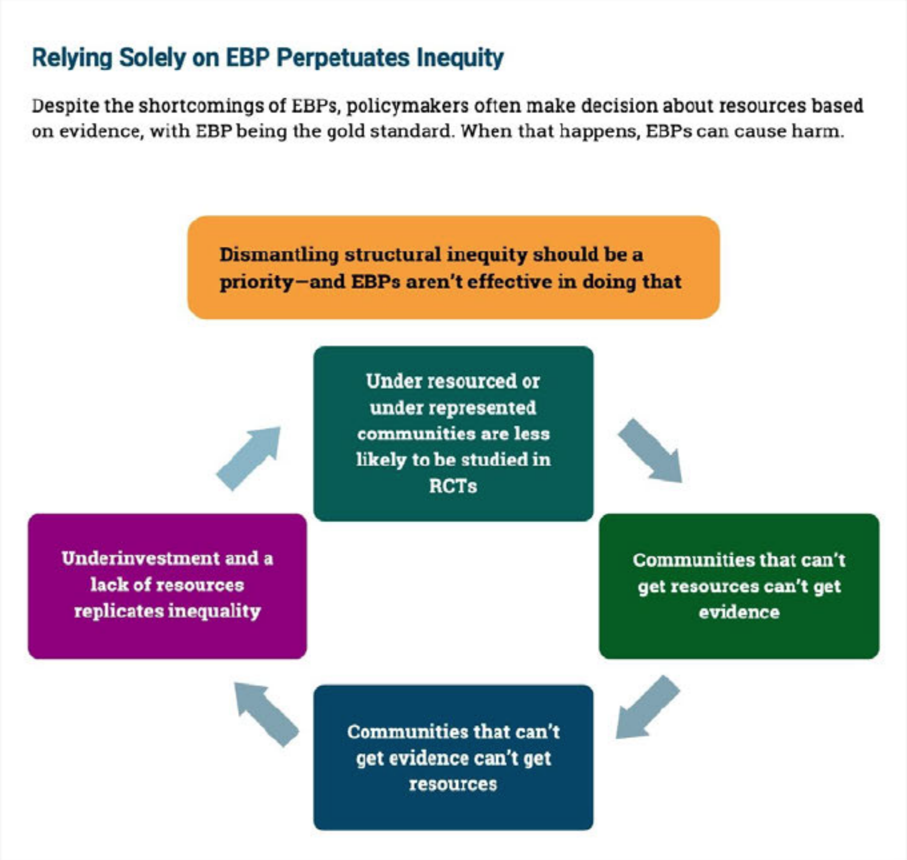
Relying Solely on Evidence-Based Practice Can Lead to Health Inequities

The issue with evidence-based practice (EBP)…

Given the current evidence-based practice process often highlights research evidence as the foundation of practice and much of healthcare research has ableist tendencies or does not include neurodivergent individuals in their creation, this calls to question the meaningfulness of published research (ASAN, n.d.; Taylor et al., 2022). Removing societal inequities should be a priority of healthcare researchers, and EBP is significantly limited in its ability to do so.



Relying Solely on EBP Perpetuates Inequity

Despite the shortcomings of EBPs, policymakers often make decision about resources based on evidence, with EBP being the gold standard. When that happens, EBPs can cause harm.

Dismantling structural inequity should be a priority—and EBPs aren't effective in doing that

Under resourced or under represented communities are less likely to be studied in RCTs

Communities that can't get resources can't get evidence

Communities that can't get evidence can't get resources

Underinvestment and a lack of resources replicates inequality

Note. From Tawa (2020, p.3)

Frameworks Guiding *Embracing Neurodivergent Occupations*

Community-Defined Evidence Practice (CDEP) Merged with the Lived Experience Informed Practice (LEIP) Model as an Alternative to Evidence-Based Practice

CDEP is defined as a set of practices that have yielded a positive consensus within a community over time and/or successful application of practices developed with significant community input (CDEP Integration Advisory Group, 2021; Martinez et al., 2010; National Latino Behavioral Health Association & National Network to Eliminate Disparities, 2009). Due to EBP often procuring research with racist and ableist tendencies, CDEP was designed to support and highlight the voices of marginalized communities (CDEP Integration Advisory Group, 2021). LEIP emphasizes lived experience as the foundation for practice, with clinical decisions prioritizing individuals and the impacted communities over research evidence and clinical experience (Wise, 2023a)

Research Evidence
Considers research evidence, though utilizing research is optional if not aligned with community expertise.

Community Expertise
Communities are the experts on what is important and meaningful.

Lived Experience
Lived experience is the foundation of practice; prioritized over research.

Culturally Relevant
Practices evolve over time to meet the needs of the community

CDEP + LEIP

Intersectionality
Acknowledgement of intersectionality and attempts to dismantle the effects of inequitable practices (e.g., anti-racist efforts).

Environmental Context

Documented Evidence
Participatory community-based research and evaluation data collection are the main form of evidence building.

Note. Adapted from CDEP Integration Advisory Group, 2021; Martinez et al., 2010; National Latino Behavioral Health Association & National Network to Eliminate Disparities, 2009; Wise, 2023.

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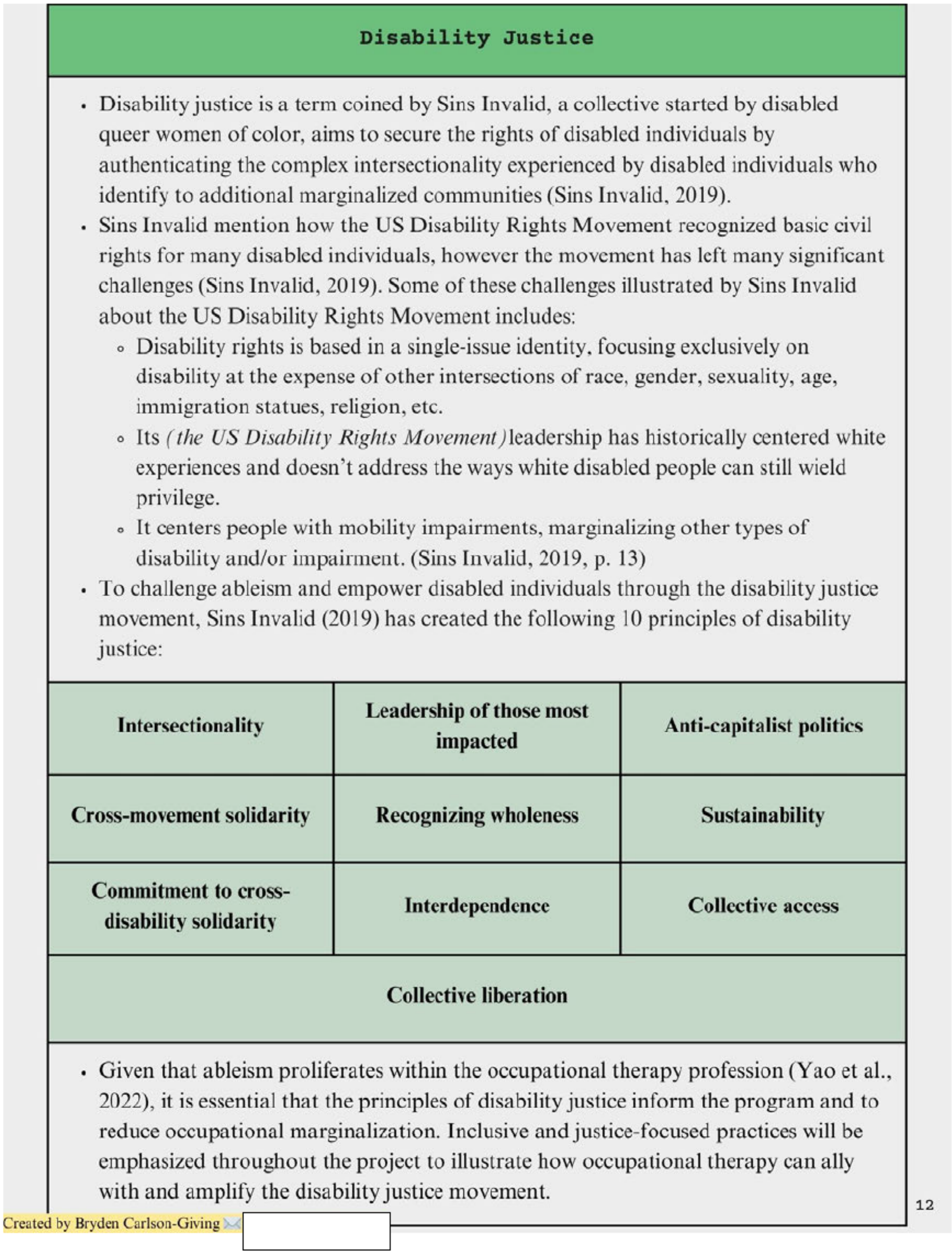
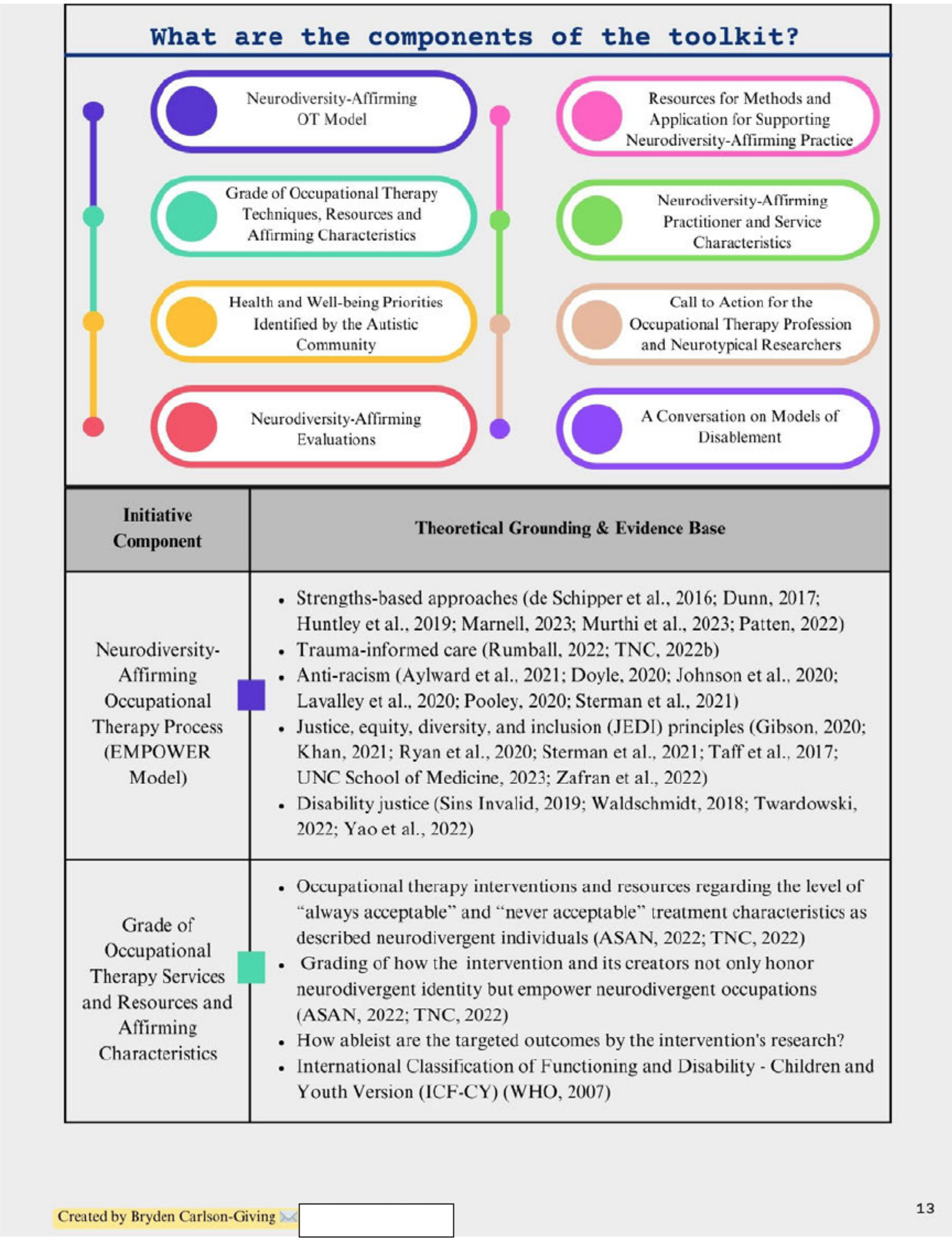


Disability Justice

- Disability justice is a term coined by Sins Invalid, a collective started by disabled queer women of color, aims to secure the rights of disabled individuals by authenticating the complex intersectionality experienced by disabled individuals who identify to additional marginalized communities (Sins Invalid, 2019).
- Sins Invalid mention how the US Disability Rights Movement recognized basic civil rights for many disabled individuals, however the movement has left many significant challenges (Sins Invalid, 2019). Some of these challenges illustrated by Sins Invalid about the US Disability Rights Movement includes:
    - Disability rights is based in a single-issue identity, focusing exclusively on disability at the expense of other intersections of race, gender, sexuality, age, immigration statues, religion, etc.
    - Its *(the US Disability Rights Movement)* leadership has historically centered white experiences and doesn't address the ways white disabled people can still wield privilege.
    - It centers people with mobility impairments, marginalizing other types of disability and/or impairment. (Sins Invalid, 2019, p. 13)
- To challenge ableism and empower disabled individuals through the disability justice movement, Sins Invalid (2019) has created the following 10 principles of disability justice:

Intersectionality	**Leadership of those most impacted**	**Anti-capitalist politics**
Cross-movement solidarity	**Recognizing wholeness**	**Sustainability**
Commitment to cross-disability solidarity	**Interdependence**	**Collective access**
Collective liberation		

- Given that ableism proliferates within the occupational therapy profession (Yao et al., 2022), it is essential that the principles of disability justice inform the program and to reduce occupational marginalization. Inclusive and justice-focused practices will be emphasized throughout the project to illustrate how occupational therapy can ally with and amplify the disability justice movement.



What are the components of the toolkit?

- Neurodiversity-Affirming OT Model
- Grade of Occupational Therapy Techniques, Resources and Affirming Characteristics
- Health and Well-being Priorities Identified by the Autistic Community
- Neurodiversity-Affirming Evaluations
- Resources for Methods and Application for Supporting Neurodiversity-Affirming Practice
- Neurodiversity-Affirming Practitioner and Service Characteristics
- Call to Action for the Occupational Therapy Profession and Neurotypical Researchers
- A Conversation on Models of Disablement

Initiative Component		Theoretical Grounding & Evidence Base
Neurodiversity-Affirming Occupational Therapy Process (EMPOWER Model)	🟪	• Strengths-based approaches (de Schipper et al., 2016; Dunn, 2017; Huntley et al., 2019; Marnell, 2023; Murthi et al., 2023; Patten, 2022) • Trauma-informed care (Rumball, 2022; TNC, 2022b) • Anti-racism (Aylward et al., 2021; Doyle, 2020; Johnson et al., 2020; Lavalley et al., 2020; Pooley, 2020; Sterman et al., 2021) • Justice, equity, diversity, and inclusion (JEDI) principles (Gibson, 2020; Khan, 2021; Ryan et al., 2020; Sterman et al., 2021; Taff et al., 2017; UNC School of Medicine, 2023; Zafran et al., 2022) • Disability justice (Sins Invalid, 2019; Waldschmidt, 2018; Twardowski, 2022; Yao et al., 2022)
Grade of Occupational Therapy Services and Resources and Affirming Characteristics	🟩	• Occupational therapy interventions and resources regarding the level of "always acceptable" and "never acceptable" treatment characteristics as described neurodivergent individuals (ASAN, 2022; TNC, 2022) • Grading of how the intervention and its creators not only honor neurodivergent identity but empower neurodivergent occupations (ASAN, 2022; TNC, 2022) • How ableist are the targeted outcomes by the intervention's research? • International Classification of Functioning and Disability - Children and Youth Version (ICF-CY) (WHO, 2007)

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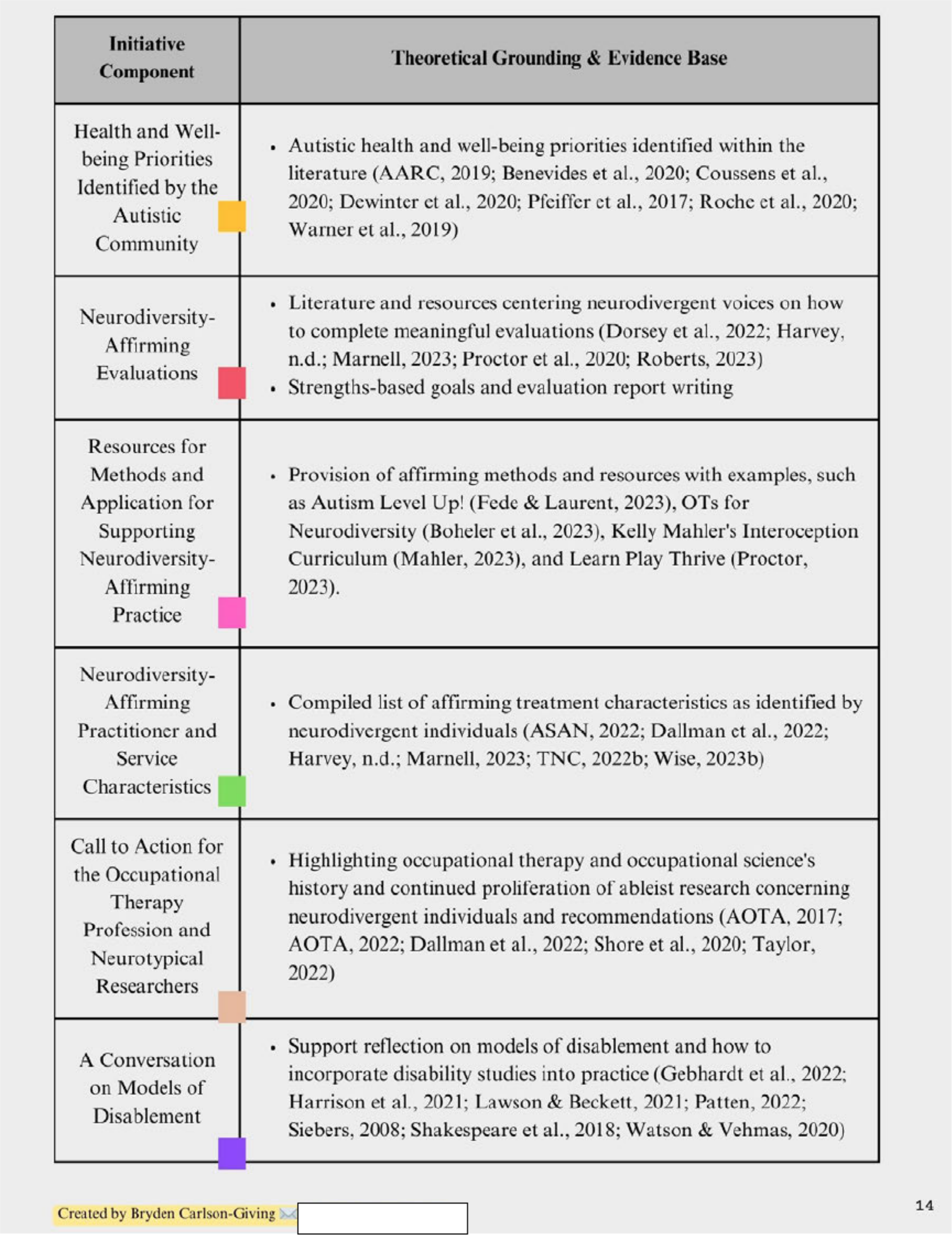

Initiative Component	Theoretical Grounding & Evidence Base
Health and Well-being Priorities Identified by the Autistic Community	• Autistic health and well-being priorities identified within the literature (AARC, 2019; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020; Warner et al., 2019)
Neurodiversity-Affirming Evaluations	• Literature and resources centering neurodivergent voices on how to complete meaningful evaluations (Dorsey et al., 2022; Harvey, n.d.; Marnell, 2023; Proctor et al., 2020; Roberts, 2023) • Strengths-based goals and evaluation report writing
Resources for Methods and Application for Supporting Neurodiversity-Affirming Practice	• Provision of affirming methods and resources with examples, such as Autism Level Up! (Fede & Laurent, 2023), OTs for Neurodiversity (Boheler et al., 2023), Kelly Mahler's Interoception Curriculum (Mahler, 2023), and Learn Play Thrive (Proctor, 2023).
Neurodiversity-Affirming Practitioner and Service Characteristics	• Compiled list of affirming treatment characteristics as identified by neurodivergent individuals (ASAN, 2022; Dallman et al., 2022; Harvey, n.d.; Marnell, 2023; TNC, 2022b; Wise, 2023b)
Call to Action for the Occupational Therapy Profession and Neurotypical Researchers	• Highlighting occupational therapy and occupational science's history and continued proliferation of ableist research concerning neurodivergent individuals and recommendations (AOTA, 2017; AOTA, 2022; Dallman et al., 2022; Shore et al., 2020; Taylor, 2022)
A Conversation on Models of Disablement	• Support reflection on models of disablement and how to incorporate disability studies into practice (Gebhardt et al., 2022; Harrison et al., 2021; Lawson & Beckett, 2021; Patten, 2022; Siebers, 2008; Shakespeare et al., 2018; Watson & Vehmas, 2020)

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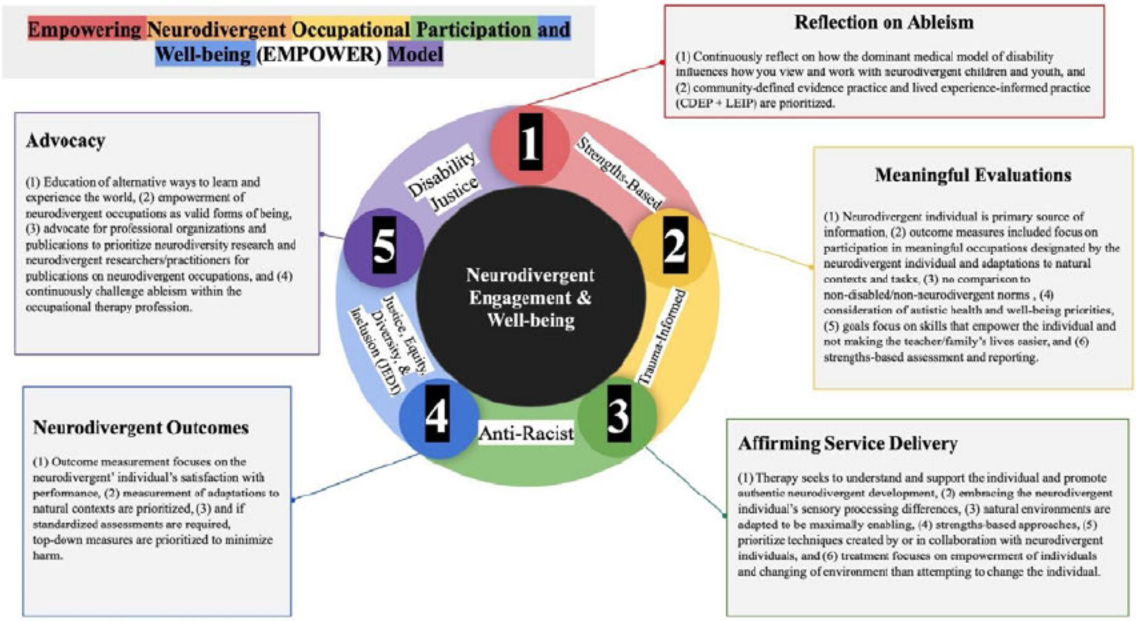
Introduction to Selected Components

For the next few pages, you will be introduced to a few components of *Embracing Neurodivergent Occupations*. Please note that the information you see within this introductory manual is only a blueprint, and the information you see within the complete website may change from what is within the manual.

Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model



Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model

Reflection on Ableism

(1) Continuously reflect on how the dominant medical model of disability influences how you view and work with neurodivergent children and youth, and (2) community-defined evidence practice and lived experience-informed practice (CDEP + LEIP) are prioritized.

Meaningful Evaluations

(1) Neurodivergent individual is primary source of information, (2) outcome measures included focus on participation in meaningful occupations designated by the neurodivergent individual and adaptations to natural contexts and tasks, (3) no comparison to non-disabled/non-neurodivergent norms , (4) consideration of autistic health and well-being priorities, (5) goals focus on skills that empower the individual and not making the teacher/family's lives easier, and (6) strengths-based assessment and reporting.

Affirming Service Delivery

(1) Therapy seeks to understand and support the individual and promote authentic neurodivergent development, (2) embracing the neurodivergent individual's sensory processing differences, (3) natural environments are adapted to be maximally enabling, (4) strengths-based approaches, (5) prioritize techniques created by or in collaboration with neurodivergent individuals, and (6) treatment focuses on empowerment of individuals and changing of environment than attempting to change the individual.

Neurodivergent Outcomes

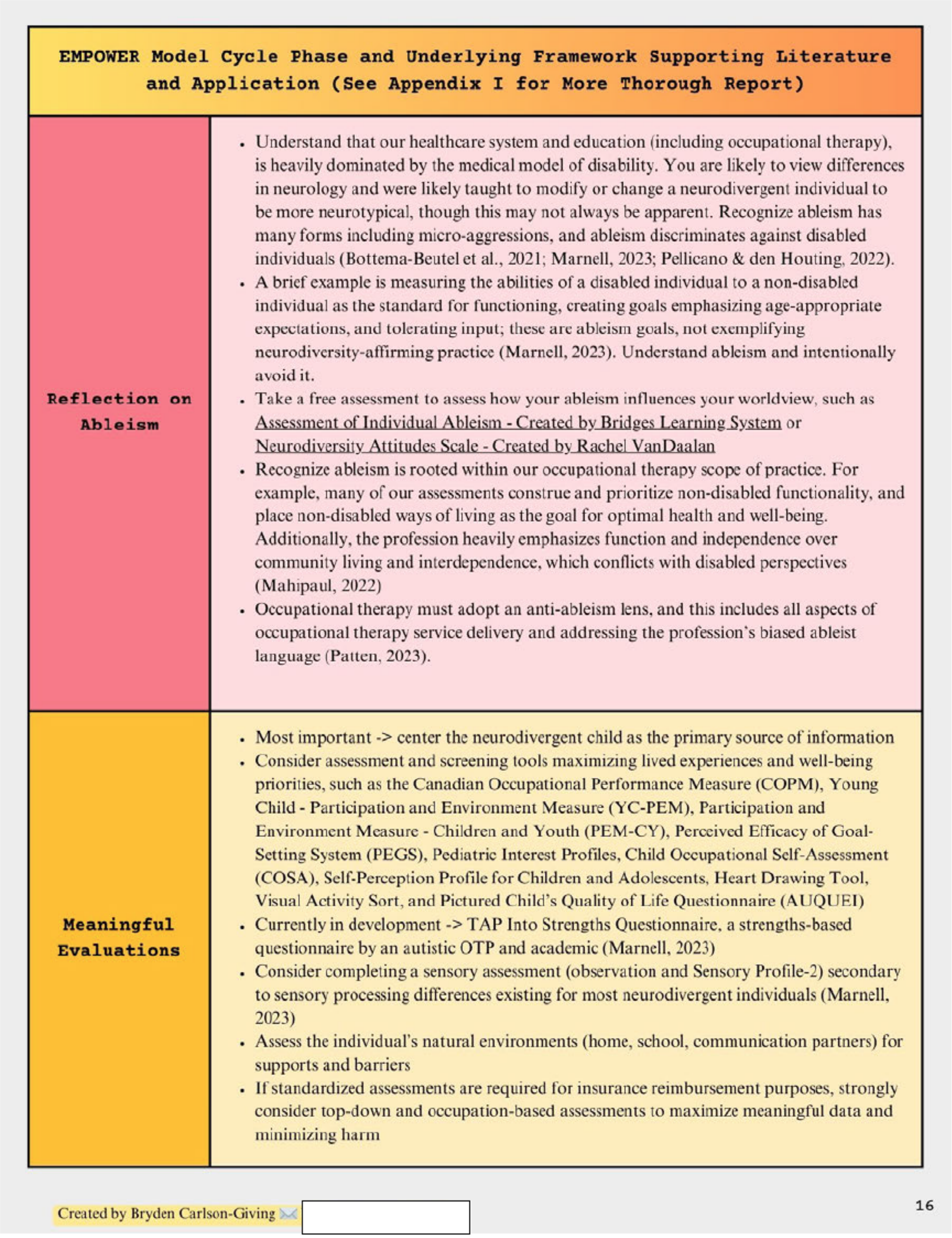
(1) Outcome measurement focuses on the neurodivergent' individual's satisfaction with performance, (2) measurement of adaptations to natural contexts are prioritized, (3) and if standardized assessments are required, top-down measures are prioritized to minimize harm.

Advocacy

(1) Education of alternative ways to learn and experience the world, (2) empowerment of neurodivergent occupations as valid forms of being, (3) advocate for professional organizations and publications to prioritize neurodiversity research and neurodivergent researchers/practitioners for publications on neurodivergent occupations, and (4) continuously challenge ableism within the occupational therapy profession.

The EMPOWER model was initially conceptualized by this author with feedback from international disabled OTPs and academics. The model was inspired by common themes found within disability advocate and neurodiversity-affirming literature (which are detailed in Appendix I). The cycle incorporates the following steps:

1. Reflection on ableism (Bottema-Beutel et al., 2021; Mahipaul, 2022; Marnell, 2023; Patten, 2023; Pellicano & den Houting, 2022)
2. Meaningful evaluations (Dorsey et al., 2022; Harvey, n.d.; Law et al., 2017; Marnell, 2023; Proctor et al., 2020; Roberts, 2023)
3. Affirming service delivery (ASAN, 2022; Harvey, n.d; Holler et al., 2021; Marnell, 2023; Shore et al., 2020; TNC, 2022b)
4. Neurodivergent outcomes (AARC, 2019; ASAN, 2022; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020 Marnell, 2023; Patten, 2022; Pfeiffer et al., 2017; Roche et al., 2020; TNC, 2022b; Warner et al., 2019)
5. Advocacy (Le et al., 2021; Murthi et al., 2023; Patten, 2022)



EMPOWER Model Cycle Phase and Underlying Framework Supporting Literature and Application (See Appendix I for More Thorough Report)	
Reflection on Ableism	- Understand that our healthcare system and education (including occupational therapy), is heavily dominated by the medical model of disability. You are likely to view differences in neurology and were likely taught to modify or change a neurodivergent individual to be more neurotypical, though this may not always be apparent. Recognize ableism has many forms including micro-aggressions, and ableism discriminates against disabled individuals (Bottema-Beutel et al., 2021; Marnell, 2023; Pellicano & den Houting, 2022). - A brief example is measuring the abilities of a disabled individual to a non-disabled individual as the standard for functioning, creating goals emphasizing age-appropriate expectations, and tolerating input; these are ableism goals, not exemplifying neurodiversity-affirming practice (Marnell, 2023). Understand ableism and intentionally avoid it. - Take a free assessment to assess how your ableism influences your worldview, such as Assessment of Individual Ableism - Created by Bridges Learning System or Neurodiversity Attitudes Scale - Created by Rachel VanDaalan - Recognize ableism is rooted within our occupational therapy scope of practice. For example, many of our assessments construe and prioritize non-disabled functionality, and place non-disabled ways of living as the goal for optimal health and well-being. Additionally, the profession heavily emphasizes function and independence over community living and interdependence, which conflicts with disabled perspectives (Mahipaul, 2022) - Occupational therapy must adopt an anti-ableism lens, and this includes all aspects of occupational therapy service delivery and addressing the profession's biased ableist language (Patten, 2023).
Meaningful Evaluations	- Most important -> center the neurodivergent child as the primary source of information - Consider assessment and screening tools maximizing lived experiences and well-being priorities, such as the Canadian Occupational Performance Measure (COPM), Young Child - Participation and Environment Measure (YC-PEM), Participation and Environment Measure - Children and Youth (PEM-CY), Perceived Efficacy of Goal-Setting System (PEGS), Pediatric Interest Profiles, Child Occupational Self-Assessment (COSA), Self-Perception Profile for Children and Adolescents, Heart Drawing Tool, Visual Activity Sort, and Pictured Child's Quality of Life Questionnaire (AUQUEI) - Currently in development -> TAP Into Strengths Questionnaire, a strengths-based questionnaire by an autistic OTP and academic (Marnell, 2023) - Consider completing a sensory assessment (observation and Sensory Profile-2) secondary to sensory processing differences existing for most neurodivergent individuals (Marnell, 2023) - Assess the individual's natural environments (home, school, communication partners) for supports and barriers - If standardized assessments are required for insurance reimbursement purposes, strongly consider top-down and occupation-based assessments to maximize meaningful data and minimizing harm

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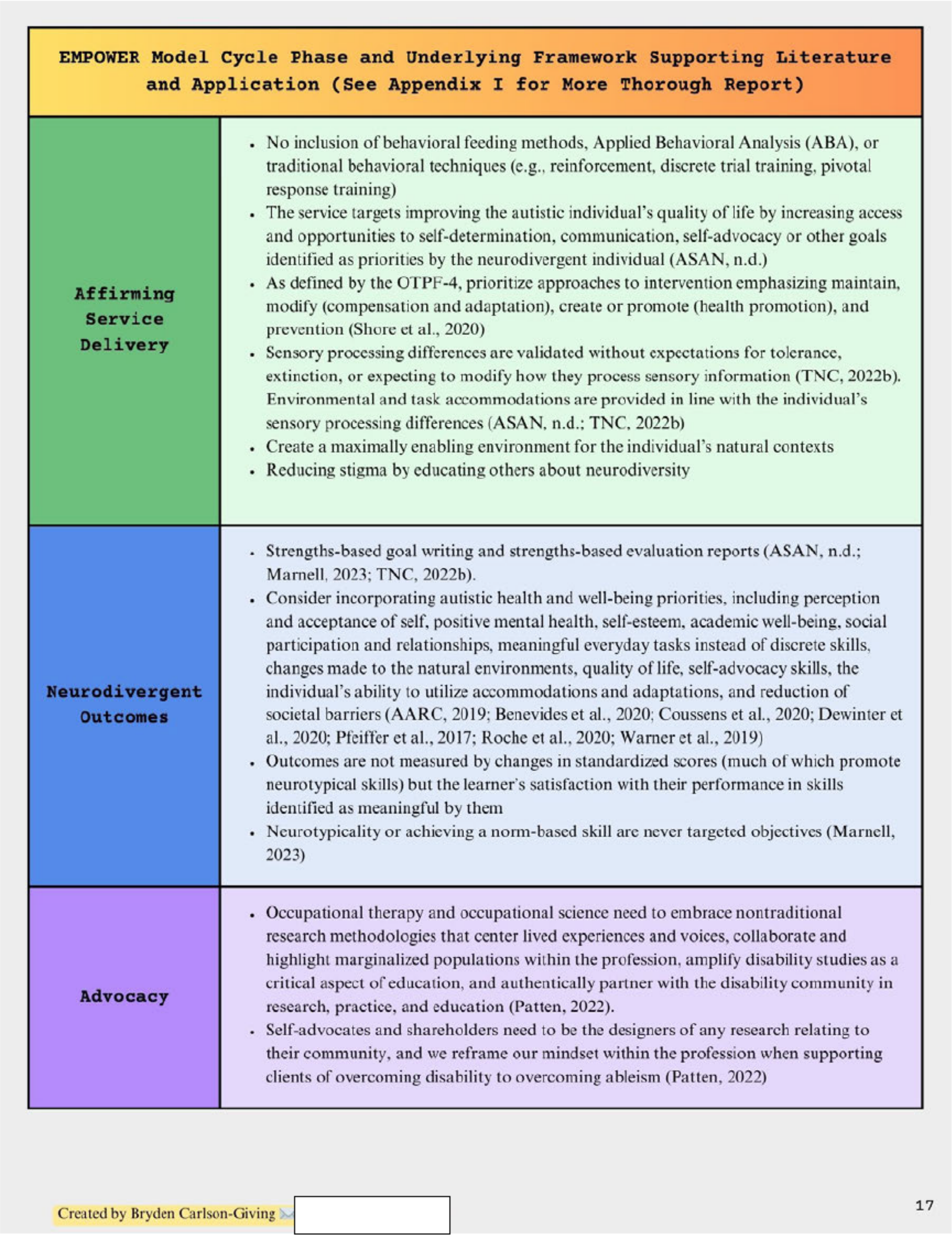

EMPOWER Model Cycle Phase and Underlying Framework Supporting Literature and Application (See Appendix I for More Thorough Report)	
Affirming Service Delivery	• No inclusion of behavioral feeding methods, Applied Behavioral Analysis (ABA), or traditional behavioral techniques (e.g., reinforcement, discrete trial training, pivotal response training) • The service targets improving the autistic individual's quality of life by increasing access and opportunities to self-determination, communication, self-advocacy or other goals identified as priorities by the neurodivergent individual (ASAN, n.d.) • As defined by the OTPF-4, prioritize approaches to intervention emphasizing maintain, modify (compensation and adaptation), create or promote (health promotion), and prevention (Shore et al., 2020) • Sensory processing differences are validated without expectations for tolerance, extinction, or expecting to modify how they process sensory information (TNC, 2022b). Environmental and task accommodations are provided in line with the individual's sensory processing differences (ASAN, n.d.; TNC, 2022b) • Create a maximally enabling environment for the individual's natural contexts • Reducing stigma by educating others about neurodiversity
Neurodivergent Outcomes	• Strengths-based goal writing and strengths-based evaluation reports (ASAN, n.d.; Marnell, 2023; TNC, 2022b). • Consider incorporating autistic health and well-being priorities, including perception and acceptance of self, positive mental health, self-esteem, academic well-being, social participation and relationships, meaningful everyday tasks instead of discrete skills, changes made to the natural environments, quality of life, self-advocacy skills, the individual's ability to utilize accommodations and adaptations, and reduction of societal barriers (AARC, 2019; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020; Warner et al., 2019) • Outcomes are not measured by changes in standardized scores (much of which promote neurotypical skills) but the learner's satisfaction with their performance in skills identified as meaningful by them • Neurotypicality or achieving a norm-based skill are never targeted objectives (Marnell, 2023)
Advocacy	• Occupational therapy and occupational science need to embrace nontraditional research methodologies that center lived experiences and voices, collaborate and highlight marginalized populations within the profession, amplify disability studies as a critical aspect of education, and authentically partner with the disability community in research, practice, and education (Patten, 2022). • Self-advocates and shareholders need to be the designers of any research relating to their community, and we reframe our mindset within the profession when supporting clients of overcoming disability to overcoming ableism (Patten, 2022)

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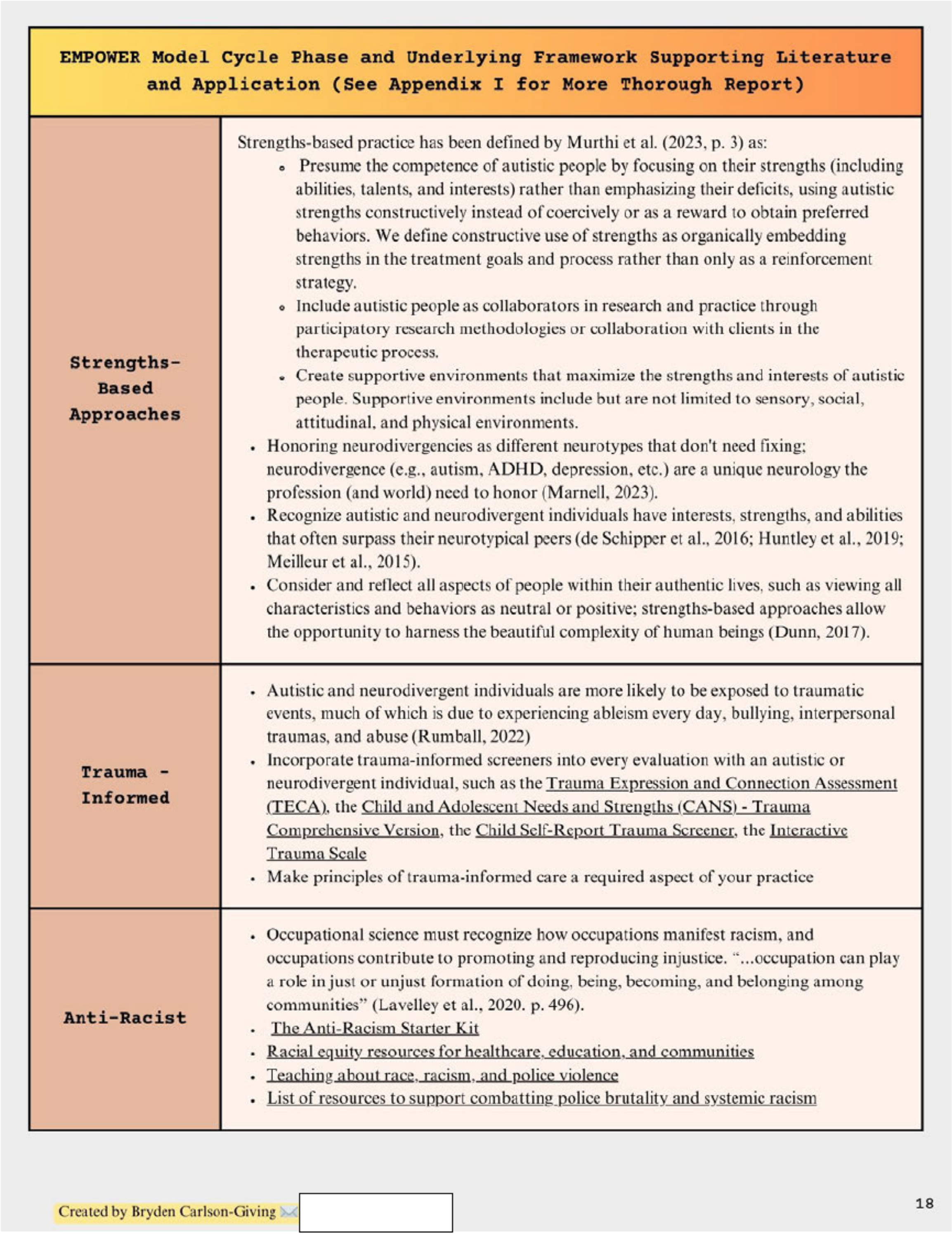

EMPOWER Model Cycle Phase and Underlying Framework Supporting Literature and Application (See Appendix I for More Thorough Report)	
Strengths-Based Approaches	Strengths-based practice has been defined by Murthi et al. (2023, p. 3) as: ◦ Presume the competence of autistic people by focusing on their strengths (including abilities, talents, and interests) rather than emphasizing their deficits, using autistic strengths constructively instead of coercively or as a reward to obtain preferred behaviors. We define constructive use of strengths as organically embedding strengths in the treatment goals and process rather than only as a reinforcement strategy. ◦ Include autistic people as collaborators in research and practice through participatory research methodologies or collaboration with clients in the therapeutic process. ◦ Create supportive environments that maximize the strengths and interests of autistic people. Supportive environments include but are not limited to sensory, social, attitudinal, and physical environments. • Honoring neurodivergencies as different neurotypes that don't need fixing; neurodivergence (e.g., autism, ADHD, depression, etc.) are a unique neurology the profession (and world) need to honor (Marnell, 2023). • Recognize autistic and neurodivergent individuals have interests, strengths, and abilities that often surpass their neurotypical peers (de Schipper et al., 2016; Huntley et al., 2019; Meilleur et al., 2015). • Consider and reflect all aspects of people within their authentic lives, such as viewing all characteristics and behaviors as neutral or positive; strengths-based approaches allow the opportunity to harness the beautiful complexity of human beings (Dunn, 2017).
Trauma - Informed	• Autistic and neurodivergent individuals are more likely to be exposed to traumatic events, much of which is due to experiencing ableism every day, bullying, interpersonal traumas, and abuse (Rumball, 2022) • Incorporate trauma-informed screeners into every evaluation with an autistic or neurodivergent individual, such as the Trauma Expression and Connection Assessment (TECA), the Child and Adolescent Needs and Strengths (CANS) - Trauma Comprehensive Version, the Child Self-Report Trauma Screener, the Interactive Trauma Scale • Make principles of trauma-informed care a required aspect of your practice
Anti-Racist	• Occupational science must recognize how occupations manifest racism, and occupations contribute to promoting and reproducing injustice. "...occupation can play a role in just or unjust formation of doing, being, becoming, and belonging among communities" (Lavelley et al., 2020. p. 496). • The Anti-Racism Starter Kit • Racial equity resources for healthcare, education, and communities • Teaching about race, racism, and police violence • List of resources to support combatting police brutality and systemic racism

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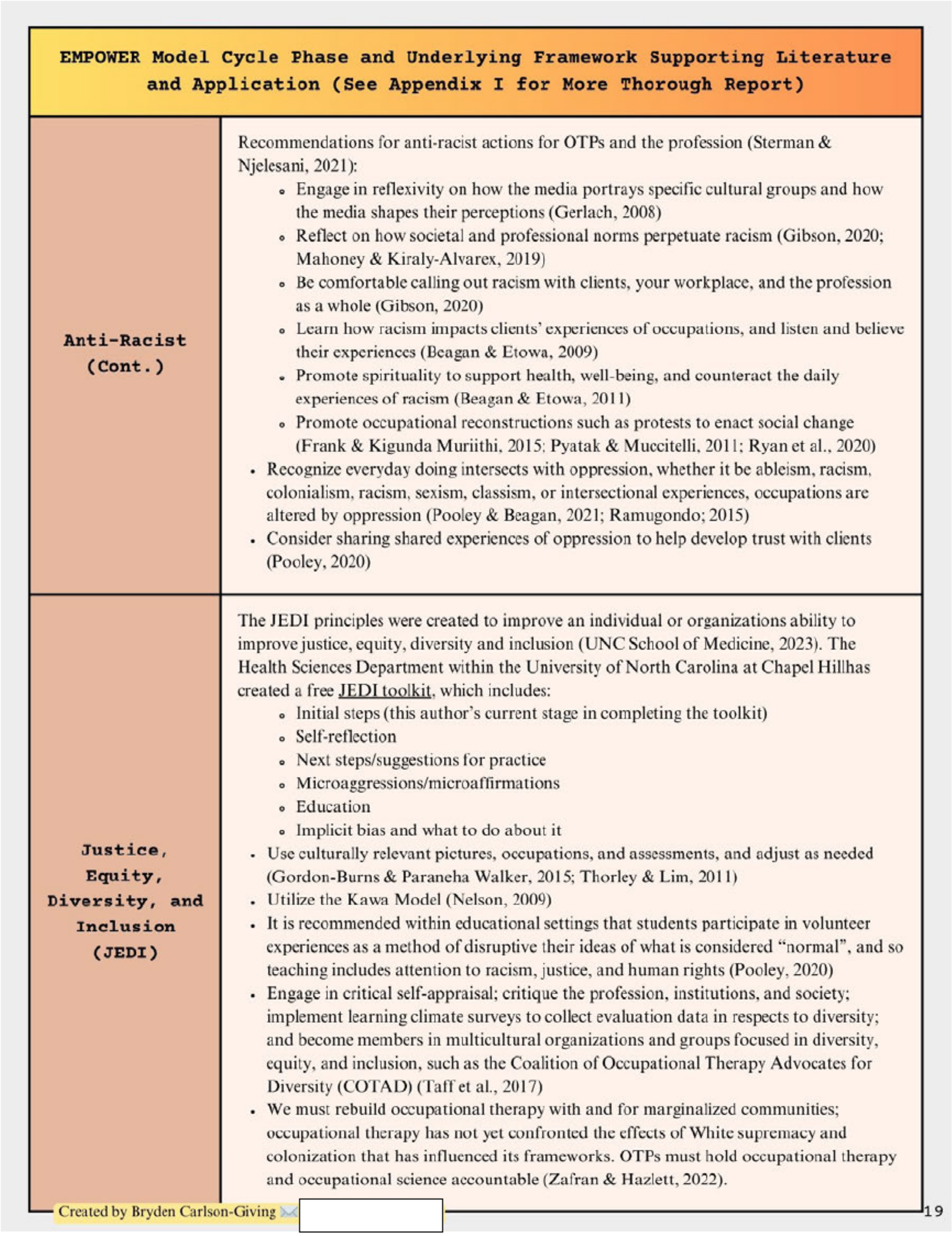

EMPOWER Model Cycle Phase and Underlying Framework Supporting Literature and Application (See Appendix I for More Thorough Report)	
Anti-Racist (Cont.)	Recommendations for anti-racist actions for OTPs and the profession (Sterman & Njelesani, 2021): ∘ Engage in reflexivity on how the media portrays specific cultural groups and how the media shapes their perceptions (Gerlach, 2008) ∘ Reflect on how societal and professional norms perpetuate racism (Gibson, 2020; Mahoney & Kiraly-Alvarex, 2019) ∘ Be comfortable calling out racism with clients, your workplace, and the profession as a whole (Gibson, 2020) ∘ Learn how racism impacts clients' experiences of occupations, and listen and believe their experiences (Beagan & Etowa, 2009) ∘ Promote spirituality to support health, well-being, and counteract the daily experiences of racism (Beagan & Etowa, 2011) ∘ Promote occupational reconstructions such as protests to enact social change (Frank & Kigunda Muriithi, 2015; Pyatak & Muccitelli, 2011; Ryan et al., 2020) • Recognize everyday doing intersects with oppression, whether it be ableism, racism, colonialism, racism, sexism, classism, or intersectional experiences, occupations are altered by oppression (Pooley & Beagan, 2021; Ramugondo; 2015) • Consider sharing shared experiences of oppression to help develop trust with clients (Pooley, 2020)
Justice, Equity, Diversity, and Inclusion (JEDI)	The JEDI principles were created to improve an individual or organizations ability to improve justice, equity, diversity and inclusion (UNC School of Medicine, 2023). The Health Sciences Department within the University of North Carolina at Chapel Hillhas created a free JEDI toolkit, which includes: ∘ Initial steps (this author's current stage in completing the toolkit) ∘ Self-reflection ∘ Next steps/suggestions for practice ∘ Microaggressions/microaffirmations ∘ Education ∘ Implicit bias and what to do about it • Use culturally relevant pictures, occupations, and assessments, and adjust as needed (Gordon-Burns & Paraneha Walker, 2015; Thorley & Lim, 2011) • Utilize the Kawa Model (Nelson, 2009) • It is recommended within educational settings that students participate in volunteer experiences as a method of disruptive their ideas of what is considered "normal", and so teaching includes attention to racism, justice, and human rights (Pooley, 2020) • Engage in critical self-appraisal; critique the profession, institutions, and society; implement learning climate surveys to collect evaluation data in respects to diversity; and become members in multicultural organizations and groups focused in diversity, equity, and inclusion, such as the Coalition of Occupational Therapy Advocates for Diversity (COTAD) (Taff et al., 2017) • We must rebuild occupational therapy with and for marginalized communities; occupational therapy has not yet confronted the effects of White supremacy and colonization that has influenced its frameworks. OTPs must hold occupational therapy and occupational science accountable (Zafran & Hazlett, 2022).

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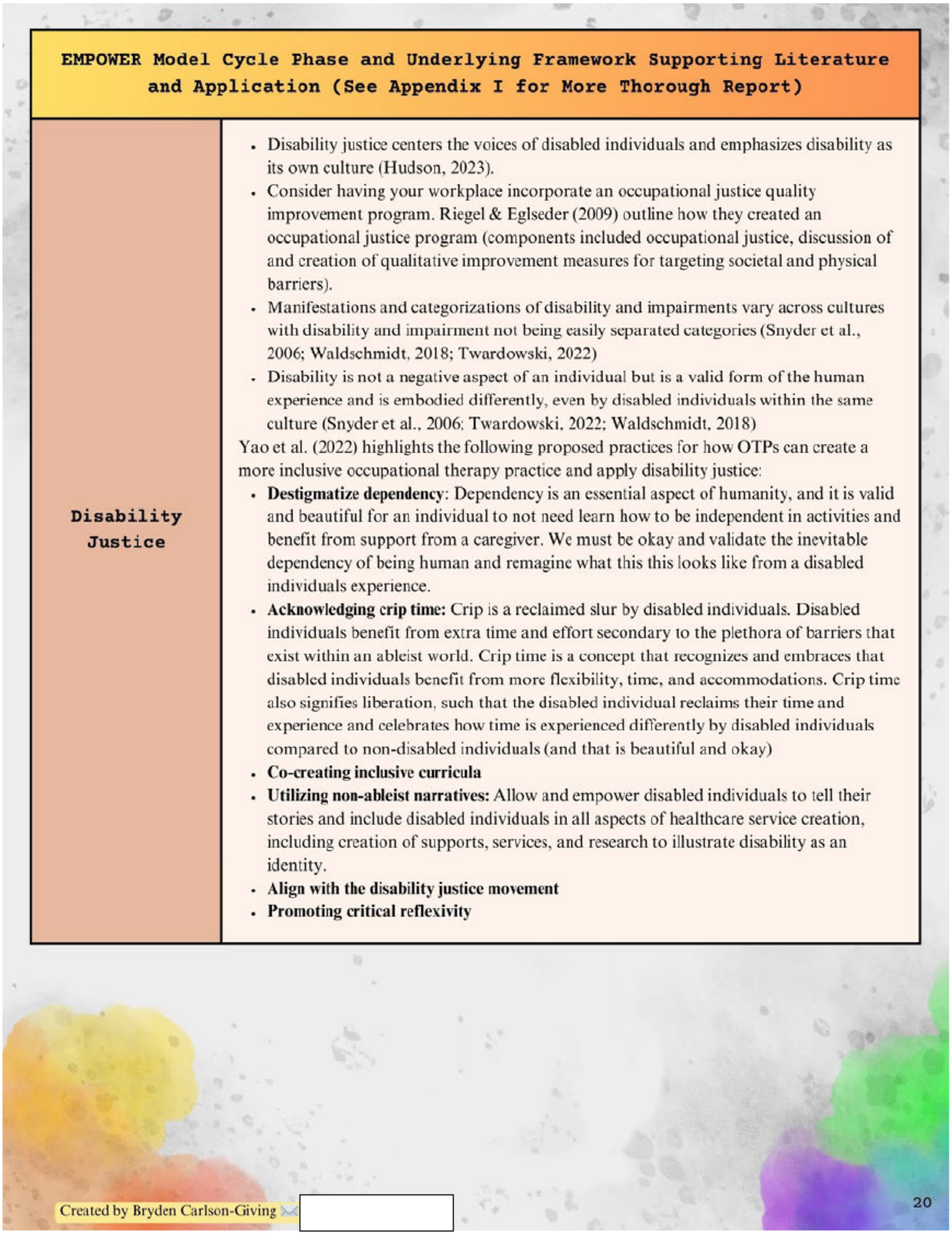
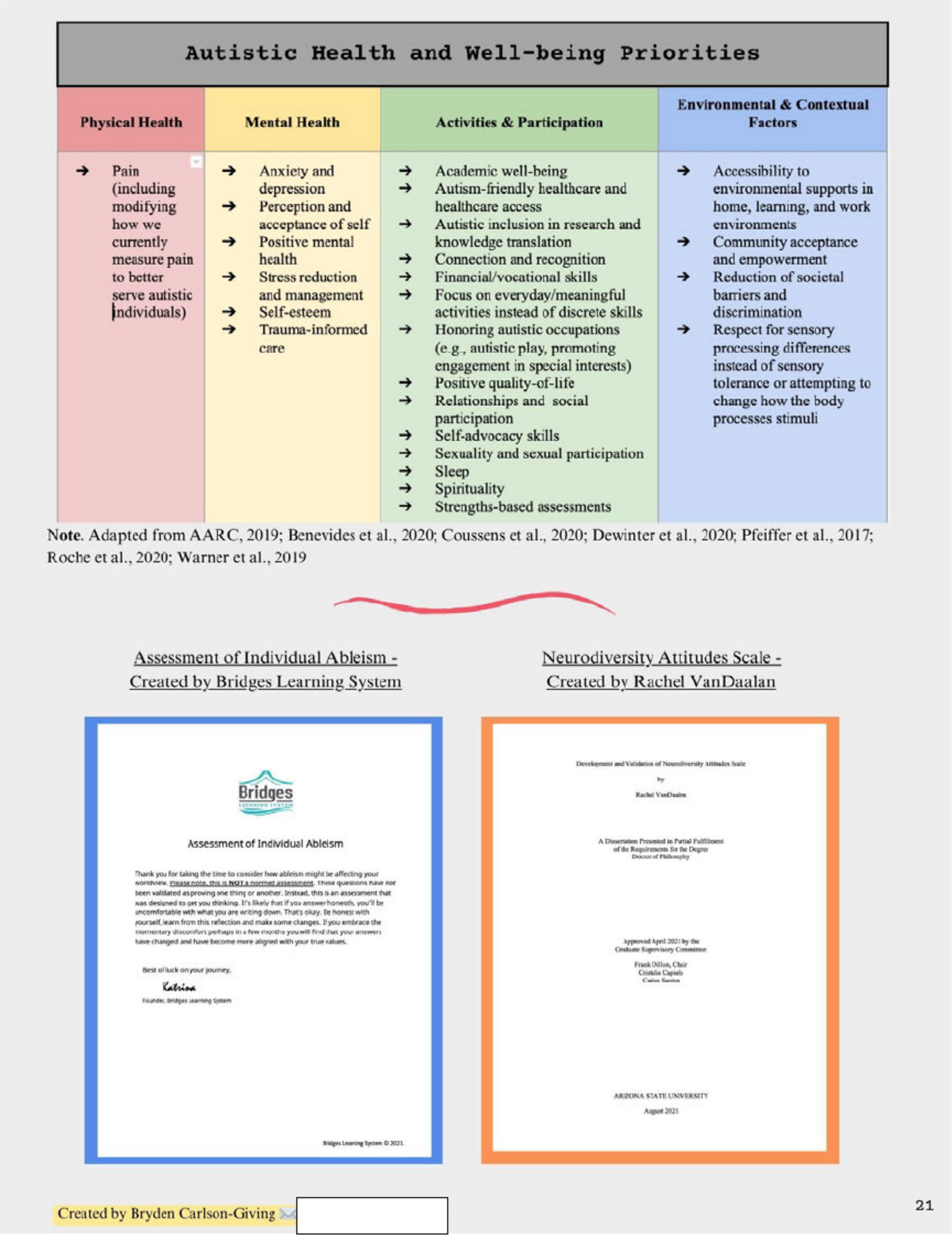


EMPOWER Model Cycle Phase and Underlying Framework Supporting Literature and Application (See Appendix I for More Thorough Report)	
Disability Justice	• Disability justice centers the voices of disabled individuals and emphasizes disability as its own culture (Hudson, 2023). • Consider having your workplace incorporate an occupational justice quality improvement program. Riegel & Eglseder (2009) outline how they created an occupational justice program (components included occupational justice, discussion of and creation of qualitative improvement measures for targeting societal and physical barriers). • Manifestations and categorizations of disability and impairments vary across cultures with disability and impairment not being easily separated categories (Snyder et al., 2006; Waldschmidt, 2018; Twardowski, 2022) • Disability is not a negative aspect of an individual but is a valid form of the human experience and is embodied differently, even by disabled individuals within the same culture (Snyder et al., 2006; Twardowski, 2022; Waldschmidt, 2018) Yao et al. (2022) highlights the following proposed practices for how OTPs can create a more inclusive occupational therapy practice and apply disability justice: • **Destigmatize dependency**: Dependency is an essential aspect of humanity, and it is valid and beautiful for an individual to not need learn how to be independent in activities and benefit from support from a caregiver. We must be okay and validate the inevitable dependency of being human and remagine what this this looks like from a disabled individuals experience. • **Acknowledging crip time:** Crip is a reclaimed slur by disabled individuals. Disabled individuals benefit from extra time and effort secondary to the plethora of barriers that exist within an ableist world. Crip time is a concept that recognizes and embraces that disabled individuals benefit from more flexibility, time, and accommodations. Crip time also signifies liberation, such that the disabled individual reclaims their time and experience and celebrates how time is experienced differently by disabled individuals compared to non-disabled individuals (and that is beautiful and okay) • **Co-creating inclusive curricula** • **Utilizing non-ableist narratives:** Allow and empower disabled individuals to tell their stories and include disabled individuals in all aspects of healthcare service creation, including creation of supports, services, and research to illustrate disability as an identity. • **Align with the disability justice movement** • **Promoting critical reflexivity**



Autistic Health and Well-being Priorities

Physical Health	Mental Health	Activities & Participation	Environmental & Contextual Factors
→ Pain (including modifying how we currently measure pain to better serve autistic individuals)	→ Anxiety and depression → Perception and acceptance of self → Positive mental health → Stress reduction and management → Self-esteem → Trauma-informed care	→ Academic well-being → Autism-friendly healthcare and healthcare access → Autistic inclusion in research and knowledge translation → Connection and recognition → Financial/vocational skills → Focus on everyday/meaningful activities instead of discrete skills → Honoring autistic occupations (e.g., autistic play, promoting engagement in special interests) → Positive quality-of-life → Relationships and social participation → Self-advocacy skills → Sexuality and sexual participation → Sleep → Spirituality → Strengths-based assessments	→ Accessibility to environmental supports in home, learning, and work environments → Community acceptance and empowerment → Reduction of societal barriers and discrimination → Respect for sensory processing differences instead of sensory tolerance or attempting to change how the body processes stimuli

Note. Adapted from AARC, 2019; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020; Warner et al., 2019

Assessment of Individual Ableism -
Created by Bridges Learning System

Bridges
LEARNING SYSTEM

Assessment of Individual Ableism

Thank you for taking the time to consider how ableism might be affecting your worldview. Please note, this is **NOT** a normed assessment. These questions have not been validated as proving one thing or another. Instead, this is an assessment that was designed to get you thinking. It's likely that if you answer honestly, you'll be uncomfortable with what you are writing down. That's okay. Be honest with yourself, learn from this reflection and make some changes. If you embrace the momentary discomfort perhaps in a few months you will find that your answers have changed and have become more aligned with your true values.

Best of luck on your journey,

Katrina

Founder, Bridges Learning System

Bridges Learning System © 2021.

Neurodiversity Attitudes Scale -
Created by Rachel VanDaalan

Development and Validation of Neurodiversity Attitudes Scale

by

Rachel VanDaalen

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved April 2021 by the
Graduate Supervisory Committee:

Frank Dillon, Chair
Cristalis Capielo
Carlos Santos

ARIZONA STATE UNIVERSITY

August 2021

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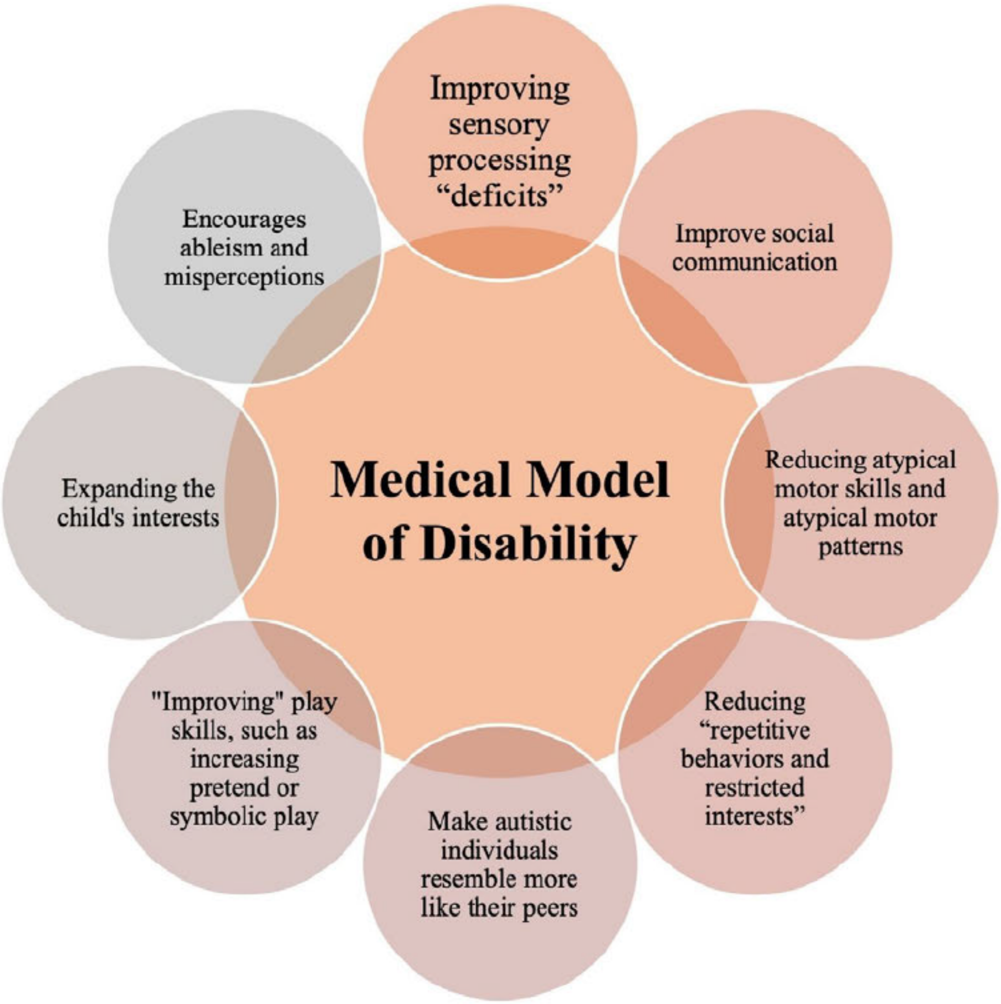
Applying the Medical Model Model of Disability Vs. the EMPOWER Model



Medical Model of Disability

Improving sensory processing “deficits”

Improve social communication

Reducing atypical motor skills and atypical motor patterns

Reducing “repetitive behaviors and restricted interests”

Make autistic individuals resemble more like their peers

"Improving" play skills, such as increasing pretend or symbolic play

Expanding the child's interests

Encourages ableism and misperceptions

Adapted from AARC; ASAN, n.d.; Shore et al., 2020; TNC, 2022

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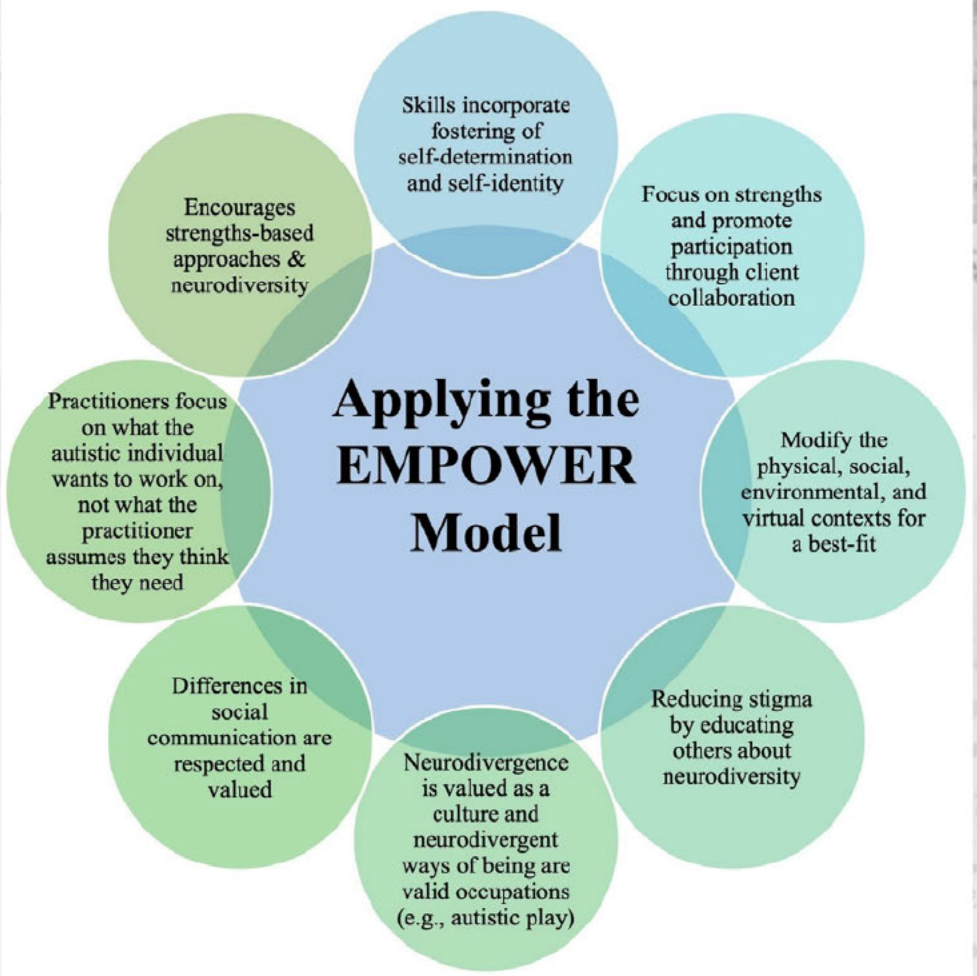
Applying the Medical Model Model of Disability Vs. the EMPOWER Model



Applying the EMPOWER Model

Skills incorporate fostering of self-determination and self-identity

Focus on strengths and promote participation through client collaboration

Modify the physical, social, environmental, and virtual contexts for a best-fit

Reducing stigma by educating others about neurodiversity

Neurodivergence is valued as a culture and neurodivergent ways of being are valid occupations (e.g., autistic play)

Differences in social communication are respected and valued

Practitioners focus on what the autistic individual wants to work on, not what the practitioner assumes they think they need

Encourages strengths-based approaches & neurodiversity

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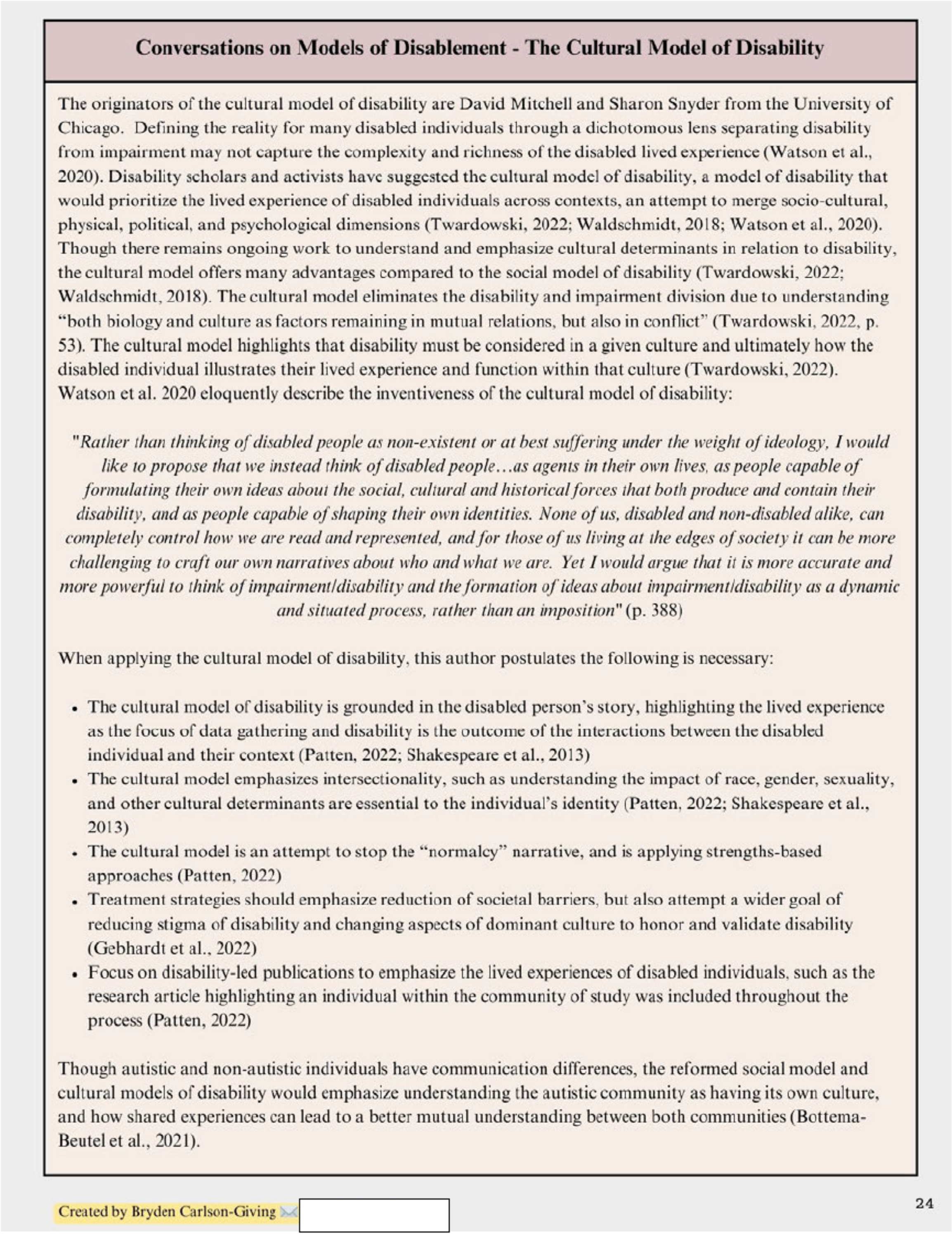

Conversations on Models of Disablement - The Cultural Model of Disability

The originators of the cultural model of disability are David Mitchell and Sharon Snyder from the University of Chicago. Defining the reality for many disabled individuals through a dichotomous lens separating disability from impairment may not capture the complexity and richness of the disabled lived experience (Watson et al., 2020). Disability scholars and activists have suggested the cultural model of disability, a model of disability that would prioritize the lived experience of disabled individuals across contexts, an attempt to merge socio-cultural, physical, political, and psychological dimensions (Twardowski, 2022; Waldschmidt, 2018; Watson et al., 2020). Though there remains ongoing work to understand and emphasize cultural determinants in relation to disability, the cultural model offers many advantages compared to the social model of disability (Twardowski, 2022; Waldschmidt, 2018). The cultural model eliminates the disability and impairment division due to understanding "both biology and culture as factors remaining in mutual relations, but also in conflict" (Twardowski, 2022, p. 53). The cultural model highlights that disability must be considered in a given culture and ultimately how the disabled individual illustrates their lived experience and function within that culture (Twardowski, 2022). Watson et al. 2020 eloquently describe the inventiveness of the cultural model of disability:

> "*Rather than thinking of disabled people as non-existent or at best suffering under the weight of ideology, I would like to propose that we instead think of disabled people…as agents in their own lives, as people capable of formulating their own ideas about the social, cultural and historical forces that both produce and contain their disability, and as people capable of shaping their own identities. None of us, disabled and non-disabled alike, can completely control how we are read and represented, and for those of us living at the edges of society it can be more challenging to craft our own narratives about who and what we are. Yet I would argue that it is more accurate and more powerful to think of impairment/disability and the formation of ideas about impairment/disability as a dynamic and situated process, rather than an imposition*" (p. 388)

When applying the cultural model of disability, this author postulates the following is necessary:

- The cultural model of disability is grounded in the disabled person's story, highlighting the lived experience as the focus of data gathering and disability is the outcome of the interactions between the disabled individual and their context (Patten, 2022; Shakespeare et al., 2013)
- The cultural model emphasizes intersectionality, such as understanding the impact of race, gender, sexuality, and other cultural determinants are essential to the individual's identity (Patten, 2022; Shakespeare et al., 2013)
- The cultural model is an attempt to stop the "normalcy" narrative, and is applying strengths-based approaches (Patten, 2022)
- Treatment strategies should emphasize reduction of societal barriers, but also attempt a wider goal of reducing stigma of disability and changing aspects of dominant culture to honor and validate disability (Gebhardt et al., 2022)
- Focus on disability-led publications to emphasize the lived experiences of disabled individuals, such as the research article highlighting an individual within the community of study was included throughout the process (Patten, 2022)

Though autistic and non-autistic individuals have communication differences, the reformed social model and cultural models of disability would emphasize understanding the autistic community as having its own culture, and how shared experiences can lead to a better mutual understanding between both communities (Bottema-Beutel et al., 2021).

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A Visualization and Comparison of the Medical, Traditional Social, and Cultural Models of Disability

Medical Model of Disability	Traditional Social Model of Disability	Cultural Model of Disability
• Disability is strictly the result of impairments and is an individual problem • Treatment is focused on changing the individual to be "less disabled" or more neurotypical • Impairments as defined by non-disabled individuals need to be remediated or "fixed" • No change required by the ableist society • Impairments of the body are "deficiencies" or "deficits", and being disabled is a deviation from the societal norm • Historically, the medical model contributed to the creation and proliferation of prejudices against disabled individuals • The medical model is the dominant model used to inform policy and healthcare within the United States and much of the world	• Disability is a social construction and is a result of societal barriers, such as the prejudices and attitudes of non-disabled individuals leading to social inequality • Focus on changing social policies • Impairment and disability are two separate categories, with impairment being natural and disability unnatural and there being no causal relation between the two • Treatment is focused on reducing environmental barriers and supporting accessibility • There is one universal definition and understanding of disability • Culture is not an essential component when examining and understanding disability	• Disability is a natural and valid form of human diversity • Disability comprises social, cultural, historical, psychological, and bodily dimensions • Disability is situated as a complex interaction between the individual and their wider context • Treatment is focused on empowerment of the disabled individual and highlighting their lived experience, which can include adaptations to their environment or remediation of their impairment as defined on their terms • Cultural model emphasizes challenging of cultural norms within society • Consideration of intersectionality (e.g., race, gender, class, sexuality) must occur to grasp an accurate picture of the disabled lived experience • Various cultural groups exist within the disabled universe, with their own interpretations of impairment and disability

Note. Adapted from Gerbhardt et al. (2022); Twardowski (2022); Waldschmidt et al. (2018); Watson et al. (2020)

It is important to note much of current healthcare research by neurodivergent and disabled researchers examining the reformed social model of disability into practice have expanded upon the original principles outlined by Oliver (traditional social model) (Shore et al., 2020), much of which resemble tenets of the cultural model of disability (what advocates have been designating as the reformed social model) (Woods, 2017)

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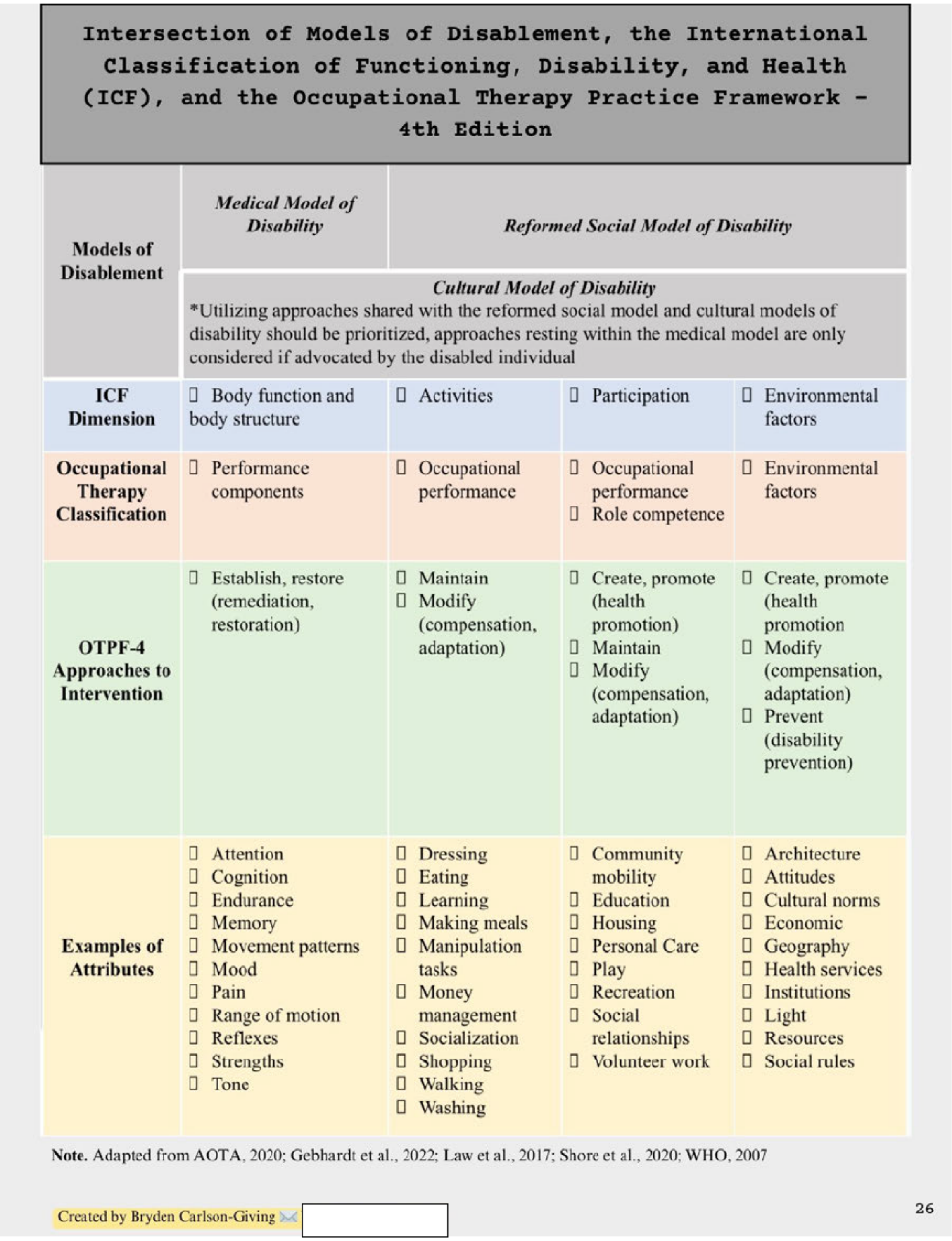

Intersection of Models of Disablement, the International Classification of Functioning, Disability, and Health (ICF), and the Occupational Therapy Practice Framework - 4th Edition

Models of Disablement	***Medical Model of Disability***	***Reformed Social Model of Disability***		
	Cultural Model of Disability *Utilizing approaches shared with the reformed social model and cultural models of disability should be prioritized, approaches resting within the medical model are only considered if advocated by the disabled individual			
ICF Dimension	☐ Body function and body structure	☐ Activities	☐ Participation	☐ Environmental factors
Occupational Therapy Classification	☐ Performance components	☐ Occupational performance	☐ Occupational performance ☐ Role competence	☐ Environmental factors
OTPF-4 Approaches to Intervention	☐ Establish, restore (remediation, restoration)	☐ Maintain ☐ Modify (compensation, adaptation)	☐ Create, promote (health promotion) ☐ Maintain ☐ Modify (compensation, adaptation)	☐ Create, promote (health promotion ☐ Modify (compensation, adaptation) ☐ Prevent (disability prevention)
Examples of Attributes	☐ Attention ☐ Cognition ☐ Endurance ☐ Memory ☐ Movement patterns ☐ Mood ☐ Pain ☐ Range of motion ☐ Reflexes ☐ Strengths ☐ Tone	☐ Dressing ☐ Eating ☐ Learning ☐ Making meals ☐ Manipulation tasks ☐ Money management ☐ Socialization ☐ Shopping ☐ Walking ☐ Washing	☐ Community mobility ☐ Education ☐ Housing ☐ Personal Care ☐ Play ☐ Recreation ☐ Social relationships ☐ Volunteer work	☐ Architecture ☐ Attitudes ☐ Cultural norms ☐ Economic ☐ Geography ☐ Health services ☐ Institutions ☐ Light ☐ Resources ☐ Social rules

Note. Adapted from AOTA, 2020; Gebhardt et al., 2022; Law et al., 2017; Shore et al., 2020; WHO, 2007

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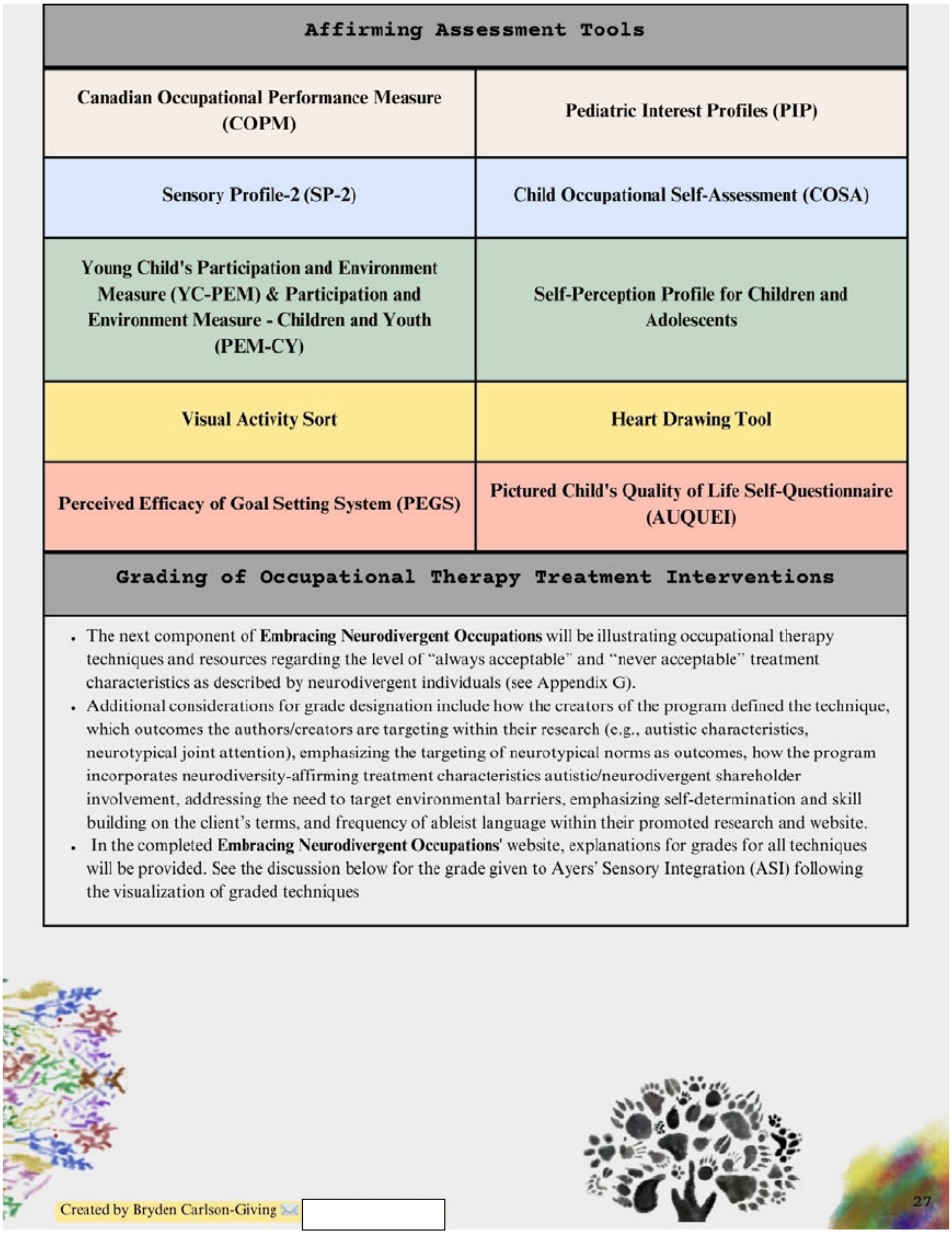

Affirming Assessment Tools

Canadian Occupational Performance Measure (COPM)	**Pediatric Interest Profiles (PIP)**
Sensory Profile-2 (SP-2)	**Child Occupational Self-Assessment (COSA)**
Young Child's Participation and Environment Measure (YC-PEM) & Participation and Environment Measure - Children and Youth (PEM-CY)	**Self-Perception Profile for Children and Adolescents**
Visual Activity Sort	**Heart Drawing Tool**
Perceived Efficacy of Goal Setting System (PEGS)	**Pictured Child's Quality of Life Self-Questionnaire (AUQUEI)**

Grading of Occupational Therapy Treatment Interventions

- The next component of **Embracing Neurodivergent Occupations** will be illustrating occupational therapy techniques and resources regarding the level of "always acceptable" and "never acceptable" treatment characteristics as described by neurodivergent individuals (see Appendix G).
- Additional considerations for grade designation include how the creators of the program defined the technique, which outcomes the authors/creators are targeting within their research (e.g., autistic characteristics, neurotypical joint attention), emphasizing the targeting of neurotypical norms as outcomes, how the program incorporates neurodiversity-affirming treatment characteristics autistic/neurodivergent shareholder involvement, addressing the need to target environmental barriers, emphasizing self-determination and skill building on the client's terms, and frequency of ableist language within their promoted research and website.
- In the completed **Embracing Neurodivergent Occupations**' website, explanations for grades for all techniques will be provided. See the discussion below for the grade given to Ayers' Sensory Integration (ASI) following the visualization of graded techniques

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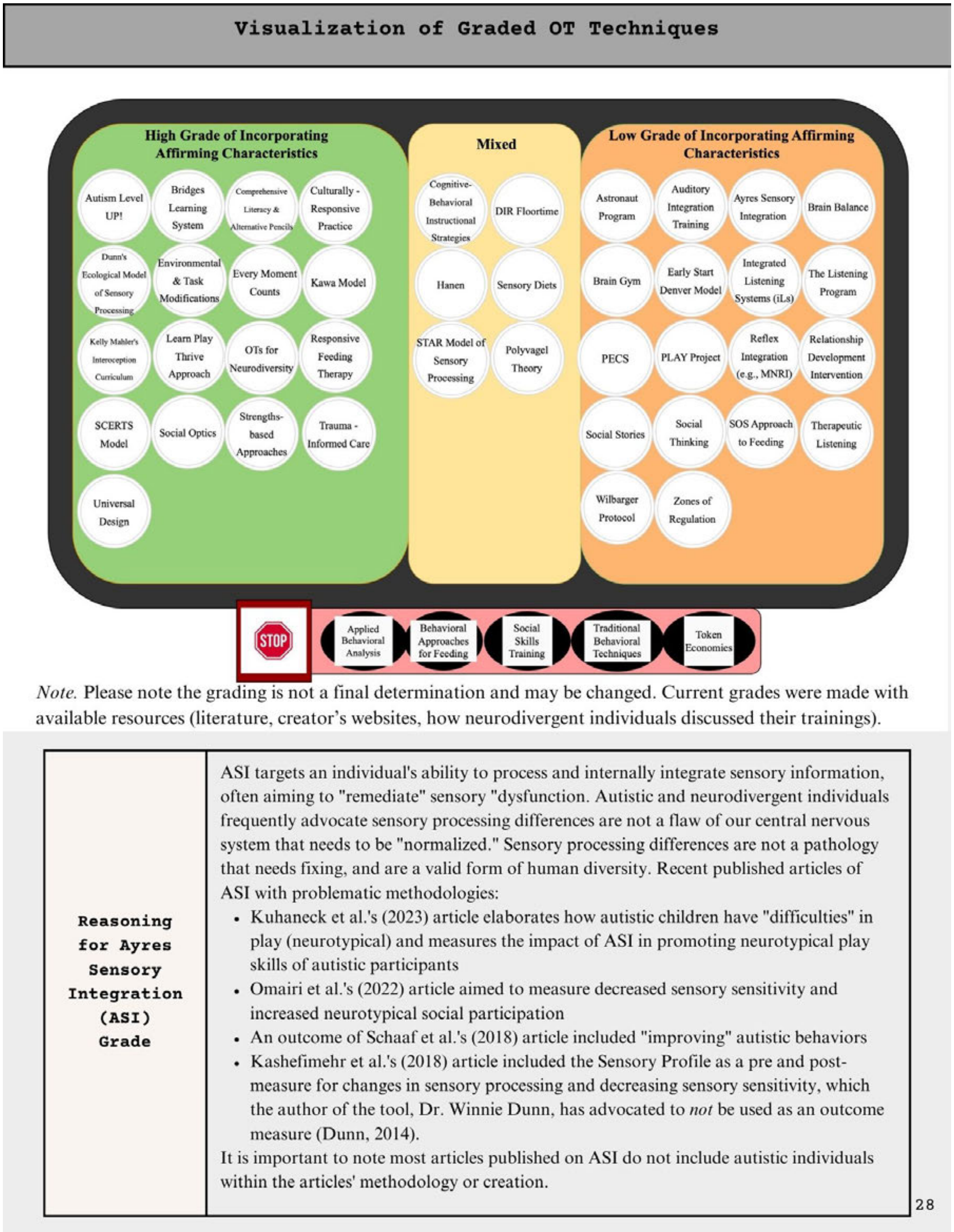
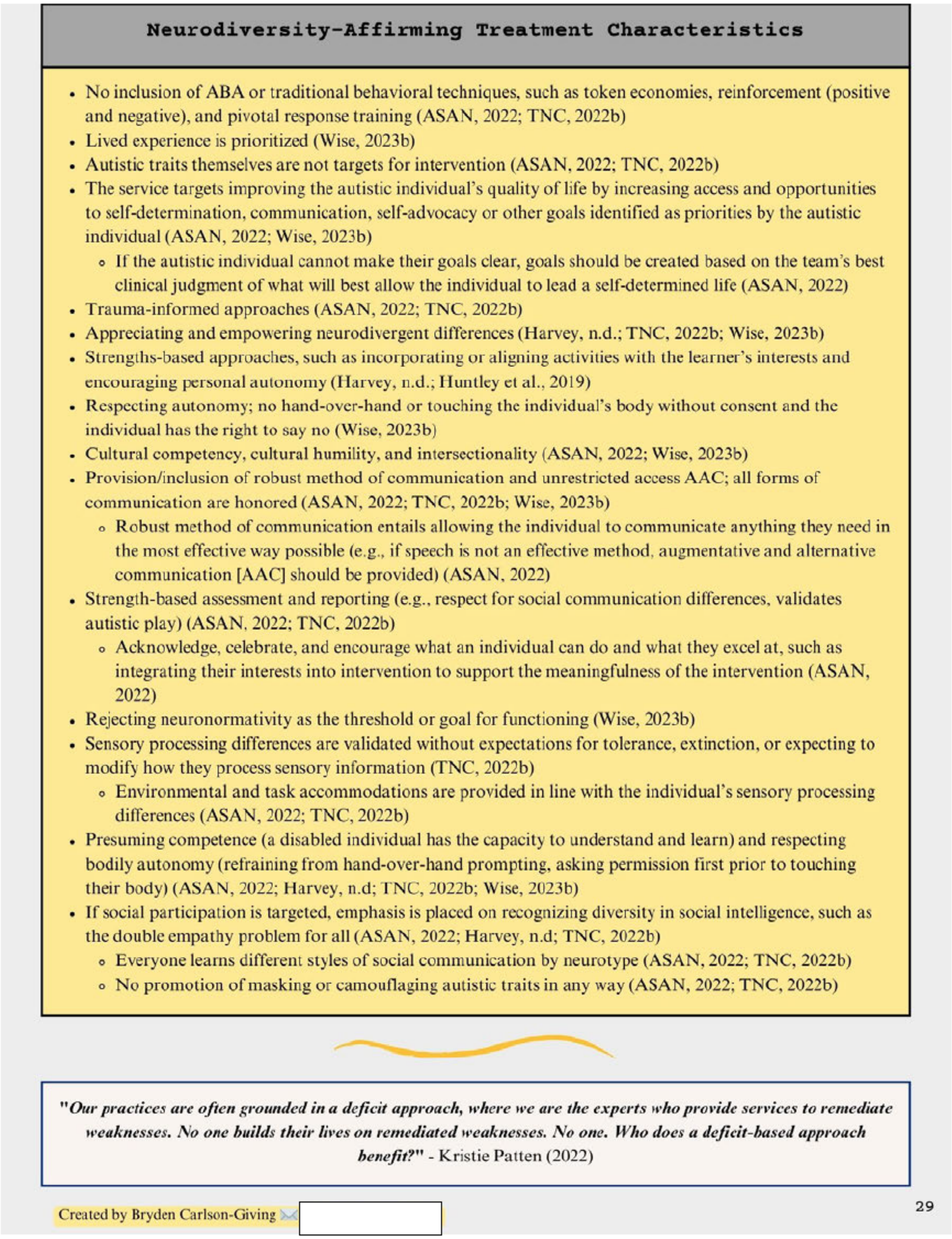


Visualization of Graded OT Techniques

Note. Please note the grading is not a final determination and may be changed. Current grades were made with available resources (literature, creator's websites, how neurodivergent individuals discussed their trainings).

Reasoning for Ayres Sensory Integration (ASI) Grade	ASI targets an individual's ability to process and internally integrate sensory information, often aiming to "remediate" sensory "dysfunction. Autistic and neurodivergent individuals frequently advocate sensory processing differences are not a flaw of our central nervous system that needs to be "normalized." Sensory processing differences are not a pathology that needs fixing, and are a valid form of human diversity. Recent published articles of ASI with problematic methodologies: • Kuhaneck et al.'s (2023) article elaborates how autistic children have "difficulties" in play (neurotypical) and measures the impact of ASI in promoting neurotypical play skills of autistic participants • Omairi et al.'s (2022) article aimed to measure decreased sensory sensitivity and increased neurotypical social participation • An outcome of Schaaf et al.'s (2018) article included "improving" autistic behaviors • Kashefimehr et al.'s (2018) article included the Sensory Profile as a pre and post-measure for changes in sensory processing and decreasing sensory sensitivity, which the author of the tool, Dr. Winnie Dunn, has advocated to *not* be used as an outcome measure (Dunn, 2014). It is important to note most articles published on ASI do not include autistic individuals within the articles' methodology or creation.



Neurodiversity-Affirming Treatment Characteristics

- No inclusion of ABA or traditional behavioral techniques, such as token economies, reinforcement (positive and negative), and pivotal response training (ASAN, 2022; TNC, 2022b)
- Lived experience is prioritized (Wise, 2023b)
- Autistic traits themselves are not targets for intervention (ASAN, 2022; TNC, 2022b)
- The service targets improving the autistic individual's quality of life by increasing access and opportunities to self-determination, communication, self-advocacy or other goals identified as priorities by the autistic individual (ASAN, 2022; Wise, 2023b)
  - If the autistic individual cannot make their goals clear, goals should be created based on the team's best clinical judgment of what will best allow the individual to lead a self-determined life (ASAN, 2022)
- Trauma-informed approaches (ASAN, 2022; TNC, 2022b)
- Appreciating and empowering neurodivergent differences (Harvey, n.d.; TNC, 2022b; Wise, 2023b)
- Strengths-based approaches, such as incorporating or aligning activities with the learner's interests and encouraging personal autonomy (Harvey, n.d.; Huntley et al., 2019)
- Respecting autonomy; no hand-over-hand or touching the individual's body without consent and the individual has the right to say no (Wise, 2023b)
- Cultural competency, cultural humility, and intersectionality (ASAN, 2022; Wise, 2023b)
- Provision/inclusion of robust method of communication and unrestricted access AAC; all forms of communication are honored (ASAN, 2022; TNC, 2022b; Wise, 2023b)
  - Robust method of communication entails allowing the individual to communicate anything they need in the most effective way possible (e.g., if speech is not an effective method, augmentative and alternative communication [AAC] should be provided) (ASAN, 2022)
- Strength-based assessment and reporting (e.g., respect for social communication differences, validates autistic play) (ASAN, 2022; TNC, 2022b)
  - Acknowledge, celebrate, and encourage what an individual can do and what they excel at, such as integrating their interests into intervention to support the meaningfulness of the intervention (ASAN, 2022)
- Rejecting neuronormativity as the threshold or goal for functioning (Wise, 2023b)
- Sensory processing differences are validated without expectations for tolerance, extinction, or expecting to modify how they process sensory information (TNC, 2022b)
  - Environmental and task accommodations are provided in line with the individual's sensory processing differences (ASAN, 2022; TNC, 2022b)
- Presuming competence (a disabled individual has the capacity to understand and learn) and respecting bodily autonomy (refraining from hand-over-hand prompting, asking permission first prior to touching their body) (ASAN, 2022; Harvey, n.d; TNC, 2022b; Wise, 2023b)
- If social participation is targeted, emphasis is placed on recognizing diversity in social intelligence, such as the double empathy problem for all (ASAN, 2022; Harvey, n.d; TNC, 2022b)
  - Everyone learns different styles of social communication by neurotype (ASAN, 2022; TNC, 2022b)
  - No promotion of masking or camouflaging autistic traits in any way (ASAN, 2022; TNC, 2022b)

> ***"Our practices are often grounded in a deficit approach, where we are the experts who provide services to remediate weaknesses. No one builds their lives on remediated weaknesses. No one. Who does a deficit-based approach benefit?"*** - Kristie Patten (2022)

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Recommended Readings & Texts to Explore

Journal Articles & Gray Literature

Autistic Self-Advocacy Network (ASAN). (n.d.). *For whose benefit? Evidence, ethics, and effectiveness of autism interventions.* Autistic Self Advocacy Network. https://autisticadvocacy.org/wp-content/uploads/2021/12/ACES-Ethics-of-Intervention.pdf

Benevides, T. W., Shore, S. M., Palmer, K., Duncan, P., Plank, A., Andresen, M.-L., Caplan, R., Cook, B., Gassner, D., Hector, B. L., Morgan, L., Nebeker, L., Purkis, Y., Rankowski, B., Wittig, K., & Coughlin, S. S. (2020). Listening to the autistic voice: Mental health priorities to guide research and practice in autism from a stakeholder-driven project. *Autism: The International Journal of Research and Practice, 24*(4), 822–833. https://doi.org/10.1177/1362361320908410

Bottema-Beutel, K., Kapp, S. K., Lester, J. N., Sasson, N. J., & Hand, B. N. (2021). Avoiding ableist language: Suggestions for autism researchers. *Autism in Adulthood, 3*(1), 18–29. https://doi.org/10.1089/aut.2020.0014

Dallman, A. R., Williams, K. L., & Villa, L. (2022). Neurodiversity-affirming practices are a moral imperative for occupational therapy. *The Open Journal of Occupational Therapy, 10*(2), 1–9. https://doi.org/10.15453/2168-6408.1937

Harrison, E. A., Sheth, A. J., Kish, J., VanPuymbrouck, L. H., Heffron, J. L., Lee, D., & Mahaffey, L. (2021). Disability studies and occupational therapy: Renewing the call for change. *American Journal of Occupational Therapy, 75*(4). https://doi.org/10.5014/ajot.2021.754002

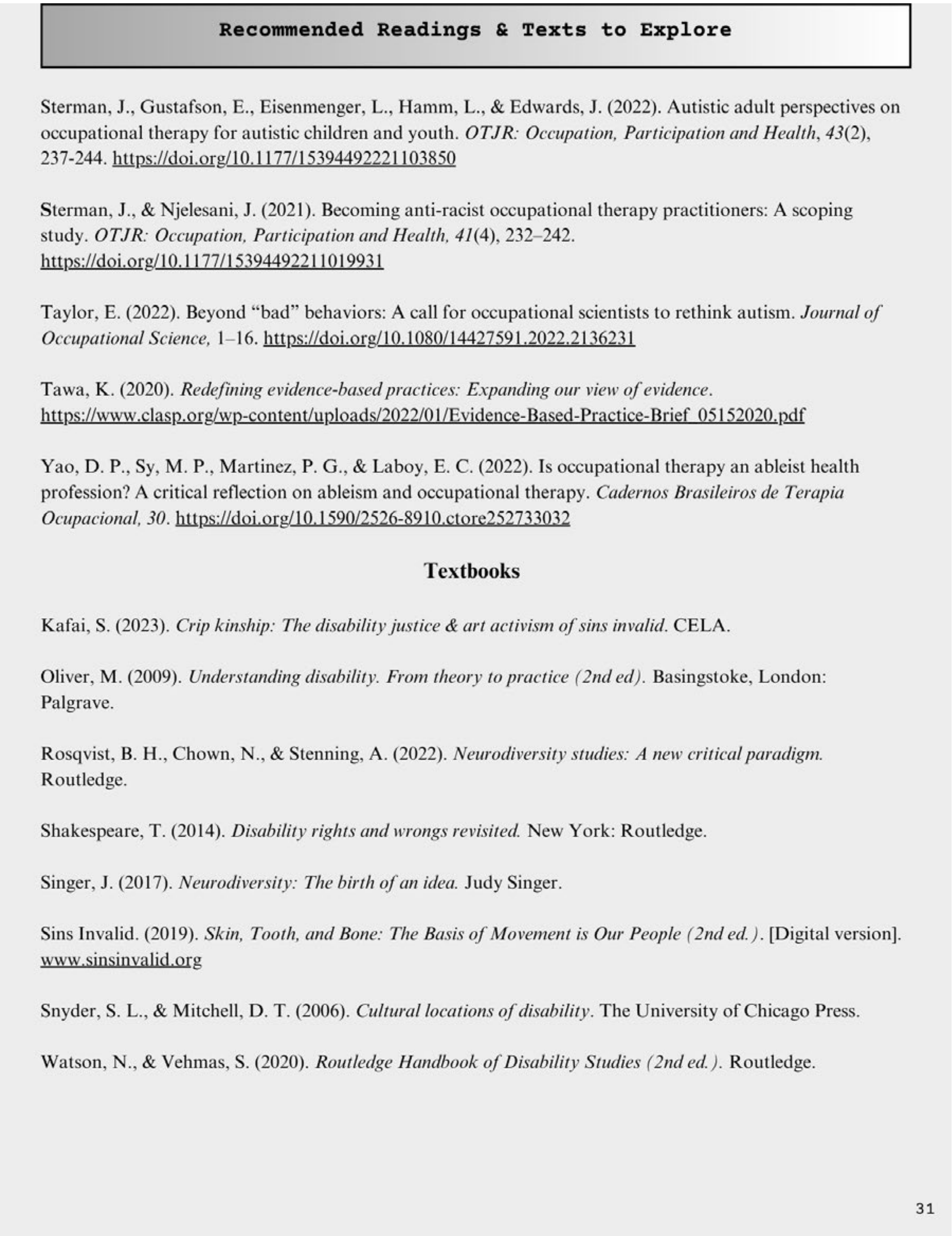
Kiepek, N. C., Beagan, B., Rudman, D. L., & Phelan, S. (2019). Silences around occupations framed as unhealthy, illegal, and deviant. *Journal of Occupational Science, 26*(3), 341–353. https://doi.org/10.1080/14427591.2018.1499123

Johnson, K. R., & Lavalley, R. (2021). From racialized think-pieces toward anti-racist praxis in our science, education, and practice. *Journal of Occupational Science, 28*(3), 404–409. https://doi.org/10.1080/14427591.2020.1847598

Milton, D., & Sims, T. (2016). How is a sense of well-being and belonging constructed in the accounts of autistic adults? *Disability & Society, 31*(4), 520–534. https://doi.org/10.1080/09687599.2016.1186529

Murthi, K., Chen, Y.-L., Shore, S., & Patten, K. (2023). Strengths-based practice to enhance mental health for autistic people: A scoping review. *The American Journal of Occupational Therapy, 77*(2). https://doi.org/10.5014/ajot.2023.050074

Patten, K. K. (2022). Finding our strengths: Recognizing professional bias and interrogating systems. *The American Journal of Occupational Therapy, 76*(6). https://doi.org/10.5014/ajot.2022.076603



Recommended Readings & Texts to Explore

Sterman, J., Gustafson, E., Eisenmenger, L., Hamm, L., & Edwards, J. (2022). Autistic adult perspectives on occupational therapy for autistic children and youth. *OTJR: Occupation, Participation and Health*, *43*(2), 237-244. https://doi.org/10.1177/15394492221103850

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Created by Bryden Carlson-Giving ✉ [redacted]

APPENDIX X – First Submitted Proposal for AOTA 2024 (EMPOWER Model)

Proposal Title

A Neurodivergent Occupational Performance Model

Session Format

Poster: Displayed on an 8’ wide x 4’ tall bulletin board. Posters will be on display during a designated 2-hour period. Presenters are required to be with their poster for the entire 2-hour block of time.

Speakers and Authors

Primary Speaker: Bryden Carlson-Giving, OTD, OTR/L

Abstract Synopsis

This poster will highlight a proposed neurodiversity-affirming occupational therapy model to empower occupational therapy practitioners (OTPs) and promote their ability to support neurodivergent individuals.

Learning Objectives

1. Identify the multi-faceted contexts and factors promoting neurodiversity-affirming principles within an occupational therapy model.
2. Reflect and discuss applying the proposed neurodiversity-affirming occupational therapy model into practice when supporting neurodivergent individuals.

Abstract

Research has illustrated neurodivergent individuals are often absent from the occupational therapy literature, including research completed about neurodivergent outcomes, which significantly impacts the quality of occupational therapy services

(Taylor, 2022). Occupational therapy services aimed to support neurodivergent individuals often target improving sensory processing patterns, reduction of neurodivergent play, and promoting neurotypical social participation, all of which can lead to increased masking and decreased quality-of-life for neurodivergent individuals (Bottema-Beutel et al., 2021). When OTPs target these objectives, the profession promotes neurotypicality as a benchmark for functioning, inadvertently creating occupational marginalization, reducing the ability of neurodivergent individuals to participate in occupations secondary to these occupations as deviating from the dominant culture of neurotypicality.

This author aims to promote neurodivergent ways of being as valid occupations and incorporate neurodivergent ways of engagement into occupational frameworks. The author has partnered with neurodivergent OTPs to illustrate a neurodiversity-affirming occupational therapy model. The proposed model outlines how to reflect on ableism, complete meaningful evaluations, conduct affirming treatment, target neurodivergent outcomes, and participate in advocacy. Reviews of the literature summarize the following as predominant themes emphasized by disabled scholars and advocates which will be incorporated within the model: trauma-informed, disability justice (Patten, 2022; Sheth et al., 2021), cultural humility, anti-racism and intersectionality, and ecological frameworks. This poster session will provide an opportunity for OTPs to provide feedback on the proposed model, and reflect on how they can adapt their occupational therapy practice to incorporate neurodiversity-affirming principles.

Primary Topic Category

- Diversity, Equity, & Inclusion

Secondary Topic Category

- Advocacy

Level of Material

Intermediate level is geared to practitioners with a general working knowledge of current practice trends and literature related to the subject matter. Focus is on increasing knowledge and competent application of the subject matter.

Level Rational

This information is most accessible to individuals with at least some experience in the topic and are looking to provide feedback on a proposed occupational therapy model. Participants may or may not be aware of the neurodiversity-affirming topics to be discussed but will be ready to apply the content after the session.

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APPENDIX Y – Second Submitted Proposal for AOTA 2024 (Toolkit)

Proposal Title

A Neurodiversity-Affirming Toolkit for Occupational Therapy Practitioners Supporting Neurodivergent Children and Youth: An Introduction

Session Format

Short Course: 1-hour session with reflective time for attendees.

Speakers and Authors

Primary Speaker: Bryden Carlson-Giving, OTD, OTR/L

Abstract Synopsis

This presentation will introduce a knowledge translation intervention, the neurodiversity-affirming toolkit. The toolkit will empower OTPs to provide neurodiversity-affirming care throughout all stages of the OT process.

Learning Objectives

Apply neurodiversity-affirming principles throughout the entire OT process, including assessment, intervention, neurodivergent outcomes, and advocacy to maximize neurodivergent occupational performance and well-being.

Reflect on current practices and modify approaches to ensure they align with best practices as identified by neurodivergent individuals.

Abstract

The medical model of disability is the dominant model of viewing and supporting neurodivergent individuals within healthcare (Bottema-Beutel et al., 2020; Holler et al., 2021), including occupational therapy. Due to the proliferation of the medical model within the occupational therapy profession, neurodivergent occupational participation continues to not be explored or validated within the occupational therapy literature (Taylor, 2022). It has been reported OTPs conduct evaluations that do not align with the priorities of neurodivergent individuals, and OTPs utilize treatment approaches that have been denounced by neurodivergent individuals (Sterman et al., 2022).

This short course will illustrate a neurodiversity-affirming toolkit, a knowledge translation tool emphasizing the lived experiences of neurodivergent individuals using community-defined evidence practices. Participants will be guided through the various components of the toolkit, including the health and well-being priorities as identified by autistic individuals, assessment tools that maximize the meaningfulness of evaluations, applying models of disablement within their practice, identifying interventions and supports that have a high grade of applying neurodiversity-affirming characteristics, and how practitioners can advocate for neurodiversity-affirming practice to become mainstream within pediatric occupational therapy practice. By being introduced to the neurodiversity-affirming toolkit coupled with the toolkit's resources, practitioners will feel more confident in promoting neurodivergent well-being and support the profession's ability to be anti-ableist. The toolkit will provide the means to support OTPs to reflect on their practices, and illustrate applicable tools for amplifying their neurodivergent clients and empowering authentic neurodivergent ways of living in a disabling world.

Primary Topic Category

Diversity, Equity, & Inclusion

Secondary Topic Category

Advocacy

Level of Material

Intermediate level is geared to practitioners with a general working knowledge of current practice trends and literature related to the subject matter. Focus is on increasing knowledge and competent application of the subject matter.

Level Rational

This information is most accessible to individuals with at least some experience in the topic and are looking to influence systems to be more neurodiversity-affirming. Participants may or may not be aware of the neurodiversity-affirming topics to be discussed but will be ready to apply the content after the session.

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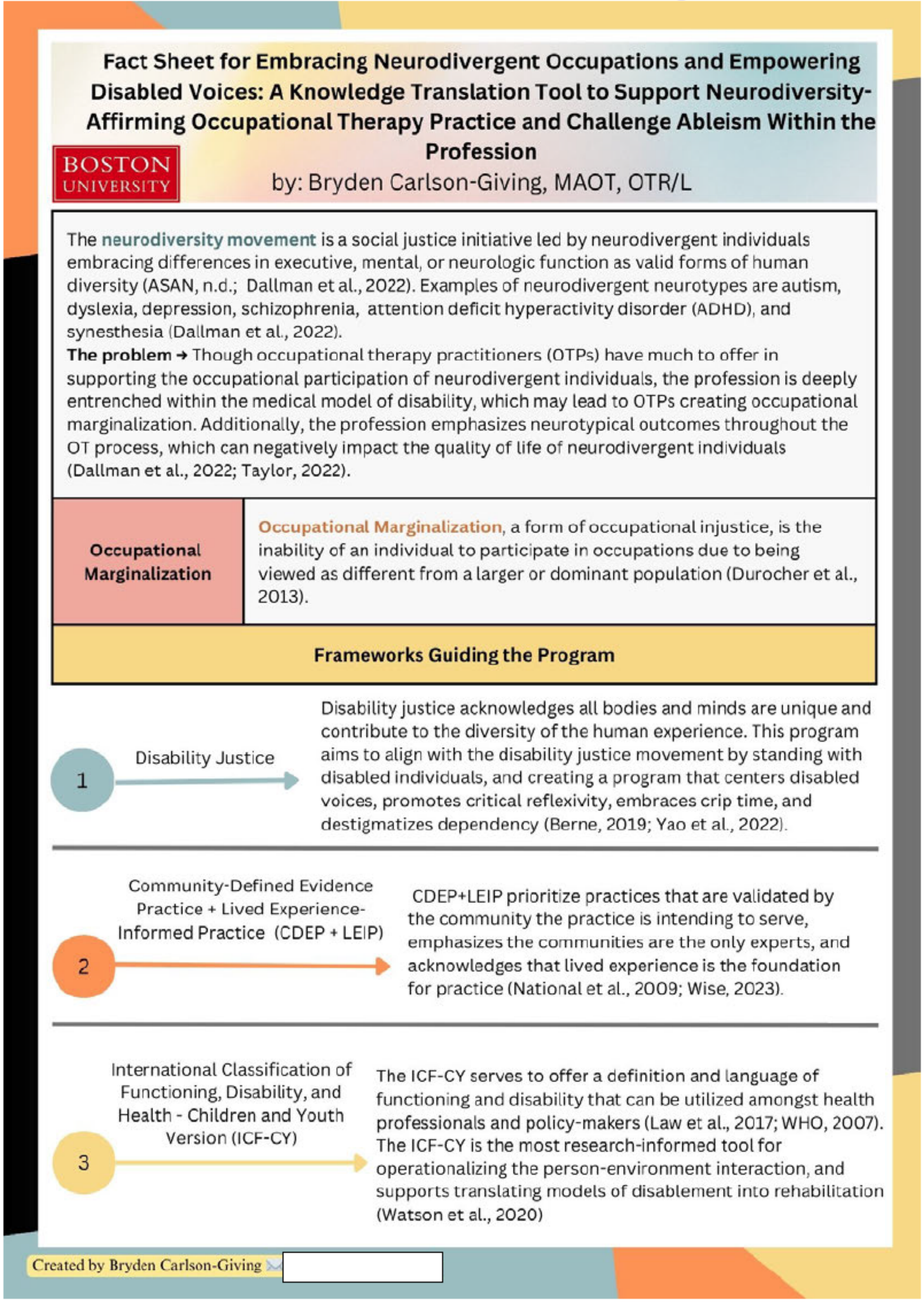
APPENDIX Z – Fact Sheet for *Embracing Neurodivergent Occupations*

Click Here to Download Fact Sheet at Neurodivergent Nexus



Fact Sheet for Embracing Neurodivergent Occupations and Empowering Disabled Voices: A Knowledge Translation Tool to Support Neurodiversity-Affirming Occupational Therapy Practice and Challenge Ableism Within the Profession

BOSTON UNIVERSITY

by: Bryden Carlson-Giving, MAOT, OTR/L

The **neurodiversity movement** is a social justice initiative led by neurodivergent individuals embracing differences in executive, mental, or neurologic function as valid forms of human diversity (ASAN, n.d.; Dallman et al., 2022). Examples of neurodivergent neurotypes are autism, dyslexia, depression, schizophrenia, attention deficit hyperactivity disorder (ADHD), and synesthesia (Dallman et al., 2022).

The problem → Though occupational therapy practitioners (OTPs) have much to offer in supporting the occupational participation of neurodivergent individuals, the profession is deeply entrenched within the medical model of disability, which may lead to OTPs creating occupational marginalization. Additionally, the profession emphasizes neurotypical outcomes throughout the OT process, which can negatively impact the quality of life of neurodivergent individuals (Dallman et al., 2022; Taylor, 2022).

Occupational Marginalization	**Occupational Marginalization**, a form of occupational injustice, is the inability of an individual to participate in occupations due to being viewed as different from a larger or dominant population (Durocher et al., 2013).

Frameworks Guiding the Program

1 Disability Justice → Disability justice acknowledges all bodies and minds are unique and contribute to the diversity of the human experience. This program aims to align with the disability justice movement by standing with disabled individuals, and creating a program that centers disabled voices, promotes critical reflexivity, embraces crip time, and destigmatizes dependency (Berne, 2019; Yao et al., 2022).

2 Community-Defined Evidence Practice + Lived Experience-Informed Practice (CDEP + LEIP) → CDEP+LEIP prioritize practices that are validated by the community the practice is intending to serve, emphasizes the communities are the only experts, and acknowledges that lived experience is the foundation for practice (National et al., 2009; Wise, 2023).

3 International Classification of Functioning, Disability, and Health - Children and Youth Version (ICF-CY) → The ICF-CY serves to offer a definition and language of functioning and disability that can be utilized amongst health professionals and policy-makers (Law et al., 2017; WHO, 2007). The ICF-CY is the most research-informed tool for operationalizing the person-environment interaction, and supports translating models of disablement into rehabilitation (Watson et al., 2020)

Created by Bryden Carlson-Giving [redacted]

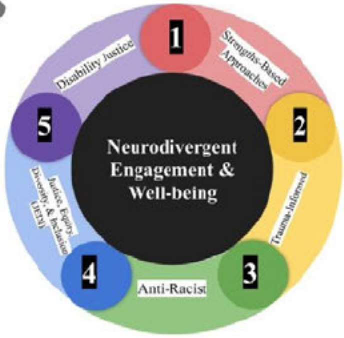
Proposed Program → A Neurodiversity-Affirming (NA) Toolkit to Support Neurodivergent Children and Youth

This program serves as an example of community-based participatory research (CBPR), with the inclusion of various of neurodivergent advocates and scholars to maximize neurodivergent lived experience. The program will initially be an in-person workshop for OTPs supporting neurodivergent children and youth, with the goal of creating a website containing the program. The website will be open-access/free to promote accessibility. Once the website is completed, the workshop will be translated to be completed online after modifying the workshop with feedback from OTPs and neurodivergent shareholders. A few components of the program will include:

- A NA occupational therapy model
- Compilation of health and well-being priorities identified by autistic individuals
- Grading of occupational therapy strategies and resources regarding NA characteristics
- NA evaluations including affirming assessment tools
- Resources for NA strategies and their application
- Discussion of models of disablement and the OT process
- Call to action for OTPs, the OT profession, and neurotypical researchers

Simplified Draft of Proposed Model

Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model



Autistic and neurodivergent ways of participation are valid occupations!

Implications for Occupational Therapy Practice

- The review of evidence by disability advocates and scholars heavily advocates for a neurodiversity-affirming knowledge translation program for OTPs (Dallman et al., 2022; Taylor, 2022).
- This program embraces and emphasizes neurodivergent ways of living as valid occupations.
- This program aims to increase pediatric OTPs and their ability to implement meaningful evaluations, affirming strategies, reflect on current practices, challenge ableism within occupational therapy, and amplify neurodivergent voices.
- By providing neurodiversity-affirming care, OTPs can reduce the occupational marginalization experienced by neurodivergent individuals and provide care supported by neurodivergent individuals, including care rooted in disability justice and the neurodiversity-movement.
- Providing neurodiversity-affirming care is a moral imperative for occupational therapy, and OTPs, researchers, and academics must reflect and adapt to answer this call to action (Dallman et al., 2022).

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Introductory Manual for *Embracing Neurodivergent Occupations*

Created by Bryden Carlson-Giving ✉ [redacted]

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APPENDIX AA – Executive Summary for *Embracing Neurodivergent Occupations*

Introduction

The neurodiversity movement is a social justice revolution led by neurodivergent individuals embracing differences in executive, mental, or neurologic function as valid forms of human diversity (ASAN, n.d.; Dallman et al., 2022). Neurodiversity incorporates all neurotypes, including those who are neurotypical. Differences in neurology influence how human beings participate in life and experience the world, which are in enormously diverse and beautiful ways (Dallman et al., 2022). It has been proposed that supporting neurodivergent clients in their ability to participate in life in these distinct, neurodivergent ways of living is an ethical mandate for occupational therapy practitioners (OTPs) (Dallman et al., 2022). There is no “correct way” to embody and perform through life, and enhancing how each individual defines meaning in life deserves to be recognized and validated (Dallman et al., 2022).

Healthcare has an extensive history of pathologizing and misconceptualizing identities and individuals who experience and participate in life that deviate from the norm prior to welcoming them (e.g., queerness), and the profession of occupational therapy is no different (Dallman et al., 2022; Wood & Davidson, 2020). Though OTPs have much to offer in supporting the occupational participation of neurodivergent individuals and the neurodiversity movement, the profession struggles with implementing best practices, including those supported by neurodiversity-affirming research and maximizing incorporation of neurodivergent perspectives (ASAN, n.d.; Taylor, 2022). This project, *Embracing Neurodivergent Occupations and Empowering Disabled Voices:*

A Knowledge Translation Tool to Support Neurodiversity-Affirming Occupational Therapy Practice and Challenge Ableism Within the Profession, will be a knowledge translation tool to support OTPs to develop their ability to empower autistic voices, and utilize best practices as defined by autistic individuals. Additionally, this author aims to emphasize autistic and neurodivergent ways of living (e.g., differences in play, social communication, and sensory processing) are valid forms of occupations.

Program Overview

Theoretical Frames of Reference for Program

Though OTPs have much to offer in supporting the occupational participation of autistic children and youth, the profession struggles with implementing best practices within plans of care, including those supported by neurodiversity-affirming research and maximizing incorporation of autistic perspectives (ASAN, n.d.; Taylor, 2022). The two problems addressed by the *Embracing Neurodivergent Occupations* are (1) challenges in knowledge translation by pediatric OTPs; and (2) selecting methods that are neurodiversity-affirming, which maximize the lived experiences of neurodivergent perspectives and disability justice.

Disability justice is the first framework guiding the project, which acknowledges how all bodies and minds are unique and contribute to the diversity of the human experience. Disability justice also recognizes intersectionality exists within identities, and disabled individuals are powerful because of the intricate complexities of their experience. This project aims to align with the disability justice movement by standing with disabled individuals, and creating a program that centers disabled voices, promotes critical reflexivity, embraces crip time[3], and destigmatizes dependency (Berne, 2019; Yao et al., 2022).

Diversity, equity, and inclusion (DEI) scholars emphasize the following problems with the evidence-based practice (EBP) process: much of published healthcare research highlights evidence that has ableist tendencies or does not incorporate neurodivergent individuals within its creation (ASAN, n.d.; Taylor et al., 2022), the EBP process is significantly limited in its ability to combat and remove societal inequities (Tawa, 2020), and current conceptualizations of EBP do not require lived experience to be the foundation for evidence (Wise, 2023a). This author proposes an alternative approach to EBP, a merging of community-defined evidence practice (CDEP) and lived experience informed practice (LEIP), or CDEP+LEIP. CDEP+LEIP prioritize practices that are validated by the community the practice is intending to serve, emphasize the communities are the only experts, and that lived experience is the foundation for practice (National et al., 2009; Wise, 2023). The final model, the ICF-CY, serves to support bridging the concepts of disability justice and CDEP+LEIP into the rehabilitation setting (WHO, 2007).

Program Components

The *Embracing Neurodivergent* aims to be a knowledge translation program to

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[3] *Crip* is a reclaimed slur by disabled individuals. Disabled individuals benefit from extra time and effort secondary to the plethora of barriers that exist within an ableist world. Crip time is a concept that recognizes and embraces that disabled individuals benefit from more flexibility, time, and accommodations. Crip time also signifies liberation, such that the disabled individual reclaims their time and experience and celebrates how time is experienced differently by disabled individuals compared to non-disabled individuals (and that is beautiful and okay!) (Kuppers, 2014; Yao et al., 2022)

maximize OTPs and their ability to promote disability justice, provide neurodiversity-affirming care, and maximize the lived experiences of neurodivergent individuals. There are a plethora of elements comprising the toolkit, with highlighted components including:

1. The Empowering Neurodivergent Occupational Participation and Well-being (EMPOWER) Model
    - This author conceptualized the first known neurodiversity-affirming occupational therapy model, which is inspired by common themes found within disability advocate and neurodiversity-affirming literature (ASAN, n.d.; Doyle, 202; Patten, 2022; Rumball, 2022; Taylor, 2022; Yao et al., 2022).
2. Autistic and Neurodiversity-Affirming Techniques and Services Characteristics
    - A component will summarize neurodiversity-affirming service characteristics described by neurodivergent researchers and organizations. This component aims to support a practitioner's ability to adapt a strategy as needed to be more neurodiversity-affirming or when wanting to quantify the potential of a strategy to be used in a neurodiversity-affirming manner (ASAN, n.d.; Harvey, n.d.; Huntley et al., 2019; TNC, 2022; Wise, 2023b)
3. Grading of Occupational Therapy Strategies, Resources, and Affirming Characteristics
    - This author illustrates occupational therapy services and resources regarding the level of neurodiversity-affirming technique characteristics as

described by neurodivergent individuals (ASAN, n.d.; Benevides et al., 2020; Boheler et al., 2023; Harvey, n.d.; TNC 2022b).

4. Education on Health and Well-being Priorities Identified by the Autistic Community
    - By keeping these health and well-being priorities in mind, OTPs may have more opportunity to reflect on their own practices and how they deliver services and supports within the context of these priorities when working with autistic individuals to maximize meaningfulness of service provision (AARC, 2019; Benevides et al., 2020; Coussens et al., 2020; Dewinter et al., 2020; Pfeiffer et al., 2017; Roche et al., 2020; Warner et al., 2019).
5. Neurodiversity-Affirming Evaluations
    - This component will elucidate how to perform neurodiversity-affirming evaluations, including assessment tools that maximize affirming data, write strengths-based goals and evaluation reports, and challenge preconceived notions about standardized assessments (Dorsey et al., 2022; Fede et al., 2023; Harvey, n.d.; Proctor et al., 2020; TNC, 2022b).
6. Highlighting Methods and Application of Strategies with a High Grade of Being Neurodiversity-Affirming
    - To support OTP's ability to apply the neurodiversity toolkit within clinical practice, an overview of the resources and strategies that have a high grade of incorporating neurodiversity-affirming characteristics will be explored.

Anticipated Outcomes and Conclusion

The review of evidence by disability advocates and scholars heavily advocates for a neurodiversity-affirming knowledge translation program for OTPs (Dallman et al., 2022; Taylor, 2022). Anticipated outcomes of this program include increasing pediatric OTPs and their ability to implement meaningful evaluations, affirming services, reflect on current practices, and amplify neurodivergent voices. The program will be coupled with knowledge translation best practices to bridge the research implementation gap. The program will become an interactive workshop, a free website, and online modules to increase accessibility. The program will be free and disseminated online in 2024, and partnerships with neurodivergent advocates will commence to support diffusion of the program. By providing neurodiversity-affirming care, OTPs can reduce the occupational marginalization experienced by neurodivergent individuals and provide care that is supported by neurodivergent individuals, such as care rooted in disability justice and the neurodiversity-movement. Providing neurodiversity-affirming care is a moral imperative for occupational therapy, and OTPs, researchers, and academics must reflect and adapt to answer this call to action.

This innovative program serves as an example of community-based participatory research (CBPR) to maximize the incorporation of the autistic and neurodivergent lived experience. This program’s design contributes to the disability justice and neurodiversity movements that are beginning to proliferate within academia and rehabilitation. Additionally, the program challenges the ableism embedded within occupational therapy and provides the reflective tools needed for practitioners to modify their practices as needed and become more anti-ableist.

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APPENDIX BB – Bryden Carlson-Giving's Biosketch for Grant Funding

OMB No. 0925-0001 and 0925-0002 (Rev. 10/2021 Approved Through 01/31/2026)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Bryden Carlson-Giving

eRA COMMONS USER NAME (credential, e.g., agency login): NA

POSITION TITLE: Occupational Therapist, Doctoral Candidate (2nd year post-professional)

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
Gustavus Adolphus College	BA	09/2012	06/2016	Psychological Science
Saint Catherine University	MAOT	09/2016	12/2018	Occupational Therapy
Boston University	OTD	06/2021	Present	Occupational Therapy

A. Personal Statement

I am a neurodivergent and disabled pediatric occupational therapy practitioner (OTP). I have experience supporting pediatric outpatient and inpatient rehabilitation settings. My work emphasizes community-defined evidence practice, mental health promotion, trauma-informed care, and incorporating strengths-based approaches to promote a positive self-identity for my pediatric client. My work includes encouraging a shift away from an impairment-based perspective and returning to strengths-based, occupation-centered practices. I seek to promote neurodiversity-affirming practices, amplify the voices of the disabled community, and challenge ableism within healthcare and research. From helping individuals discover and embrace their sensory processing differences to collaborating with their family and education team to improve their ability to be neurodiversity-affirming, I aim to maximize his client's quality of life and well-being to support authentic, neurodivergent development.

I am currently a doctoral student at Boston University, and my research project aims to be an example of community-based participatory research by collaborating with autistic individuals throughout program development. My long-term goal with my research is to promote neurodiversity-affirming approaches within occupational therapy practice and for practitioners to utilize strategies that honor neurodivergent identity. I recently completed a research study evaluating views and incorporation of disablement models by pediatric occupational therapists, with a goal to publish results and recommendations next year. The research study was an interdisciplinary collaboration, with program design receiving insight from practitioners and academics around the world. I lectured a short course at the national American Occupational Therapy Association (AOTA)'s conference in the Spring of 2023 regarding the results of this study, and I hosted a Conversations that Matter discussion at the national conference. I am currently collaborating with AOTA's evidence-based practice team as the primary author of a manuscript advocating for expanding United Healthcare's coverage of the cognitive retraining codes to promote access to high-quality care for our pediatric clients. To support equitable practices within rehabilitation, I also co-authored and led a TEDx Talk to support individuals working with neurodivergent individuals can implement equitable and affirming strategies.

B. Positions, Scientific Appointments and Honors

Positions and Employment

2022 – Present	OT Potential Advisory Board Member
2020 – 2021	Problem-Based Learning (PBL) Instructor, St. Catherine University, Saint Paul, MN
2019 – Present	Member, Therapist Neurodiversity Collective
2019 – Present	Occupational Therapist, M Health Fairview, Minneapolis, MN
2019 – Present	Member, Autism Community of Practice
2016 – Present	Member, American Occupational Therapy Association
2016 – Present	Member, Minnesota Occupational Therapy Association

Honors & Awards

2022	Evidence Foundation's Systematic Review Workshop Grant
2020 – 2021	Leadership Scholarship, St. Catherine University, St. Paul, MN
2018	W. Emil Foreman Community Service Award, Sigma Alpha Epsilon Foundation
2016	Wallenberg Foundation Intern in Sweden Award, Gustavus Adolphus College
2015	Danish Institute Academic Excellence Award, Danish Institute for Study Abroad

C. Contributions to Science

Pre-Doctoral Career

1. **How to Be Evidence-Based Within Your Occupational Therapy Practice: Practical Applications:** This continuing education course provided a summary of evidence-based practice and its relationship to reimbursement, describing methods for finding and utilizing evidence-based information, and provided practical approaches for incorporating evidence-based resources into their practice setting. This invited presentation was for the MOTA Metro District Special Interest Group in 2019.
    a. **Giving, B.** (2019). *How to be evidence-based within your occupational therapy practice: Practical applications* [Presentation]. Minnesota Occupational Therapy Association Metro District Special Interest Group, Minneapolis, MN, United States.
2. **Best Practice Guidelines for Occupational Therapy Practitioners Treating Autistic Children and Youth:** This presentation was culmination of recommendations from various professional organizations on best available evidence for methods used with autistic children and youth. This work promoted occupational therapy practitioners' clinical decision-making by including accessible, evidence-based recommendations into their practice. This presentation was for the Minnesota Occupational Therapy Association Conference in 2019.
    a. **Giving, B.** (2019). *Best practice guidelines for occupational therapy practitioners treating autistic children and youth* [Presentation]. Minnesota Occupational Therapy Association Conference, Minneapolis, MN, United States.
3. **Motion #3 – AOTA's Approved Provider Program, A Suggested Process**: This proposal was accepted for the 2019 American Occupational Therapy Association (AOTA) Annual Business Meeting and later passing, requesting that the Board of Directors to implement a robust system for ensuring the quality of programs approved under AOTA's Approved Provider Program that aligns with the Choosing Wisely Campaign. The co-author of this motion was Rochelle Marx-Asher, MS Ed., OTR/L.
    a. AOTA 2019 Annual Business Meeting Minutes. (2019). *American Journal of Occupational Therapy*, *73*(Supplement_2). https://doi.org/10.5014/ajot.2019.73s213
4. **Evidence-Based Occupational Therapy Interventions for Autistic Children: Current Practices and Continuing Education in Minnesota:** The purpose of this thesis was to investigate the use of non-evidence-based practices that are often used with children with autism spectrum disorder (ASD) by occupational therapy practitioners, as well as continuing education necessary to better pediatric occupational therapy practice with children with ASD in Minnesota. There were three modes of data collection: website content analysis, survey, and focus groups. This work was presented at the 2017 Occupational Therapy/Physical Therapy School-Based Institute, the MOTA Pediatric Special Interest Group in 2018, and as a poster at the 2019 American Occupational Therapy Association Conference. My primary advisor for the project was Dr. Stephanie de Sam Lazaro, OTD, OTR/L.
    a. **Carlson-Giving, B.** (2018). *Evidence-based occupational therapy interventions for autistic children and youth: Current practices and continuing education in Minnesota* [Master's thesis]. Saint Catherine University Repository. https://sophia.stkate.edu/ma_osot/13/

5. **Auditory Integration Interventions for Autistic Children and Children with Developmental Disabilities:** An Evidence-Based Project: Completed an evidence-based practice project on the topic of common auditory/listening strategies utilized by pediatric occupational therapists. This project entailed database searches, critical appraisals, synthesis of the evidence, and recommendations for practice. A professional presentation was made to members of the Minnesota Occupational Therapy Association as part of a continuing education project. Dr. Julie Bass, Ph.D., OTR/L, FAOTA was the primary mentor. My collaborators were Jen Garness, Taylor Heidebrink, Alexandra Hein, Rebecca Humbert, Erika Janorschke, Rachel Kramer, Lauren Koelker, and Aimee Lindstrom.
    a. Garness, J., **Giving, B,** Heidebrink, T., Hein, A., Humbert, R., Janorschke, E, Kramer, R. Koelker, L., Lindstrom, A., Bass, J. D. (2016). *Auditory integration interventions for autistic children and children with developmental disabilities: An evidence-based practice project*. Sophia, the St. Catherine University Repository. https://sophia.stkate.edu/ma_osot/15

Doctoral Career

1. **What Is Neurodiversity-Affirming Practice**: This TedxTalk describes neurodiversity-affirming practice, which has been gaining momentum in recent years in healthcare in terms of working with neurodivergent individuals. It is the idea that individuals have differences in their abilities and how they interact with the world around them – differences which are not considered to be deficits that need to be "fixed." Rather, those who view individuals in this light consider neurodiversity to be natural. In this talk, Katherine and I share concepts and examples on how to apply neurodiversity-affirming practice, with the script written in support by previous work of disability advocates.
    a. **Carlson-Giving, B.** & McGinley, K. (2023). *What is neurodiversity-affirming practice?* [Video]. Ted Conferences. https://www.youtube.com/watch?v=yhhhyV-q9KQ
2. **The Utilization of the Medical Model and Social Model of Disability Within Occupational Therapy Practice Supporting Autistic Children and Youth:** I instructed a workshop aimed to support participants and their ability to identify trends within occupational therapy assessment and provision of services supporting autistic children and youth relating to the medical model and social model of disability, and reflect on their current practices and consider how they utilize the medical model and social model when supporting autistic children and youth. This workshop took place at the national AOTA Conference within Kansas City.
    a. **Carlson-Giving, B.** (2023, April 21). *Short course: The utilization of the medical model and social model of disability within occupational therapy practice supporting autistic children and youth* [Conference session]. American Occupational Therapy Association Conference, Kansas City, MO.
3. **Neurodiversity-Affirming Pediatric Occupational Therapy Practice:** I led a Conversations that Matter (CTM) session to provide opportunities occupational therapy practitioners and occupational therapy students to discuss high-quality care that promotes quality of life and well-being for neurodivergent children, and support how the profession can utilize neurodiversity-affirming practices.

   a. **Carlson-Giving, B**., Sheth, A., & Wong, B. (2023, April 21). *Neurodiversity-affirming pediatric occupational therapy practice* [Conversations that matter session]. American Occupational Therapy Association Conference, Kansas City, MO.

4. **Facilitation of Autistic Panel:** I facilitated an autistic panel consisting of two autistic occupational therapy practitioners and one autistic speech therapist, and the panel provided a space for autistic individuals to share the strengths and the learning opportunities for occupational therapy practitioners supporting the autistic community and encouraged practitioners to reflect on their own practices when supporting autistic individuals.
   a. **Carlson-Giving, B**., Dorsey, R., Salveggi-Hernandez, S., & Hamm, E. (2022, September 20). *Autistic perspectives on occupational therapy practice* [Virtual facilitated panel discussion – facilitator]. Minnesota Occupational Therapy Association.

<u>Ongoing Projects and Support</u>

Neurodiversity-Affirming Pediatric Occupational Therapy Practice	**Project Leader:** Bryden Carlson-Giving	**Dates:** 2023 to Present
This presentation will provide a brief overview of neurodiversity-affirming practice (NAP) and how to apply NAP concepts within assessment and service provision when supporting neurodivergent children and youth. Goals for participants include the increased utilization of occupation-based frameworks with rehabilitation and the social model of disability when working with neurodivergent children, all of which can maximize the health, well-being, and quality-of-life of neurodivergent children and youth on their terms. **Role on Project:** Co-Author		
APA Reference: Carlson-Giving, B. & Duffy, E. (2023). *Neurodiversity-affirming pediatric occupational therapy practice* [Conference session]. Minnesota Occupational Therapy Association Conference.		

Applying Neurodiversity-Affirming Concepts Within Pediatric Practice	**Project Leader:** Bryden Carlson-Giving	**Dates:** 2023 to Present
This Conversations that Matter (CTM) discussion will be a part two of the preceding formal presentation, "Neurodiversity-Affirming Pediatric Occupational Therapy Practice". Attendance at the presentation is recommended, but not required to attend this CTM. This CTM will provide the space for occupational therapy practitioners (OTPs) to problem-solve applying neurodiversity-affirming concepts into practice, including supports and services, assessment, and barriers. **Role on Project:** Co-Author		
APA Reference: Carlson-Giving, B. & Duffy, E. (2023). *Applying neurodiversity-affirming concepts within pediatric practice*. [Conversations that matter session]. Minnesota Occupational Therapy Association Conference.		

A Neurodiversity-Affirming Toolkit for Occupational Therapy Practitioners Supporting Autistic	**Project Leader:** Bryden Carlson-Giving	**Dates:** 2021 to Present

Children and Youth & A Call to Action		
This doctoral project will be a knowledge translation tool, and the mission of the program is to support the utilization of best practices by occupational therapy practitioners supporting autistic children and youth. Long-term goals of the proposed program are to reduce stigmatization of autism, facilitate increased acceptance and activism of neurodiversity, and promote the occupational therapy profession's ability to target autistic health and well-being priorities. **Role on Project:** Author		
APA Reference: Carlson-Giving, B. (2023). *A neurodiversity-affirming toolkit for occupational therapy practitioners supporting autistic children and youth and a call to action* [Doctoral project]. Boston University Repository.		

D. Scholastic Performance – Doctorate Level

YEAR	COURSE TITLE	GRADE
Boston University		
2023	Health Promotion & Wellness	A
2022	Outcomes and Measurement I: Program Evaluation	A
2022	Outcomes and Measurement II: Individual Client Monitoring	A
2022	Social Policy & Disability	A
2022	Practicum in Social Policy & Disability	A
2022	Evaluating Clinical Theory and Research	A
2022	Practicum in Theory Analysis	A
Saint Catherine University		
2022	Evolution of Ideas in Occupational Therapy	A
2022	Advanced Practice	A
2022	Organizations & Systems	A
2022	Program Evaluation	A
2022	Social Determinants of Health	A
2022	Academic and Clinical Education	A
2022	Essential Knowledge and Capacities for Leadership	A
2022	Educational Methods	A
2022	Doctoral Orientation Camp	A

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