

**Occupational Therapy as an Effective and Holistic Treatment Option**

Gabriela Diorio

Psychology Department, Wagner College

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### **Abstract**

The current thesis is an attempt to show the development, effectiveness, and need for promotion of occupational therapy (OT) as a treatment option for mentally ill and disabled individuals. Chapter one demonstrated how OT has developed from holistic and humanistic theories which helped shift treatment away from simply curing an illness towards empathizing rehabilitation, motivation, humans innate tendencies to personally grow, and be successful in society. Theories of Alfred Adler, Adolf Meyer, Abraham Maslow, and Carl Rogers are reviewed and shown to be directly and indirectly involved in the foundations and goals of contemporary OT. Chapter two showed how the holistic approach of OT and the use of sensory integration theory is effective in helping children with autism spectrum disorder (ASD). OT is used to increase function in activities of daily living, such as toileting and feeding, and provides skills for children to be successful in the future, within society, such as having a job and living independently. Chapter three discussed how many children who have disorders do not receive treatment due to parental stigma around diagnoses, treatments, and labeling. Increasing and promoting education for parents on mental illness and the effectiveness of therapies can potentially help more children receive treatment. Chapter four ties these three chapters together and connects the evidence found to a school based-pediatric OT field placement.

*Keywords:* humanism, holism, occupational therapy, mental illness, disability treatment

## **Chapter 1: History of Psychology: Holistic and Humanistic Movements in Reshaping General Therapeutic Approaches**

Before the holism and humanism movements' many disabled and mentally ill patients were thought of as hopeless, useless, and burdens to society (Karl & Holland, 2013; Shontz, 2003). The change to viewing human nature as holistic, rather than in a reducible-atomistic manor as seen in psychoanalysis, led to a new image of human beings (Maslow, 1981/1954). This holistic image, or life philosophy, encompassed all areas of human knowledge, social institutions, and experiences (Maslow, 1981/1954). A new positive outlook on humanity was forming as personal growth became priority and the medical therapeutical model of simply getting rid of a disease and not taking time to understand an individual's dynamics was becoming unfavorable (Adler, 1956). The holistic and humanistic theories, proposed by Alfred Adler, Adolf Meyer, Abraham Maslow, and Carol Rogers played a significant role in changing treatment of illness from psychoanalytical to treatments that collectively involved humanity and the social community. These individual's shared similar beliefs in the common drive for all humans to strive, have goal directed behaviors, and live up to full potentials. The development of holistic and humanistic theories within psychology guided the treatment of disabilities to change from simply treating an illness to center around improving life, personal growth, and enabling successes in society which can be considered the groundwork for shaping the foundations and goals of contemporary occupational therapy (OT).

### **Background: Differing Beliefs from the Popular Psychoanalysis**

It is not a coincidence that Adler, Meyer, Maslow, and Rogers all trained within and are moving away from psychoanalysis as they thought there were better options for treatment and had differing views from Freud. Alfred Adler, an Austrian medical doctor, psychoanalysis, and

student of Freud, saw Freud as having the wants of a natural scientist and being too focused on mechanic reductionism, avoiding consciousness, and emphasizing physiology (Adler, 1956). Compared to Freud, Adler was a subjective social scientist who thought life was not reducible and humans had a psychological desire to be better rather than an innate biological drive motivating behavior. Adolf Meyer, a Swiss born American psychiatrist and contemporary of Freud, was known for his holistic psychobiology, ergasiology (Karl & Holland, 2013). While Meyer wanted to bridge biology and psychology and believed psychiatry should be involved within central medical care, Freud was trying to make psychology as separate from the body as possible. Abraham Maslow, an American psychologist, liked Freud's idea of an unconscious inner nature but believed it was important to express this inner nature rather than suppress (Maslow, 2013/1962). Carl Rogers' (1951), unlike Freud, believed that transference was not a bad thing that always occurred but was evidence for good therapeutic relationships. Collectively these individuals believed that treatment should center around personal growth rather than the medical model, that it is important to understand an individual's dynamics, not simply get rid of a disease and provided a more positive outlook on humanity compared to psychoanalysis.

### **Holistic Theories of Adler and Meyer**

The holistic theories of Adler and Meyer led to new views of illness and treatment. Adler was reported to be one of the first to recognize the significance of holism within psychology as he saw social coherence as fundamental to science and social interest as the unifying concept (Ansbacher, 1994/1961). Social interest was the belief that humans have innate potentials to give back to society as human achievements can only be significant when given meaning from others and human's need others to help them attain their goals (Adler, 1956). Adler's holistic view, that individuals are unified and inseparable from society, led to Individual psychology (Adler, 1956;

Ansbacher, 1992/1990). Individual psychology is the belief that humans' have an innate motivation for goal attainment; to move from feeling inferior to superior within societies boundaries (Adler, 1956; Ansbacher, 1992/1990). The movement is focused on needing to overcome obstacles rather than gain power and originates unconsciously in childhood (Adler, 1956). Children constantly feel inferior when in contact with others and are naturally motivated by this inferiority to make personal goals to overcome these feelings. There will always be a new instance that causes inferiority so, one will learn to grow and deal with new problems by setting new goals. As one gets older society decreases opportunities and implements demands to work within when trying to reach goals. These goals are achieved through one's own style of life which are all the movements and behaviors an individual does to find solutions, overcome feelings of inferiority, and deal with confrontations.

Adler believed illness stemmed from enhanced inferiority in three social situations (communal life, work, and love) which led to a lack of social interest, inability to cooperate, and errors in style of life (Adler, 1956). Adler (1956) explained three incorrect styles of life, namely, a ruling type (dominate others), getting type (passive codependent attitudes), and avoiding type (ignore problems). Individuals with these styles of life have low social interest and cannot solve their own problems within a social context. Adler (1956) explained, in addition to style of life errors, a mix of abnormal childhood inferiority, lack of social interest, inability to solve new problems, and unreachably high goals led to people being insufficiently prepared for life, insecure, and ill (Adler, 1956; Ansbacher, 1992/1990). Adler (1956) believed illness was a social problem needed to be dealt with by social solutions and therapy was an area to spark social interest (practice thinking of other) and cooperation (listen to a therapist). The goals of therapy were having an individual understand their mistakes and no longer make them, connect with

others, learn cooperation and coping skills, gain self-esteem and courage, and increase motivation (Adler, 1956; Ansbacher, 1992/1990). Adler (1956) believed successful treatment required three parts. First is an unprejudiced, empathetic understanding of the patient within their environment to uncover their style of life. Therapists ask questions about how one deals with life demands as individual's style of life is expressed during times of challenge. Second, the patient must understand the mistakes in their style of life. Therapists explain what they found to the patient in a way where the patient can feel an instant click, like the therapist is talking about them, not simply telling them. Third is to have a good therapeutic relationship to increase social interest by showing equality, encouragement, and emphasizing similarities (Adler, 1956; Ansbacher, 1992/1990). Therapy becomes personal as every individual has a specific style of life and can only be successful if the therapist completely understands each patient. When an individual starts behaving in ways to better their relationships with the world and be useful for others, they are deemed better (Adler, 1956). Ansbacher (1994/1961) reported Jan C. Smuts, who coined the word holism, had read Adler's work, and praised him for his great advances in psychology, making science kinder to human nature, and resorting one's dignity and worth, which psychoanalysis had destroyed, showing evidence for Adler's effect on changing psychoanalytical views of illness, treatment, and humanity.

Adler's belief that therapists must completely understand an individual's history is very similar to Meyer's holistic view of psychiatry (Adler, 1956; Karl & Holland, 2013). Meyer was avid in his desire to make a change in medical treatment and was one of the first psychiatrists to advocate for holistic medical treatment over the current medical therapeutic model (Karl & Holland, 2013). Meyer wanted psychiatry to be integrated with medicine to empathize understanding "human total function" or common-sense psychiatry which was based on the

belief that to effectively treat a patient, one must look at everything to do with the patient, not just their symptoms of illness. This belief provided evidence for the shift away from the medical therapeutic model of simply treating all disease and illness as physical problems. Meyer also opposed the division of labor and believed all individuals on a team, such as physicians, nurses, lab technicians, should be informed about all aspects of the living patient (Karl & Holland, 2013; Serrett et al., 1985). Lab technicians who only deal with tissue samples should know about the patient's emotional history and psychiatrists should be there during physical exams. Meyer was also one of the first to propose that patients' full lives should be recorded in a life chart with documented status of all their organs, medical history, and personal events (Serrett et al., 1985). Meyer believed life charts would allow patients to be seen as whole, total people, not detachable parts (Serrett et al., 1985). In addition to keeping patients' records, Meyer emphasized the need for increasing actual patient interactions (Karl & Holland, 2013). He believed in the science of care and that personalized patient contact was extremely important, further changing how treatment should be conducted.

Meyer worked in a hospital and saw the mentally ill and disabled patients being abandoned and removed from society (Karl & Holland, 2013). Meyer believed that humans are natural social beings that belong in a community and removing individuals was the worst possible form of treatment (Meyer, 1983/1922). Meyer's (1983/1922) treatment focused on an individual's ability to work. He used occupations and careers as a form of treatment and substitute for restraints. Using work as treatment helped patients gain achievements, find pleasure, have self-guidance and confidence, and feel motivated to have a role in humanity. Meyer (1983/1922) believed in reemphasizing and developing redeemable and transferrable skills within his patients. He gave examples of impulsive patients controlling themselves by



picking the hair out of mattresses and muscular deficient patients feeling pleasurable achievement by making something with one's hands. Meyer's overall beliefs of treating individuals holistically, beyond their symptoms, and emphasizing treatment as a form of skill building to be back in the community, shows a shift towards emphasizing personal growth rather than treating an illness.

### **Humanistic Theories of Maslow and Rogers**

Continuing from Alder and Meyer, Maslow and Rogers further changed how treatment should be conducted now focusing therapeutic techniques more on the individual rather than integrating society. Adler influenced Maslow and both believed humans are innately motivated to move towards mastery as healthy individuals have motivational based needs (Mansager & Blushtein, 2020). While Adler focused on inferiority in a societal context, Maslow focused on the self as individuals are motivated by what they are personally lacking (Mansager & Blushtein, 2020). Maslow (1981/1954) wanted to improve human beings by helping them understand their needs and intrinsic values of life. Maslow believed humans are universally motivated to grow, self-actualize, and validate themselves and that the holistic way of thinking is easier to explain these concepts than the atomistic way (Maslow, 2013/1962). Maslow's (1981/1954) hierarchy of needs claimed that because of need deprivation all behaviors help one gain needs directly or indirectly; when one lacks something, one always strives for it. Maslow's hierarchy consists of satisfying biological needs, safety needs, needs for belonging and affection, needs for self-esteem, and finally self-actualization (Maslow, 2013/1962). In order to understand one's needs, one must learn about their inner nature. The inner self will be actualized so it is important to go through the process of discovering it; self-actualizers are reported to make great sense of their inner nature. Maslow (2013/1962) believed one's inner nature is reflective of good

or neutral desires to strive for and reach one's full potential of abilities and goals. When one knows their inner nature, they can validate themselves and grow to be their best person (Maslow, 1981/1954).

Needing treatment is a result of one's needs not being met within one's environments. Maslow (1981/1954) recognized how hard it is to have needs gratified because human potentials and innate natures are easily lost and destroyed in bad environments. Maslow (2013/1962) believed individuals are sick because they are in a sick environment that goes against their inner nature. Problems stem from constant need-dominating behaviors, lack of need gratification, needs being met unsatisfactorily, having no intrinsic motivation for growth, and denying the inner self/doing things against the inner self (Maslow, 1981/1954). Therapy was a quest for knowledge about the self, a place to stimulate human relations, and to have needs of support, protection, and approval satisfied (Maslow, 2013/1962). In treatment, individual's potentials, needs, goals, and inner natures were discovered and once found, deficiencies could be fixed by the self or through social interactions (Mansager & Bluyshtein, 2020). Maslow emphasized how therapists should be wise and loving in order to meet other's needs and help them through the pain of self-discovery (Mansager & Bluyshtein, 2020; Maslow, 2013/1962). Similar to Adler (1956), treatment is very specific as everyone's hierarchy of needs are personal to what one likes, values, and is motivated by, so it is important to take time to understand individual's dynamics (Mansager & Bluyshtein, 2020). Overall, Maslow (2013/1962) showed how illness stems from having unmet needs and going against one's inner nature which can be healed through self-exploration, self-gratification, and learning how to listen one's inner nature. His belief that therapists should aim to better individuals lives rather than make them un-sick demonstrates a change in how people, illness, and treatment are viewed.

Rogers empathized similar ideas as Maslow such as life problems centering around the self rather than the community (Rogers, 1951). For Rogers (1951), the self was a wholeness of clusters of one's characteristics, abilities, relationships, environment, goals, and values. Rogers (1951) believed people are always moving in the direction of goal directed behaviors to actualize and enhance experiences in order to mature and maintain the self. When people are not striving for their goals, are disorganized, and live by the values of others, they will get sick. Rogers (1951) changed the terminology from patient to client because he saw people as voluntarily coming to therapy to get help and the term client helped minimize the connotation of sickness around individuals receiving treatment. Rogers (1951) was interested in nondirective counseling or client centered therapy to shift away from the dogma of free association. The goals of client centered therapy were to foster personal growth, bring peace of mind, and help individuals accept, be comfortable with, and value themselves. He believed therapy was a learning process and the end goal was to release individuals' capacities for personality reorganization and establish better adjustment, not cure anything (Rogers, 1951). Treatment was deemed successful when verbal content, attitudes, and symptom talk all changed to be reflective of self-worth, motivation, and positivity. Rogers (1951) saw clients, when getting better, would stop talking about the past and talk about how they used new behaviors to tackle a problem, or how they have increased frustration tolerance. Rogers empathized the importance of learning about each client's self-construct, characteristics, abilities, and values to use for positive treatment and formation of realistic achievable goals. Rogers (1992/1957) emphasized a genuine relationship between the therapist and client, in addition to physical contact, must have specific characteristics in order to foster change. Clients should be incongruent, vulnerable, and anxious while the therapist should be congruent, provide unconditional positive regard, and be empathetic and understanding of the

client's frame of references. Rogers (1992/1957) empathized that a client must feel free to be deeply themselves and learn to like the self "as is." It is the therapist's job to help integrate the clients' experiences and be a support system as the client tries to understand the self, which will result in less tensions and anxiety (Rogers, 1951). Rogers' counseling was successful and preferred over Freudian psychoanalysis (Estes, 1952). Estes (1952) reported Rogers' book being highly important as evidence that client-orientated therapy is useful on many people with many different problems. Estes (1952) reported around forty research studies had already been published and several hundred counselors were now using the nondirective approach showing the early success, effective use, and shift towards new humanistic beliefs and treatment styles.

### **Rehabilitation psychology**

The humanistic theories and ideologies discussed, especially the commonality of motivation driving behavior, gave rise to treatment emphasizing rehabilitation. Rehabilitation psychology focuses on using one's skills in order to maximize health, optimize function, increase social participation, and improve well-being through self-determination, which are reflective of humanisms goals (MacLachlan & Mannan, 2014; Shontz, 2003). Rehabilitation psychology became prominent after World War II as people were surviving injuries and living longer with injuries (Shontz, 2003). Soldiers were being treated and wanted to go back in the workforce to be active, useful, and functional citizens (Shontz, 2003). Interestingly, after World War I Adler was reported to have treated soldiers emphasizing the need for social feeling to integrate them back into the community (King & Shelley, 2008), and Maslow (2013/1962) mentioned the successful work of reorganization of soldiers' capacities after injury showing success in humanistic and holistic approaches. In addition, after the humanistic movement, healthcare providers were encouraged to change their perception to treating a human rather than treating a body and shift

from the medical model to empathize rehabilitation and skill building over hospitalization (Garrett, 1952; Karl & Holland, 2013). Garret (1952) believed the new holistic motivational theories about human nature should be integrated into treatment just as a new medical technology would be and thought healthcare workers should be trained to view people as motivated to get better and in how to motivate people. Garret (1952) believed, similar to Rogers, that building a good relationship was key for effective treatment.

Viewing individuals as motivated to rehabilitate, self-advocate, wanting meaningful social participation and help themselves is effective for increasing disabled patient's outcomes. Garret (1952) reviewed a case study and showed intrinsically motivated disabled individuals with practitioners familiar with motivational theories and changed perceptions of the disabled had better outcomes in rehabilitation than patients who saw their disabilities as part of them. Garret (1952) discussed two women, Nelly and Mary, who had cerebral palsy. Nelly was categorized as a motivated, high spirited individual and despite her muscle movements she was able to learn to embroider with her feet. Mary was categorized as depressed and was compared to a mentally retarded child. The main difference here was the level of motivation between the two individuals and how practitioners acted towards them seeing this difference. More recently MacLachlan & Mannan (2014) reviewed the World Report on Disability (WRD) and found healthcare moving away from special treatment to equal treatment and increased social inclusion programs to promote meaningful participation in the world. The WRD empathized the importance of transferrable skill training, allowing disabled individuals to feel equal and have meaningful participation in the world as goals of treatment (MacLachlan & Mannan, 2014). These goals all follow promoting independence, participation in society, and personal empowerment, which are integrated from the holistic and humanistic theories discussed.

### **Holism and Humanism's Relevance to Occupational Therapy**

Holistic and humanistic theories are reflective, both directly and indirectly, in current OT techniques and values. The American Occupational Therapy Association (AOTA, 2016) reported OT as using a holistic approach to treatment as each individual is seen as a complete unified whole rather than parts of problems to be managed. OT services emphasize the use of meaningful occupation to promote engagement in life within a variety of environments (AOTA, 2016). Meyer (1983/1922) directly discussed the use of occupations as a form of treatment to provide skills for living, viewing patients as wholes, and has actively been cited by the AOTA. Activity was the most useful form of treatment as Meyer (1983/1922) believed to be human was to be active in the world and to use one's abilities to perform tasks. Occupation was essential for treating problems of living and occupation related skills were needed in order to leave institutions, showing the goal of therapy reflecting rehabilitation and to function back in society. Meyer (1983/1922) believed if patients learned occupation skills, these skills could become generalized into the use and appreciation of time and the feeling of pleasantness, purpose, and profitability could be intrinsically motivating. The work patients did always centered around their capacities and interests because to be human also meant to be able to actively do things one wants to do; this is considered the philosophy of OT (Meyer, 1983/1922; Serrett et al., 1985). Meyer believed there must be healthcare workers (OT's) who help people find these interests, promote opportunities to learn occupations, teach people how to affectively use their time, and find one's natural desired balance and rhythm between work, sleep, and leisure (Meyer, 1983/1922; Serrett et. 1985). Serrett et al. (1985) provided a quote from Meyer about how an occupation worker (later OT's) must study the habits and activities a person regularly

participates in to understand their values and to shape therapeutic measures to fit them individually, which are common to OT practice today.

The AOTA's (2016) report on OT indirectly reflected the general impact of humanism as a diffuse link to other psychologist can be seen in the terminology. The AOTA (2016) explained a goal of OT is promoting prevention and public health. Besides Adler's Individual psychology, his other area of interest was education-prevention as a form of public health (Ansbacher, 1992/1990). Adler believed there could be prevention of mentally ill adults if intervention techniques started in childhood. He proposed three levels of prevention: a primary level to prevent the disorder, a secondary level for early treatment of the onset of disorder, and a tertiary level to minimize long term effects. The AOTA (2016) reported a three-tier intervention-prevention approach parallel to Adler's theory. Tier one was availability of universal services, encouraging healthy and non-healthy individuals to develop strategies to avoid illness and to learn about mental health. Tier two consisted of target services for individuals who are at risk or are showing early symptoms. Tier three is intensive intervention for individuals with identified mental and physical health challenges. Adler's three levels of prevention are clearly reflected in OT's levels of intervention and has been cited as the groundwork for classifications of functioning and disabilities within context for healthcare professional (Ansbacher, 1992/1990/1961; Johnson & Drout 2018). The AOTA (2016) also used specific terminology that is indirectly reflective of Rogers, such as OT is a client center process and emphasizes lifestyle design changes, and of Maslow, as OT emphasizes the belief that individuals want to reach their full potentials. OT was directly influenced by Meyer but there are still clear and probable patterns between the foundations and goals of OT and humanism despite the lack of a direct link between the other psychologists.

**Conclusions**

In conclusion, Adler, Meyer, Maslow, and Rogers' holistic and humanistic theories changed the views of human nature, illness, and treatment. Human nature changed towards a kinder, positive view of humanity as individuals are seen as motivated to strive to better oneself, meet goals with directed behaviors, and want to live up to their full potentials. Treatment proposed by these individuals had the same underlying importance of fully understanding an individual and establishing good client relationships. Holism and humanism ideologies shifted treatment away from psychoanalysis and emphasized the importance viewing disabled individuals as motivated to reach their full capacities, personally grow, improve their lives, and to thrive within society rather than simply an illness to treat. These theories led to the emergence of rehabilitation psychology and can be considered the groundwork of contemporary OT as these theories are seen, directly and indirectly, in the practices, goals, and foundations of OT.



## **Chapter 2: Literature Review: The Holistic Approach of Occupational Therapy in Helping Children with Autism Spectrum Disorder**

Autism Spectrum Disorder (ASD) is characterized by difficulties with socialization and restricted and repetitive behavioral patterns, interests, and communication styles (Davidovitch et al., 2021). Although there may be some genetic variations in about ten to twenty percent of individuals with ASD, ASD is hard to diagnose based on biological markers. Diagnosis relies heavily on developmental, social, and family history as well as evaluations, observations, questionnaires, and tests conducted by professionals. Currently, there is concern around the rise in rates of ASD. The Centers for Disease Control and Prevention (CDC) reported a drastic change in the prevalence of autism from one in 150 in 2000 to one in 44 in 2018 (CDC, 2021). After sending questionnaires to many clinical psychiatrists and physicians who specialized in child development and neurology, Davidovitch et al. (2021) reported the prevalence of ASD rising from 0.2% in the nineties to 1.85% as recent as 2021 and concluded there is a moderately significant increase in ASD diagnoses compared to other neurological and psychological disorders. Davidovitch et al. (2021) believed the increased rates are reflective of both changes in the number of individuals with ASD and changes in the diagnosis practices. Davidovitch et al. (2021) explained ASD may get diagnosed even if some evaluations are inconclusive so the child can get services and other benefits that would aim to increase the child's functional level and help improve deficits. As these rates are reportedly rising, whether due to overdiagnosis or actual increased prevalence of the disorder, the need for effective interventions for children to promote functional independent living is evident (Davidovitch et al., 2021).

There is current research on how OT is an effective intervention that can help children diagnosed with ASD gain the life, sensory, and social skills they may be lacking to become as

functional as possible within society and live meaningful lives. As seen in chapter one, OT's foundation and goals have been built upon the holistic and humanistic theories of therapy and treatment, showing the positive change in treatment from fixing an illness to treating people as individuals who want to achieve and reach their full potential. Current research reflects the successful holistic approach of OT seen in the promotion of client-centered, family-centered, and school-based interventions. Each of these interventions share a common goal of making a child ready to function independently in their society. Occupational therapy practitioners (OTPs) use of these successful, effective, and extremely beneficial interventions are seen to help children with ASD succeed currently and in the future. The current paper plans to show, on the basis of sensory integration theory, specific OT cases where OT practices successfully increased children with ASD functioning in activities of daylily living, such as eating and toileting, and in future success.

### **Sensory Integration Theory**

In the beginning of a child's life, the nervous system and sensory systems are maturing and adapting to the constant inflow of information both externally and internally (Van Nest, 2019). In addition, a child is also learning about their own body in terms of proprioception and how to control body movements (Van Nest, 2019). Sensory and emotional dysregulation, such as tantrums, hyperactivity, and shifting from happiness to anger, are common within the first few years of life as maturation, adaption, and information processing can be overwhelming (Van Nest, 2019). Holistically, the environment, family, and community all impact the preferences and behaviors of a child as the child develops sensory processing skills of what is safe versus uncomfortable. Sensory integration theory deals with one making connections between perceptions that stem from the body's response to the environment and the actual environment.

Sensory integration theory intertwines physical developmental needs with social and emotional developmental needs as the body and emotions are tied; humans make connections between emotionally intense situations and sensations in the body in order to function within their world and learn (Van Nest, 2019). When any of the sensory systems provide too much or too little neural activity in the brain, dysregulation occurs. Sensory integration theory explains that when the body cannot habituate to and combine sensory information being received, the body will react in a state of fight or flight. In this state, the body will have to constantly redecide if sensations/situations are safe or not, which in turn stunts human learning and growth (Van Nest, 2019). These problems are commonly seen in children diagnosed with ASD and are an area of intervention for an OTP.

Beyond the five senses taking in information, there are also the vestibular system and the proprioceptive system (Van Nest, 2019). Many children with ASD are unaware of their physical body in space, seek or avoid certain sensations, and have continued dysregulation between what the brain is feeling versus what the body is feeling. These deficits can impact “proper” behaviors in social situations in addition to the lack of social skills (Van Nest, 2019). In school-based systems, OTPs can screen and test children for deficits in the senses such as visual and auditory processing, visual-motor, tactile, smell and taste sensitivities, and vestibular and proprioceptive processing. Implementation of proper treatment options, such as bilateral coordination tasks, visual tasks, body movements, and motor planning tasks help the child’s body modulate all the senses and compensate for increased or decreased neural activity (Clark et al., 2019). By treating these sensory difficulties in an integrative way with other tasks, a child may perform better in other areas of motor control and self-regulation which were previously being limited because of sensory problems (Clark et al., 2019; Van Nest, 2019). In addition, a common symptom of ASD

is repetitive and restrictive patterns which may occur because of sensory processing deficits, sensory hyper and/or hypo reactions or overall unusual sensory experiences which make children avoid or seek certain sensations (Hoyo & Kadlec, 2021). Using sensory integration can help not only increase functional abilities, but can help with emotional regulation, perception, reducing repetitive behaviors, and increase learning (Van Nest, 2019).

Current research has shown a lot of OTPs using sensory integration and processing theory as an underlying treatment for individuals with ASD (Hunt et al., 2017). Research on sensory integration and application of sensory tasks in OT practices are seen to help children become more successful in many areas of living such as socialization (participation in activities, play), daily living skills (feeding, dressing, toileting, sleep), and learning (Hoyo & Kadlec, 2021; Hunt et al., 2017). Hunt et al. (2017) provided evidence for the effectiveness of OT as they discuss the use of The Ayres Sensory Integration manual for promoting participation, challenging sensory-motor experiences, and production of adaptive responses to new stimuli. Hunt et al. (2017) reported children who were given this type of intervention, compared to a control group, scored significantly higher on their individual goals and that benefits are seen in both sensory (okay with more sensations) and participation (less assistance needed) based tasks. In addition, Hunt et al. (2017) reported all OTPs interviewed used sensory integration theory frequently within their practices. OTPs knowledge and use of sensory integration are foundational for helping the large majority of children with ASD succeed.

### **OT Effectiveness in Early Autism Intervention for Activities of Daily Living**

OT is highly useful and effective in helping children with ASD increase their functioning and quality of life for themselves and for their families as an ASD diagnosis impacts personal, family, and societal function (Davidovitch et al., 2021; Hunt et al., 2017). These

multidimensional impacts require therapy to focus on increasing independence and life skills for individuals with ASD. A specific case studied by Hoyo and Kadlec (2021) showed the effectiveness of the holistic/humanistic approach of OT as a treatment option to not “cure” the ASD diagnosis but to increase the child’s functions and needs for living. Hoyo and Kadlec (2021) reported after four months of family-centered OT, the child was able to be spoon-fed after only being force-fed from a syringe for two years with minimal progress from other healthcare sources. Hoyo and Kadlec (2021) discussed that the OTP’s success came from the holistic approach to treatment; OTPs not only helped deal with the main issues but worked to improve the underlying functions of the child and the parents. The OTP addressed problems related to ASD and feeding such as decreased oral motor skills, tactile sensitivities, and additionally addressed concerns of weak muscle tone and lack of body awareness. These problems were resolved through sensory integration theory, using play interventions, analyzing activities, changing the positioning and location of feedings, and implementing pacing to provide the child with a sense of control. Hoyo and Kadlec (2021) reported improvements in feeding from the OTPs work resulting from building subsequent skills, helping underlying sensory dysfunction, coaching the parents, improving interactions/relationships, decreasing anxieties around feeding, and increasing control. These were deemed effective and lasting interventions for the child’s success, providing evidence for OT as an effective intervention to help children with ASD.

Similar to Hoyo and Kadlec (2021), Gronski (2021) reviewed OT, especially the technique of parental coaching in feeding, and explored OT’s effectiveness on toileting through a case study. After the OTP observed the everyday routine of the family, tasks such as increasing fluid intake, using strong reinforcers for successful toilet strategies, and integrating what the child liked (in this case study it was cartoons) were used to promote toileting successfully at

home. Gronski (2021) also implemented rules in the classroom and school related tasks such as creating a direct route for the child, encouraging consistent time for bathroom breaks, and emphasizing the importance of positive reinforcement and neutral nonjudgmental phrases which led to successful toileting at school. These articles show support for the effectiveness of OT's holistic approaches, the use of sensory integration theory, and parental involvement to help children with ASD function successfully in their daily lives.

### **OT Intervention and Children's Future Success**

Current research has not only demonstrated OTPs role in improving the current function and abilities of children with ASD but also has shown lasting implications of future success. Wong et al. (2020) discussed the importance of employment in adulthood in terms of financial stability, independence, and the reciprocal support and reinforcement gained from family and society when an individual works. These variables are considered determinants of quality of life that tie into one's personal well-being. Wong et al. (2020) looked at transitional services and employment supports, such as vocational skill building, imposed by school-based OTPs and their outcomes of employment of adults with ASD in a ten-year longitudinal study. Wong et al. (2020) found school supports are the most important mediator predicting employment for a student with ASD. Within the analysis, parental involvement/participation and overall academic success and abilities were also important. The importance of parental involvement/participation was found to increase both academic skills and if the child got the services they needed (Wong et al., 2020). These findings provide evidence for the importance of OT in helping children with ASD succeed not only in school but in the future. For a child with ASD to succeed, OT takes the holistic approach of not only teaching effective vocational, school, and daily functioning skills but also

involving and educating the parents on what needs to be done to optimize their child's academics, self-determination, and most importantly their positive functioning.

### **Conclusion**

In conclusion, OTPs are well-educated, capable, experts on holistic practices and interventions that can strengthen individuals' skills, outcomes for life, and personal growth. OT has shown to be effective in helping not treat nor heal but improve the lives of individuals, especially children with ASD. Focusing on sensory integration theory, OT interventions help improve the activities of daily living necessary for independence in childhood such as feeding and toileting by addressing underlying deficits in sensory integration, family communication, and parenting styles. These interventions and therapies also deal with motor, emotional, and cognitive problems simultaneously, which adds to the effectiveness and high value of OT. OT also provides positive future outlooks for children with ASD, which is important as the rates of ASD are steadily rising. OT is an effective, holistic, therapeutic intervention that can better the lives and outcomes of a child with an ASD diagnosis both currently, as seen in activities of daily living, and in future employment opportunities.

### **Chapter 3: Problem and Solution: Parental Stigma Towards Childhood Mental Illness as a Barrier Inhibiting Effective Treatment**

Stigma is a common barrier that prohibits individuals from getting the care and interventions needed for treating mental illness/disorders, especially in children who cannot self-advocate (Minichil et al., 2021). Stigma is defined as a deep, discrediting attitude towards individuals with a given condition and consists of stereotypes, prejudices, and discrimination (Kaushik et al., 2016). Stigma may lead to groups or individuals feeling inferior, less desirable, devalued, and different due to labeling and status loss (Chavira et al., 2017; Hepperlen et al., 2020). According to Hepperlen et al. (2020), stigma can be broken down into four main types: public, self/internalized, affiliation, and structural. Public stigma reflects how a community, or large group, feels about a disability or a specific group. Self-stigma is the internalization of public stigma; disabled individuals or targets realize they are part of the stigmatized group. Affiliative stigma is the impact of public stigma on family members or caregivers of individuals with stigmatized disabilities. Structural stigma has to do with institutions fueling inequalities through the exclusion of those within disabled or stigmatized groups. Commonly, stigma around childhood mental illness takes place on the public, self, and affiliative levels but all four types relate to decreased service/help seeking behaviors and are noted as barriers to health services for children with mental disorders and disabilities (Hepperlen et al., 2020).

One in five children have a mental illness but less than one third seek/get treatment (Kaushik et al., 2016). Children cannot actively seek treatment for themselves, so they rely on parents or caregivers to advocate for them and initiate a path towards needed treatment (Chavira et al., 2017). Children, and adolescents, not getting the help they need because of stigma around mental illness diagnoses and treatment is significant because untreated mental disorders are



associated with short- and long-term impairments and developmental issue such as future educational deficits, family and peer problems, antisocial behavior, substance abuse, violence, increased mortality rates, comorbidities, and reduced life quality (Hepperlen et al., 2020; Kaushik et al., 2016; Walter et al., 2018). The purpose of this paper is to review potential origins of stigma around childhood mental illness, examine the problem of children not getting help-seeking behaviors and treatment from parents due to stigma, and to promote some possible solutions. Although treatments of mental disorders, such as OT, are shown to be effective, there is still stigma around diagnosing and treating children which problematically leads to children not getting the help they need to successfully succeed.

### **The Problem: Potential Origins of Stigma and Parental Impact on Treatment**

A potential reason for stigma around childhood mental health disorders stems from past terminology. Terminology from 1886 consisted of terms like imbecilic and idiotic when referring to children in institutions (Mallett, 2006). In addition, the first childhood disorders ever in the DSM-I and DSM-II revolved around external or behaviorally based problems which were referred to as dangerous (Mallett, 2006). Not until 1980 was an internal childhood problem like autism added to the DSM. Kaushik et al. (2016) hypothesized stigmatizing views of the self in young person's originate from the media and lack of representation, cognitive development, low social status, and the assimilation of caregivers' views of mental illness and disabilities. Other reasons for childhood mental health stigma could be due to mothers being blamed for their child's disorders, lack of social support, and feeling the need to isolate or hide to avoid public stigma and labeling (Hepperlen et al., 2020). Caregivers reportedly felt an increased sense of burden and fear of stigmatization when their child was diagnosed with a mental disorder or illness (Hepperlen et al., 2020). In an interview, many parents reported that one of the most

challenging things in life was coming to terms that their child had a mental disorder (Walter et al., 2018). The sense of burden, fear, stigmatization, challenge, and blame of the caregiver/parent inventively creates a barrier in seeking or delaying treatment for a child.

Stigma is a key deterrent and barrier of seeking services/treatments as about 75% of individuals who need mental health services do not receive any interventions (Chavira et al., 2017; Kaushik et al., 2016; Minichil et al., 2021). Kaushik et al. (2016) found parents perceptions of mental illness played a large role in a child's accessibility to treatment, emotional well-being, and self-stigmatization. In addition, adults were highly concerned with the label associated with getting a mental health diagnosis or being labeled as mentally ill. This fear of labeling provides evidence in the delay of treatment on behalf of a child; if a parent is worried about a label, they will be less likely to go get a diagnosis or start the path towards treatment to avoid the label. Internalized or self-stigma was prominent in relation to public stigma around labeling and reflective of parental factors such as parental optimism helping against self-stigma while parental secrecy about the diagnosis lead to shame and increased self-stigma (Kaushik et al., 2016). Minichil et al. (2021) reported caregivers feeling sad and helpless about their child's mental disabilities which led to concealing the status of a mentally ill child, withdrawing from social relations, and isolating themselves and the child due to the negative serotypes around mental disorders. Minichil et al. (2021) believed that these feelings may be a reason why children are socially isolated and deemed incompetent in communities further adding to the public stigma-self-stigma cycle. Kaushik et al. (2016), similarly concluded that individuals and their families tend to withdraw from the general public when there is an increased awareness of public stigma which can negatively lead to decreased self-esteem and treatment avoidance.

Chavira et al. (2017) looked at the effects of parental stigma on services among children with anxiety and found 41.3% of parents did not seek treatment for their child due to stigma related beliefs. Chavira et al. (2017) found most stigma revolved around parents' concerns about: negativity coming from the public (labeling, being put into a special needs class, having a diagnosis on public record, and future employment), negative social issues (being teased by peers), and other internalized stigma about mental disorders (what it means that their child has a mental problem, their child is not normal or crazy, and that their child would feel bad knowing this information). Chavira et al. (2017) concluded these three negative factors lead to inhibition of parents seeking treatments and children with anxiety receiving access to services. Walter et al. (2018) found caregiver's personal beliefs and knowledge about health related to and influenced if a child would get any form of diagnosis or treatment. In addition, Walter et al. (2018) found caregivers were highly concerned that labeling from a diagnosis would cause negative impacts across the lifespan and many parents had a lack of social support due to stigma around mental health in social networks. These findings all resulted in delays or absence of access to effective treatments and resources for children.

### **Potential Solution: Increasing Education of Mental Disorders**

Kaushik et al. (2016) noted that large scale stigma reduction initiatives have not had great success and new interventions should be employed. Rather than stigma interventions, a new focus may be on educational interventions of disabilities promoting factual information for parents. Increasing education to help change parents' attitudes and understanding of mental disorders, services, and treatment pathways, may be a good step for a solution. Zivoder et al. (2017) showed that parents are interested in wanting to know more about disorders as parents of children with disorders were active in trying to get information and knowledge about their

children's diagnoses. Zivoder et al. (2017) found that most parents got their information from the internet which did not allow for a full understanding nor reliable information on the disability. On the basis of parents' curiosity, an overall education program, not necessarily about stigma just about educating parents on different mental disorders, could be helpful to increase engagement in treatment, understanding, and hopefully reduce stigma as well. Zivoder et al. (2017) reported 92.2 % of parent felt more education and public information should be released. It may be effective to make more useful educational webpages and involve the Internet as 62.5 % of participants reported internet sites as main sources of information gathering. Walter et al. (2018) reported the need for increased education in general as parents felt they had difficulty understanding mental disorders and that doctor visits rarely mentioned how to look for and deal with mental illness. Walter et al. (2018) reported parents relied on internet searches, which were difficult to obtain information from and not easily accessible. Adding more interventions via the internet may be a helpful place to intergrade mental health into a larger system which can also help decrease public stigma. Hepperlen et al. (2020) discussed the importance of challenging well-established public attitudes and beliefs with community interventions, such as increased contact with individuals with disorders and education, to reduce stigma/increase awareness. Hepperlen et al. (2020) found a large percentage of the communities in the study were open and willing to participate and the number of contact and education events individuals attended related to decreasing negative attitudes. The internet again can be a great tool to use to increase education and promote interventions as individuals can get repetitive access to a lot of online events, interventions, and articles. Focusing future online interventions on increased education rather than directly dealing with stigma may decrease negative attitudes and stigma around mental disorders and increase engaging in treatment for children.

A larger implication, in addition to decreasing stigma through education, is that parents not only impact whether a child gets treatment, but Hellmich and Loeper (2019) reported the way parents view special needs affects how their kids view individuals with special needs; having positive parental perceptions being taught is important for future learning and positive peer treatment. Parents seemed to have negative attitudes towards children with social-emotional issues, but the array of attitudes were wide as parents also assumed children benefit for being socially included to improve their skills and accepted diversity (Hellmich & Loeper, 2019). Chavira et al. (2017) similarly reported that some adults preferred their children stay at a distance and not interact with children who were mentally ill showing how stigmatization may be learned. Hellmich and Loeper (2019) suggested that increasing the knowledge of disabilities and changing attitudes of parents can have a secondary impact on how children view special needs.

### **Conclusion**

In conclusion, stigma around childhood mental health leads to children not obtaining the diagnoses and effective treatments, such as OT, that would benefit and help them succeed. Parental beliefs, fears, lack of knowledge, and personal stigmas have a large impact on a child's access to help and treatment for disorders and disabilities as well as the child's overall wellbeing. Parents need effective interventions, access to information and education, and support systems to help them overcome any negative attitudes and be active in help-seeking behaviors. Parents and communities have shown interest in wanting to learn more and take part in educational interventions. Educational interventions may help reduce stigma associated with childhood mental illness and in turn decrease the barrier created that is restricting children from getting treatment.

**Chapter 4 redacted to remove personal reflections and any identifying information.**

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