

**A Clothing Group for Adolescents with Eating Disorders: A Role for Occupational
Therapy**

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Acknowledgments

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Abstract

Eating disorders are one of the most prevalent psychiatric conditions and can have a long-term impact, disrupting the cardiac system, gastrointestinal tract, reproductive system, cognitive functions, and many other systems of the body. In addition to the physical impacts, eating disorders effect occupational functioning, roles and routines, social participation, and often accompany other mental health conditions including anxiety and depression. Occupational therapists have a unique and valuable role in eating disorder recovery and mental health.

Increased efforts of advocacy are needed to bolster the presence of occupational therapy in this area of practice.

This capstone student assisted with the development of a clothing group within the adolescent intensive outpatient program at The Charis Center for Eating Disorders. This group addresses the relationship with clothing and how clothes can be used to portray elements of identity, culture, and expression as opposed to this expression being controlled by negative body image or self-esteem. In addition to clothing group development, this capstone project advocated for the role of occupational therapy in eating disorder recovery.

Keywords: Occupational therapy and eating disorder recovery, advocacy, clothing group

Introduction

As the United States has made small gains in overall awareness, understanding, and acknowledgement of the mental health challenges in America, the number of mental health diagnoses continues to rise. The COVID-19 pandemic has shed light on global mental health concerns, as many have experienced an increase of depressive symptoms and overall lower psychological well-being (Vindegaard & Benros, 2020). There are significantly more mental health needs but a shortage of trained professionals able to meet this growing demand. Indiana ranks 42 in its overall state of mental health as of 2022 and is one of the 12 states in the United States that ranks as having low access to care compared to the high mental health demand (Mental Health America, 2022). Among many mental health concerns plaguing the United States, eating disorders, included in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), are estimated to impact at least 28.8 million Americans at some point during their life (Deloitte Access Economics, 2020). Eating disorders can have serious long-term physical and mental effects including cardiac issues, hormonal imbalance, reproductive issues, impaired cognitive function, anxiety, depression, and in extreme circumstances, death (National Institute of Mental Health, 2023). In addition to the serious physical symptoms associated with eating disorders, the psychological component may include distorted body image, high anxiety, and an extreme obsession with food, thinness, and exercise. Eating disorders are one of the most prevalent psychiatric conditions in women and anorexia nervosa specifically can decrease the lifespan by 25 years (Brown et al., 2019; Harbottle et al., 2008 as cited in Brown et al., 2019).

Due to the significant physical and psychological symptoms associated with an eating disorder, occupational functioning is often completely disrupted as these individuals tend to isolate and engage less in the community (Brown et al., 2019). It is common for individuals with

eating disorders to avoid eating with others or in public situations due to feelings of conflict and distress surrounding food which can negatively impact their psychosocial functioning, resulting in occupational deprivation (Morris, 2015 as cited in Brown et al., 2019). Shopping for groceries, cooking and eating self-prepared food, is another challenge commonly faced by these individuals as these activities can lead to hyper-fixations on food labels, food options, and ingredients (Clark & Nayar, 2012; Crouch & Alers, 2014 as cited in Brown et al., 2019). As eating disorders manifest from negative body image and an overemphasis on weight and shape, clothing choices and the relationship with clothing are significantly impacted. Due to body dissatisfaction, these individuals tend to demonstrate clothing avoidance behaviors, experience increased levels of stress with dressing, and wear extremely loose-fitting clothing to conceal their bodies (Trautmann et al., 2007). Individuals at lower body weight have difficulty thinking, attending to tasks, and experience increased anxiety as a side effect of starvation making it difficult to complete school or work activities (Clark & Nayar, 2012). Additionally, decreased self-esteem and poor body image can result in poor hygiene, decreased participation in self-care, as these activities are stressful to complete. All of these components and areas of occupational participation that are impacted can have a ripple effect on relationships, friendships, family dynamics, and overall autonomy and independence of the individual.

In the state of Indiana, Occupational therapists are qualified mental health providers with a clear and distinct role in eating disorder recovery. Occupational therapists are uniquely qualified and trained to address healthy habits and routines, media literacy, mealtime support, meal preparation, emotional regulation, health management, cognitive reframing, clothing shopping, self-care, leisure participation, coping strategies, return to school/work, relapse prevention, and many other treatment approaches (Brown et al., 2019; Mack, 2019). Through

skills of activity analysis, occupational therapists can problem solve environmental, cognitive, medical, and interpersonal barriers to a patient's engagement in meaningful occupations (Mack et al, 2023). The unique lens of occupational therapy is a valuable asset to the multidisciplinary team in eating disorder recovery to optimize participation and wellbeing. This profession is underutilized and underrepresented in the mental health setting despite having a long history in this area of practice tracing back to the early 1980s, as the medical model has become the mainstream approach in healthcare (D'Amico et al., 2010).

The purpose of this capstone project is to develop and implement a clothing group into the adolescent intensive outpatient program at the Charis Center for Eating Disorders. This clothing group will address the overall relationship with clothing and outcome measures will be utilized to assess the impact of the program. In addition to programmatic development, this project aims to advocate for the role of occupational therapy in mental health through education and implementation of this clothing group. Advocacy efforts made towards this field will lead to long term growth in this area of practice thus increasing overall access and availability of mental health providers in Indiana to meet the growing mental health demands.

Needs Assessment

The Charis Center for Eating Disorders treats adolescents and adults with eating disorders through a comprehensive approach utilizing a multi-disciplinary team of physicians, dieticians, psychologists, psychiatrists, nurses, art therapists, and family therapists (Riley Children's Health, 2022). The process of this needs assessment began with an interest in better understanding the role of occupational therapy in the treatment of eating disorders, as well as a passion in advocacy for occupational therapy in the realm of mental health. The initial stage of this project involved meeting with the clinical director at the Charis Center to provide general information about the

capstone project and determine the level of interest in having an occupational therapy student. The next stage involved completing a community profile to better understand the community at the Charis Center. This stage then later included meeting with the clinical director to complete an interview to learn more about the site and identify gaps in services.

Community & Site Profile

The Charis Center for Eating Disorders treats clients throughout Indiana with anorexia, bulimia, binge eating, and other types of eating disorders (Riley Children's Health, 2022). The Charis Center has three different levels of care, depending on each client's needs. Outpatient includes appointments with counselors, nutritionists, and support groups. Intensive outpatient involves additional education and support for clients, requiring clients to spend multiple hours a day at the center. Temporary hospitalization is necessary for clients with advanced eating disorders to improve their health and nutrition, as well as undergo observation. These clients are there for all three meals and complete their schoolwork with the on-site teacher. A variety of therapies are offered at the Charis Center including art therapy, cognitive behavioral therapy, dialectical behavioral therapy, radically open dialectical behavioral therapy, recreational therapy, and mindfulness training. The Charis Center takes patients from all over the state of Indiana, as it is the only partial hospitalization program for adolescents in the state.

Site Interview

The first meeting was spent orienting the clinical director, Dr. Valerie Weesner, to the capstone project, as well as providing her with a more in-depth explanation of what occupational therapy is in the context of eating disorder treatment. She expressed an interest in hosting a capstone student, so plans were made to discuss more specific project ideas at a later date.

A more formal interview was then complete to gather information about the Charis Center which is summarized below. The interview began by gathering basic information related to the treatment offered at the Charis Center and what a full day of therapy would look like for a client receiving services at the Charis Center. Details regarding client population were discussed and it was mentioned that adolescents in the partial hospitalization program typically range from 12 and 17 years old (Personal communication, March 20, 2022). The interview then shifted to client factors and stages of change. Dr. Weesner explained that many of them are here because of their parents, and some seek help on their own by notifying an adult of their challenges related to food. She noted that most of the clients who seek help on their own tend to be fairly motivated until they realize that part of recovery involves weight gain. Some common co-occurring diagnoses often seen at the Charis Center include anxiety, depression, OCD, ADHD, and occasionally oppositional defiant disorder. The site eventually identified a need for addressing community re-integration, as there are no interventions or groups currently addressing this component of eating disorder recovery. Ideas were briefly discussed including the creation of a restaurant, clothing, or grocery group to simulate what it would be like to complete activities like clothing shopping, grocery shopping, or eating out at a restaurant within the Charis Center since transportation outside of the facility is not feasible. The interview increased knowledge of the Charis Center treatment approach and how their holistic nature aligns with the mission of occupational therapy. Additionally, a clear gap was established, providing a clear direction for a project.

Site Visit

A few months prior to beginning the capstone experience, the first in-person visit was made to the site to meet the staff, tour the space, and discuss more specific details of my project. Dr.

Weesner presented the opportunity to work with Anna Reese, licensed mental health provider, to apply for a grant from the Women for Riley and develop a clothing group for the adolescent IOP group that begins March 1st. This group would address the challenges associated with trying on clothes, shopping for clothing, and picking out appropriate clothing, as the overall relationship with clothing is significantly impacted by the presence of an eating disorder. Weekly meetings were scheduled with Anna to begin planning this group, as well as to start the grant application process. As the content of the group were developed, the 2023 Women for Riley grant application was submitted on December 31, 2022.

Literature Review

Current Treatment Approaches

This literature review will explore current treatment approaches, the psychology of dress, and the impact eating disorders have on clothing management to support the development of a clothing group for the adolescent intensive outpatient program at the Charis Center. Prior to reviewing the literature, it is important to differentiate common eating disorders that are treated at the Charis Center and explore current treatment approaches. The eating disorders below are not inclusive all of eating disorders treated at the Charis Center but are most relevant to the current Capstone project.

Anorexia nervosa is described as “the intense fear of being fat, a disturbance of body image, and an obsession with food and thinness, associated with the refusal to maintain a normal weight for one’s age and height” (Bulik et al., 2014 as cited in Brown et al., 2019). The two subtypes of anorexia nervosa include restricting type and binge eating/purging type (American Psychiatric Association, 2022). Those with restricting type drastically restrict food intake while

those with binge eating/purging type engage in binge behaviors followed by self-induced vomiting. Similar to anorexia nervosa, those with bulimia nervosa experience a fear of weight gain and excessive exercise. What differentiates this diagnosis is these individuals exhibit recurrent episodes of binge eating and compensatory behaviors to avoid weight gain (self-induced vomiting or use of laxatives) and tend to present at a normal or above average body weight for their age, size, and developmental stage whereas those with anorexia typically present as underweight. Binge eating disorder includes cyclic episodes of binge eating and a lack of control over consumption during these periods. A key component of this diagnosis is that binge-eating episodes must occur at least once per week for 3 months. Other Specified Feeding and Eating Disorders (OSFED) are characterized by feeding and eating difficulties that disrupt occupational performance and daily function but do not fall into the category of other diagnoses. Lastly, Avoidant/Restrictive Food Intake Disorder (ARFID) is a disturbance in eating or feeding that may be due to a lack of interest in eating or feeding, sensory challenges with food, or concern for the consequences of eating. Individuals with ARFID experience no body image disturbances or concern for weight or shape, as well as no concurrent medical conditions that explain the challenges in eating. While these diagnoses significantly vary, there are some similarities in treatment approaches.

Eating disorder treatment is inherently complex and multifactorial, requiring multiple healthcare disciplines. A cognitive behavioral approach is commonly used in the treatment of eating disorders (Lock & Pepin, 2019). Cognitive behavioral therapy (CBT) focuses on the thought patterns, beliefs, and attitudes about weight, shape, and food that create maladaptive coping strategies and eating behaviors. CBT involves cognitive restructuring to challenge negative thoughts, improve problem-solving, increase coping strategies, and prevent relapse.

Motivational interviewing is a strategy used to increase engagement in more healthy lifestyle skills. This involves establishing rapport and helping clients identify reasons for change.

Dialectical behavioral therapy (DBT) is a type of CBT used to develop emotional regulation skills, mindfulness training, distress tolerance, and interpersonal effectiveness (Grilo, 2017; Jong et al., 2018). Family based treatment (FBT) is beneficial in treating primarily adolescents, as the family unit is an essential component in successful recovery (Muratore & Attia, 2021). FBT involves weight restoration, resuming responsibilities, and forming a healthy sense of self as an adolescent. All of the above strategies are individualized based on the client factors and specific diagnosis.

Psychology of Dress

Clothes can be a form of self-expression and signify a person's values, cultural context, and interests. Clothes can also be used as a form of art or a hobby and relay something about someone's gender, class, status or attitude. Clothing choices can impact how one is perceived, how one perceives themselves, and even impact behavior. Enclothed cognition refers "to the systematic influence of clothes on the wearer's psychological processes and behavioral tendencies" (Adam and Galinsky, 2012, p. 919). Enclothed cognition is comprised of both the symbolic meaning of clothes and the physical experience of wearing clothes. In 2012, Adam and Galinsky examined enclothed cognition in the context of wearing a lab coat and found that participants wearing a lab coat described as a "doctor's coat" demonstrated increased levels of sustained attention as compared to those wearing a white painter's coat. This study concluded that there are psychological and behavioral implications related to the clothes we choose to wear. Another study assessed dress in the workplace and found that individuals dressed in more formal attire viewed themselves as more trustworthy, productive, and competent while also feeling less

friendly and creative in more formal attire (Karl et al., 2013). These studies and an abundance of others centered on the psychology of dress, demonstrate the significant impact our clothes can have on our performance, confidence, and other psychosocial factors that can influence our participation in daily tasks (Jones et al., 2019; Lopez-Perez et al., 2016). As eating disorders impact the overall relationship with clothing, the concept of enclothed cognition is distorted.

Eating Disorders and Clothes

As previously expressed, the relationship with clothing is significantly impacted by the presence of an eating disorder. A study examined motivating factors of clothing selection and found that women with bulimia who were more dissatisfied with their bodies were more likely to choose clothing that camouflaged their bodies (Harden et al., 1998). In addition to limiting their clothing choices, these individuals often avoid activities or events that may require them to challenge their physical appearance or wear something more fitted (Trautmann et al., 2007). In 2007 Trautmann et al., examined the connection between body dissatisfaction, eating behaviors, and clothing-related appearance management in college-aged women exhibiting bulimic eating behaviors. This study found that those with lower body satisfaction were more likely to wear baggy clothing, use clothes to conceal their bodies, avoid tight fitting clothes, and avoid clothing shopping. Another study investigated the connection between clothing and body experience in women (Tiggemann & Lacey, 2009). This study found that greater self-esteem and body satisfaction was associated with an increased use of clothing for uniqueness and fashion as opposed to using clothes to conceal/camouflage their bodies. These same factors of increased self-esteem and body satisfaction were independent predictors for enjoying clothing shopping. In another study, an Ecological Momentary Assessment (EMA) approach was used to examine the association between appearance-related stress and binge eating or vomiting in women with

Anorexia Nervosa with a focus on anxiety as a mediator (Mason et al., 2018). To measure appearance-related stress, participants were asked to rate stress levels after they saw reflection of self, shopped for clothes, and saw media images about weight, food, or shape. The highest percentage of high stress ratings was seen when shopping for clothes. The research presents a clear relationship between eating disorders and clothing. This relationship being distressing and perhaps negatively influences daily activities or function, as enclothed cognition portrays the impact clothing has on behavior and perceptions of self and others. Additionally, clothing shopping is especially difficult for these individuals, further supporting the need for a clothing group within the treatment of eating disorders.

Gap Analysis Statement

In addition to having a distorted perception of clothing and comfort in clothing, clothing shopping can be a difficult experience for individuals with eating disorders. Individuals with eating disorders tend to withdraw socially, isolate, and avoid activities involving food or clothing. The needs assessment with site stakeholders presents a need for this programming within the adolescent IOP program, as patients' experience with clothing is reflected in the research. Unfortunately, the research is insufficient regarding the best approach to address clothing shopping, clothing choices, and the expression of self through clothes in eating disorder recovery. This challenges the current project to take more of an experiential approach to address this component of eating disorder recovery with the expertise of patient experiences, experts at the Charis Center, and the holistic lens of occupational therapy.

Theory

“The only way to see the person is to look through the context” (Dunn et al., 1994, p. 598). The Ecology of Human Performance Model serves as a guide for this doctoral capstone project. This model is centered in the dynamic and interconnected relationship between the person, context, task, and performance. Ecology refers to the interconnectedness of organisms in their different environments. In relation to this model, the context includes all social, cultural, and temporal factors. Dunn et al., uses the example of the way adults change their behavior when speaking to an adult versus a baby or the way behavior/routines change when eating at a fast-food restaurant versus a sit-down restaurant. As the context changes so does behavior. The person is inclusive of one’s personal experiences, skills and abilities, as well as sensorimotor, cognitive, and psychosocial components. Tasks are viewed as objective behaviors needed to reach a goal through utilization of skills, abilities, and the capacity to focus attention on these tasks. Characteristics of the environment are used in conjunction with a person's skills and abilities to perform tasks and support overall performance. The context is constantly evolving, and behavior often reflects these changes to achieve goals. Occupational therapy is grounded in function and is most successful when it is engrained into real life context.

While addressing clothing for individuals with eating disorders, it is important to consider the physical, temporal, social, and cultural contexts of clothing and how the eating disorder may be impacting the relationship with clothing. This group will work to establish new strategies to utilize while clothing shopping, alter the environment, prevent triggers, and create a safe space for patients to explore new clothing experiences.

Capstone Project Plan and Process

After completing a comprehensive needs assessment and literature review, the capstone project goals and objectives were collaboratively developed with student, site mentor, faculty mentor, and capstone advisor. The need for a clothing group was established by stakeholders and presented to student to develop as capstone project and if necessary, pursue funding through the Women for Riley grant. The Charis Center currently does not have any occupational therapists on staff, which presented a secondary opportunity to educate and advocate for occupational therapy in mental health and eating disorder recovery. Project goals and objectives are listed below with program development as the primary area of focus and advocacy as secondary area of focus.

Project Goal 1: the student will use evidence-based practice to develop a clothing group for adolescents with eating disorders.

- Objective 1: the student will assess the literature to determine best practice and how clothing is addressed in the treatment of eating disorders.
- Objective 2: the student will collaborate with other healthcare providers and apply elements of occupational therapy in program development.

Project Goal 2: the student will utilize quantitative and qualitative methods to assess the effectiveness of the program.

- Objective 1: the student will select appropriate assessments to measure desired outcomes.

Project Goal 3: the student will advocate for the role of occupational therapy in mental and behavioral health settings.

- Objective 1: the student will apply the ethics and principles of occupational therapy in program development.
- Objective 2: the student will educate the healthcare team on the distinct role and lens of occupational therapy.

After the opportunity to develop a clothing group was presented to capstone student, student collaborated with Anna Reese, licensed behavioral health therapist, to organize group content and pursue funding through the Women for Riley. The grant proposal was submitted on December 31, 2022, and the proposal was chosen to be presented to the Women for Riley for further consideration. Prior to presenting the grant proposal to the Women for Riley, it was presented to the team at the Charis Center for feedback. Grant proposal was then presented to the Women for Riley and funds were granted to the Charis Center to create and implement a clothing group for the patients at the Charis Center. Capstone student and therapist began purchasing necessary supplies for the group.

Advocacy at the Charis Center began with education. A presentation was provided to the staff at the Charis Center to clearly define occupational therapy in the context of eating disorder recovery. This prompted many therapists to inquire about oral-motor and sensory challenges with feeding, more specifically for the patients with avoidance/restrictive food intake disorder (ARFID). The student then met with the clinical director to explore current approaches to treating ARFID. Each therapist utilizes an individualized approach when addressing ARFID but there are no programs or procedures being followed with this specific patient population and motor/sensory challenges are not being evaluated or addressed. This identified a gap in services and another avenue for advocacy.

Capstone Implementation

The implementation of this capstone experience took place over the span of 14 weeks. After completing a site needs assessment and a comprehensive literature review, the project implementation included the development of the clothing group and any advocacy efforts or education provided to the site from the lens of occupational therapy. The Indiana University Institutional Review Board (IRB) determined this project as non-human subjects research.

Clothing Group Content

After the need for a clothing group was established by stakeholders, student and family therapist collaborated to create the structure, content, and implementation plan of the clothing group. Below are the goals and objectives for the clothing group:

- Goal 1: to improve overall relationship with clothing and decrease body image distortions
 - Objective 1: identify and reframe negative thoughts around clothing and body image
 - Objective 2: provide education on enclothed cognition and the sizing industry
- Goal 2: a reduction in subjective distress around clothing selection by learning how to express values and identity through clothing
 - Objective 1: challenging eating disorder thoughts and beliefs surrounding clothing
 - Objective 2: identify and practice distress tolerance skills to effectively select clothing

This group is organized into three parts including educational content, mannequin clothing activity, and art activity (see Appendix A). The educational content will include education on enclothed cognition, the idea that clothing choices can influence how one is

perceived, how one perceives themselves, and influences one's actions or behavior (Adam and Galinsky, 2012). Education will also include videos and discussions surrounding the clothing industry and the inconsistencies one might face regarding clothing size, as the sizing standards are inconsistent across brands (Bishop et al., 2018). Lastly, group leaders will discuss with patients how our clothes express elements of identity, culture, sexuality, gender, and values. As individuals with eating disorders go through recovery and healthy weight is restored, it is common for patients to have to purchase new clothes. The educational content will challenge these patients to re-examine their relationship with clothing as they move through recovery and equip them for clothing shopping.

The mannequin clothing activity will be the second part to this three-part group. Gender neutral mannequins and clothing from secondhand stores were purchased using funds from the Women for Riley grant to proceed with this portion of the group. Grey colored gender-neutral mannequins will be used to account for all genders and races. Clothing was purchased from second-hand stores for sustainability purposes and to provide patients with a variety of clothing styles representative of different genders and cultures for this activity. Patients will be prompted to select an outfit from a variety of options and creatively design an outfit in any way they prefer. Patients can select an outfit that is reflective of their current identity or how they envision themselves dressing after recovery. Each patient will have the opportunity to share with the group how the outfit reflects different elements of their culture, identity, and individuality. Therapists will address any challenging thoughts or beliefs that come up throughout the activity. Through this activity patients will actively challenge their current relationship with clothing and any negative beliefs they have surrounding clothes. In addition, this activity will serve as an

opportunity to interact with clothing in a new way and explore what clothing means to them outside of their eating disorder.

The last part of the three-part group is the art activity. Patients will bring in an item of clothing that may bring up a bad memory, is triggering in some way, or has a negative implication. These clothes are commonly referred to as “sick clothes” in eating disorder recovery, as these clothes may no longer fit or are simply associated with the memories of their eating disorder. If a patient is unable to bring in an item of clothing, cloth will be provided. Patient will cut out a piece of clothing and write a value or affirmation across the item of clothing. Each patient will attach their value or affirmation onto a wire mannequin to be displayed as an art piece. This activity will symbolize the patient reclaiming power over the clothing and demonstrate that their value is not tied to their size. After completion of the three-part clothing group, each patient will receive a clothing shopping guide. This guide provides them with a list of things to do to prepare for shopping, tips for making the experience less stressful, and coping strategies to use while shopping (see Appendix B).

Participants

This group is one of many groups utilized in the 6-week adolescent intensive outpatient program which began March 20, 2023, and takes place three times a week for three hours. The clothing group will be part of the body image content in week two of the six-week program. This program is in person at the Charis Center and is tailored to patients ranging from 12–18 years old with varying eating disorder diagnoses. Patients are referred to the program and an assessment is complete to determine if this level of care is appropriate. There is a rolling admission, and the program can have up to eight patients at any given time.

Outcome measures

Outcome measures are in place to assess for any changes after completion of the group. The Eating Disorder-15 is a reliable and valid measure commonly used in eating disorder treatment (Tatham et al., 2015) (see Appendix C). This assessment will be used before and after the group to evaluate eating behaviors and attitudes, and track any changes in feelings related to appearance, as well as how these feelings impact overall participation in daily activities like clothing shopping. In addition, a clothing and shopping survey will be distributed before and after the group to measure any changes in the influence of the eating disorder on clothing choices, stress and anxiety experienced while shopping, use of coping strategies while shopping, participation in social activities, and the value placed in being a certain size (see Appendix D).

Advocacy

During the 14-week experience, occupational therapy student provided education to the therapy team and dieticians on the role of occupational therapy in eating disorder treatment, as this was many of the practitioners first exposure to OT in this setting (see Appendix E). As the capstone project progressed, staff members inquired about referral information to occupational therapy, specifically for patients with ARFID who present with sensory processing challenges with food and suspected oral motor difficulties. Since there are currently no occupational therapists or speech language pathologists on site at the Charis Center, sensory processing and oral motor concerns should be referred out to be appropriately evaluated and treated. This presented a need for referral options for physicians and therapists for patients needing OT or speech services. Capstone student connected with multiple pediatric OTs in the area to determine appropriate referral options for the Charis Center. After finding three referral options, student provided therapy and medical team with a presentation to educate staff on what feeding therapy

is, who benefits from feeding therapy, and when a referral is necessary (see Appendix F). Additionally, a quick referral handout was provided to staff members that lists the clinical signs indicating a feeding referral is necessary and the referral information (see Appendix G).

Capstone Project Evaluation

The Eating Disorder-15 and clothing and shopping survey developed by capstone student were used to evaluate outcomes of the clothing group. The education component and interactive clothing activity were done on a Thursday and the art activity was complete the following Monday. Assessment measures were distributed to the two patients in the IOP program the Tuesday before and after the group. Results are summarized below.

Eating Disorder-15

The Eating Disorder-15 is a questionnaire that examines eating behaviors and attitudes over the last week using a frequency scale. The frequency scale ranges from zero to six, zero being “not at all” and six being “all the time”. The lower the number the less the patient participated in the eating disorder behavior or attitude and the higher the number the more the patient participated in the eating disorder behavior over the last week. Table one, two, three, and four summarize the pre and post results of this outcome measure for patient one and two. The following section will summarize the main findings from the eating disorder-15.

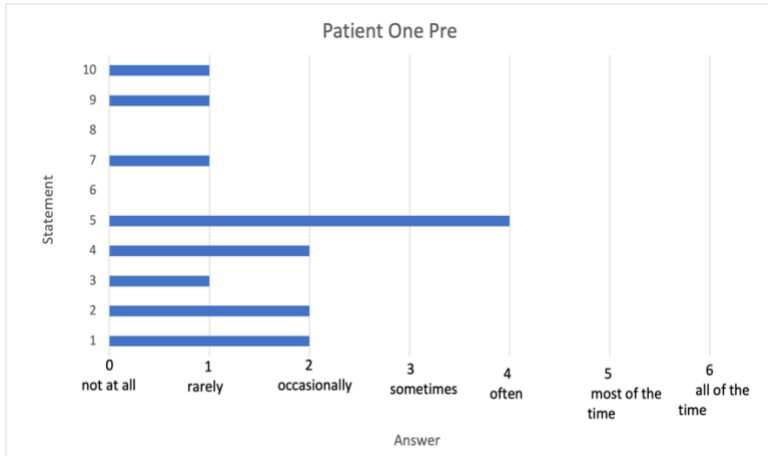
Patient one revealed a change from “occasionally” to “rarely” being worried about losing control over their eating and comparing their body negatively with others after completion of the clothing group. This patient also reported avoiding activities or people because of the way they look “occasionally” which increased to “often”. From pre to post, patient one went from “rarely” to “occasionally” being preoccupied with thoughts of food and eating, feeling distressed about

body shape, feeling worried that other people are judging them as a person because of appearance and weight, and checking body to reassure self about appearance. In avoidance of looking at body, the frequency decreased from “often” to “occasionally” and distress experienced around weight was reported to be “often” at the post-assessment, as it was not answered at the pre-assessment. In the item concerning strict rules around eating, this patient reports “not at all” in both the pre and post.

Patient two reported “all the time” in the pre and post-assessment for comparing body negatively with others, feeling stress about body shape, and worries that other people are judging them as a person because of appearance or weight. Stress surrounding weight decreased from “all the time” to “sometimes” and body checking for reassurance about appearance also decreased from “all the time” to “most of the time”. Worries about losing control overeating shift from “rarely” to “not at all” and avoiding activities or people because of appearance decreased from “most of the time” to “rarely”. Preoccupation with thoughts of food and eating increased from “often” to “most of the time” and avoidance of looking at body because of the way it makes them feel went from “rarely” to “most of the time”. Concerning following strict rules around eating, this patient failed to complete this item in the post-assessment but responded with “all the time” prior to completion of the clothing group.

Table 1

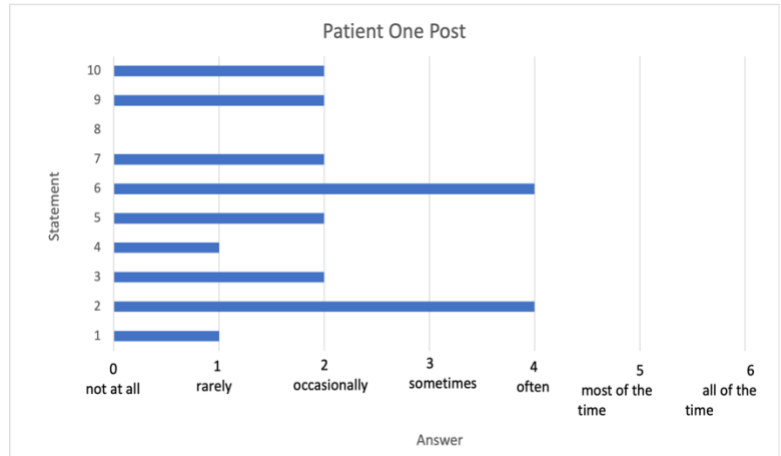
ED-15 questionnaire pre-results for patient one



Note. This table represents the frequency scale results of the ED-15 for patient one prior to completion of the clothing group.

Table 2

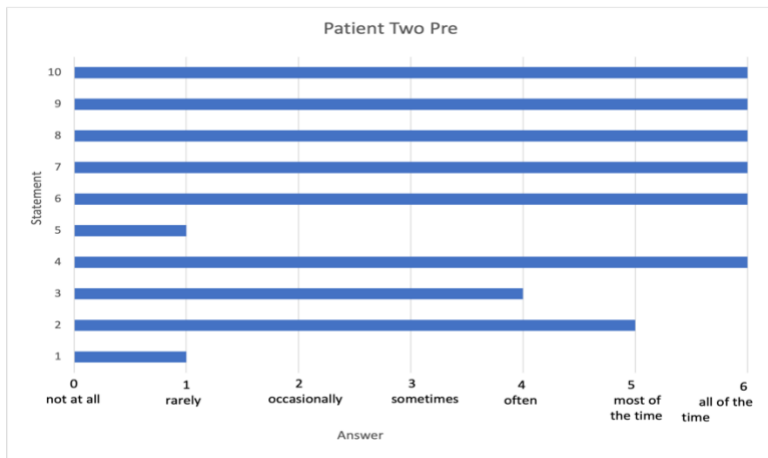
ED-15 questionnaire post-results for patient one



Note. This table represents the frequency scale results of the ED-15 for patient one after completion of the clothing group.

Table 3

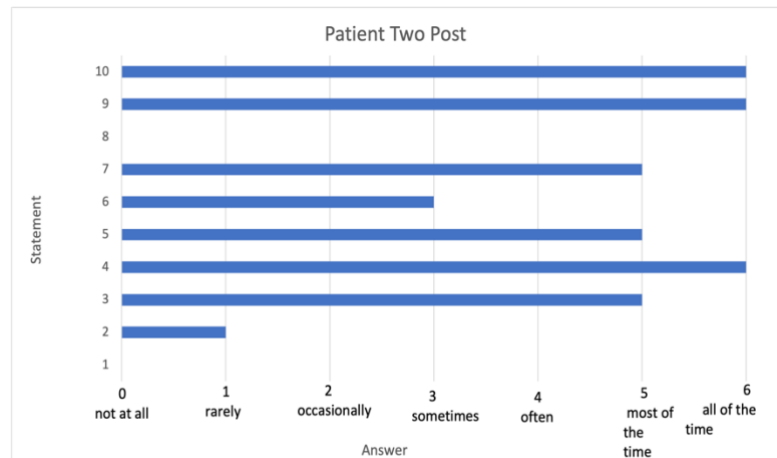
ED-15 questionnaire pre-results for patient two



Note. This table represents the frequency scale results of the ED-15 for patient two prior to completion of the clothing group.

Table 4

ED-15 questionnaire post-results for patient two



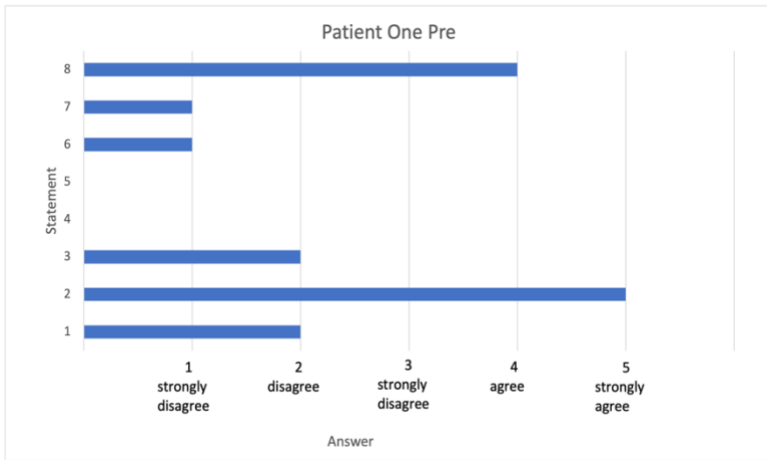
Note. This table represents the frequency scale results of the ED-15 for patient two after completion of the clothing group.

Clothing and Shopping Survey

A Likert scale survey was developed by capstone student to measure the influence of the eating disorder on clothing choices, stress and anxiety experienced while shopping, use of coping strategies while shopping, participation in social activities, and the value placed in being a certain size. Table 5-8 contains the pre and post surveys for both patients. A five-point agreement scale was used for statements one through three and six through eight and a five-point frequency scale was used for statements four through five. The higher the number in the graphs below indicates the patient experiences more clothing and shopping related challenges associated with their eating disorder. Conversely, patients with lower numbers experience less shopping and clothing related challenges.

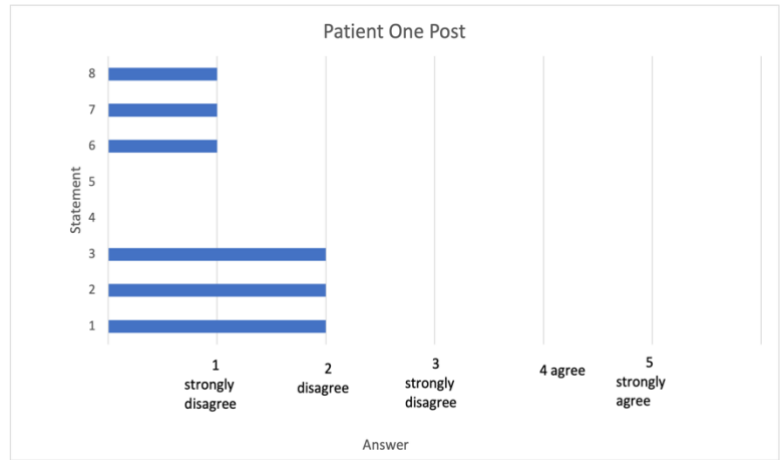
After completion of the clothing group patient one demonstrated a three-point improvement in experience of stress/anxiety while shopping for clothes and difficulty getting ready for social activities because of how they feel about themselves in clothes. A two-point improvement was demonstrated in the use of coping strategies while trying on clothes and a one-point advancement in use of coping strategies while shopping on clothes. No changes were noted in the influence of the eating disorder on clothing choices, experience of stress/anxiety while trying on clothes, level of participation in social activities because of feeling of oneself in clothes, and the value placed on being a certain size.

Table 5
Clothing and shopping pre-survey for patient one



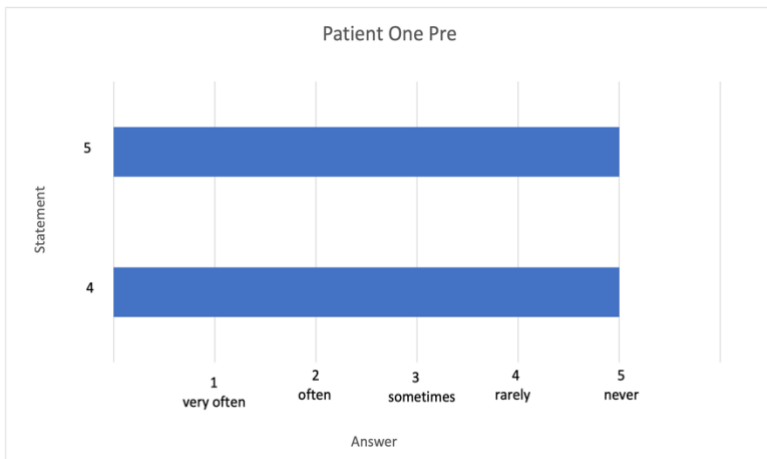
Note. This table represents the agreement scale results on the clothing and shopping survey for patient one prior to completion of the clothing group.

Table 6
Clothing and shopping post-survey for patient one



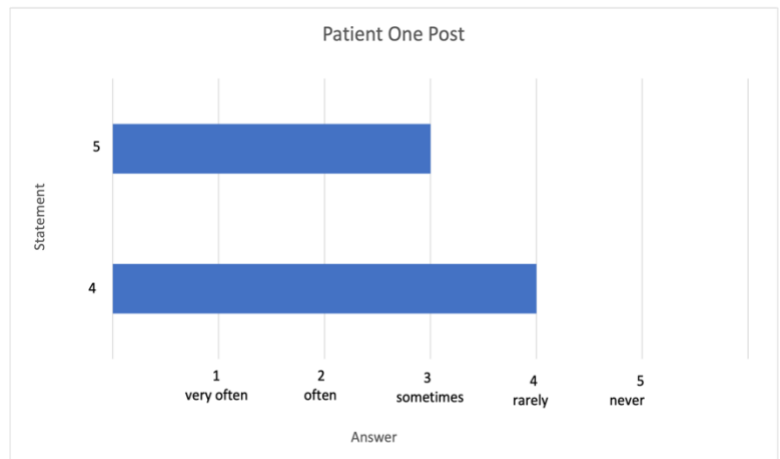
Note. This table represents the agreement scale results of the clothing and shopping survey for patient one after completion of the clothing group.

Table 7
Clothing and shopping pre-survey for patient one



Note. This table represents the frequency scale results on the clothing and shopping survey for patient one prior to completion of the clothing group.

Table 8
Clothing and shopping post-survey for patient one

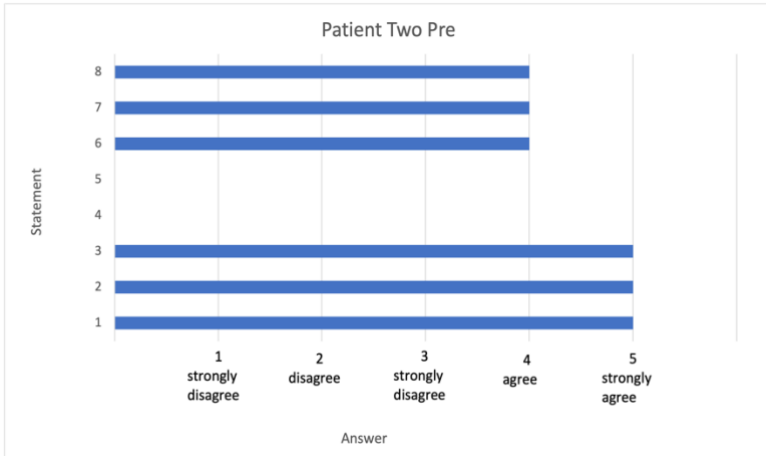


Note. This table represents the frequency scale results of the clothing and shopping survey for patient one after completion of the clothing group.

Patient 2 demonstrated a consistent 1-point improvement in the experience of stress/anxiety while shopping for clothes, the experience of stress/anxiety while trying on clothes, the use of coping strategies while shopping for clothes, and level of participation in social activities because of the feelings of oneself in clothes. No changes were demonstrated in the influence of the eating disorder on clothing choices, use of coping strategies while trying on clothes, value placed on being a certain size, and difficulty getting ready for social activities because of how they feel about themselves in clothes.

Table 5

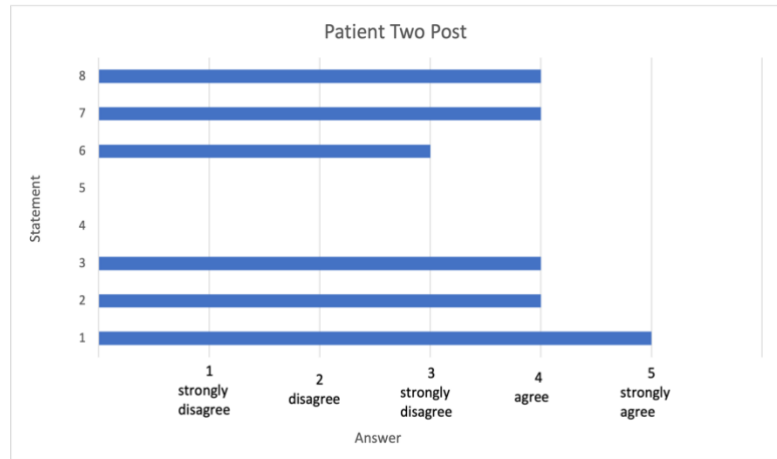
Clothing and shopping pre-survey for patient two



Note. This table represents the agreement scale results on the clothing and shopping survey for patient two prior to completion of the clothing group.

Table 6

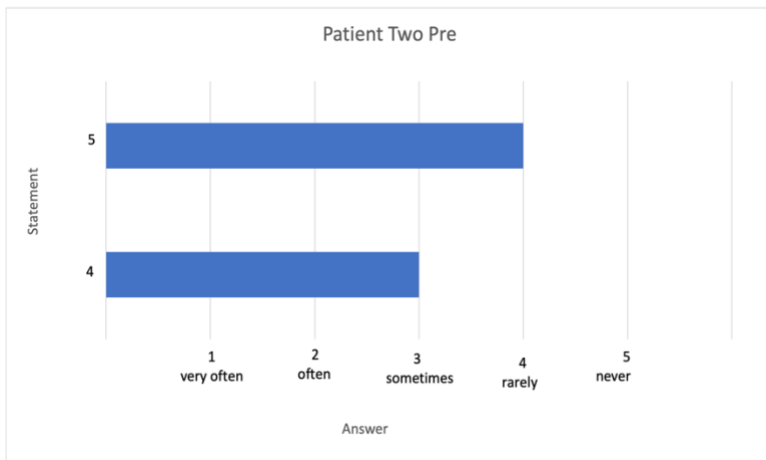
Clothing and shopping post-survey for patient two



Note. This table represents the agreement scale results on the clothing and shopping survey for patient two after completion of the clothing group.

Table 7

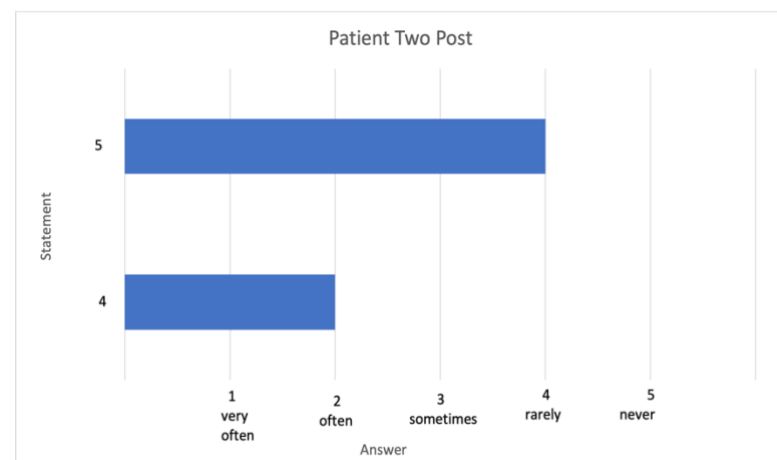
Clothing and shopping pre-survey for patient two



Note. This table represents the frequency scale results on the clothing and shopping survey for patient two prior to completion of the clothing group.

Table 8

Clothing and shopping post-survey for patient two



Note. This table represents the frequency scale results on the clothing and shopping survey for patient two after completion of the clothing group.

Discussion

Main Findings

The following paragraph will summarize and explain any common trends observed between the pre and post surveys of the two patients after completion of the clothing group. Survey results indicate a decrease in overall worries about losing control over eating, experience of stress/anxiety while shopping for clothes, and an increase in preoccupation with thoughts of food and eating and use of coping strategies while shopping for clothes. The experience of stress/anxiety while shopping for clothes and use of coping strategies while shopping for clothes are two concepts that are explicitly addressed in the clothing group in addition to being embedded throughout entire IOP curriculum. The clothing shopping guide was also provided to patients following the clothing group. This guide contains a variety of coping strategies for patients to utilize and structures shopping for patients and caregivers, so they consider all potential triggers and barriers to the experience. All of these factors likely influenced the survey items that indicated improvements. The increase in preoccupation with thoughts of food and eating can be attributed to a variety of reasons. This preoccupation with food is not only a common symptom of eating disorders but as these patients go through recovery, they are required to follow strict meal plans which can even involve supervised meals. At the time of the group, both patients were new to IOP so where they were in their recovery journey may contributed to the increase.

Limitations

There are a few notable limitations to the group implementation and data collection that may have influenced the overall group and results. The insufficient sample size is a barrier as the

results are less reliable and generalizable, as well as were not able to be statistically measured and analyzed. The pilot group was not able to complete the clothing group in its entirety due to time constraints and lacking all program materials. Inadequate research on clothing management for individuals with eating disorders is also a barrier and it is unclear how other professionals in this area of practice address the relationship with clothes. One of the patients missed a portion of the group due to transportation challenges, which likely influenced their outcomes and main takeaways from the group.

Impact and Sustainability Plan

The impact of this capstone project met the needs of the patients and filled a gap in the current programming at the Charis Center. Staff at Charis Center determined the overall need within their patient population as they observed many patients struggle with their relationship with clothing because of an eating disorder. Capstone student worked collaboratively with the site to create the group content, apply for a grant to fund the group, and then assist with the pilot group implementation. The Charis Center now has all of the group content and materials to continue the group with each cohort of IOP patients. Part of the budget in the grant was devoted towards sustainability costs which includes the costs of cleaning the clothes and costs to update the closet and expand clothes to maintain an inclusive wardrobe.

In addition to program development, the goal of advocacy was accomplished. The Charis Center staff members were provided education on the role of occupational therapy in eating disorder recovery and demonstrated growth in their understanding of occupational therapy as evidenced through conversations and interactions. They were also provided with referral options and

education on when it is appropriate to refer ARFID patients to speech or occupational therapy and demonstrated an awareness of when OT services are needed.

The 14-week experience at the Charis Center led the capstone student down a path of personal and professional growth. This experience challenges capstone student to cultivate professional skills of communication and relationship building amongst colleagues. In areas of advocacy, student can now better articulate the distinct role of occupational therapy in eating disorder recovery and clearly advocate to other disciplines in an articulate and professional manner. Student evolved in overall understanding of eating disorder recovery and the often-rigorous treatment approach necessary for these patients. The essential nature of rapport building was constantly demonstrated to student, as it is can be an integral part of patient success.

Conclusion

This capstone project sought to advocate for the role of occupational therapy in eating disorder recovery and assist with program development to address a gap in current programming. Both goals were achieved throughout the 14-week experience and sustainability has been addressed to maintain the group within the adolescent intensive outpatient program. With the high prevalence rate of eating disorders and limited mental health providers trained to address the needs of this population, occupational therapists provide a unique and beneficial perspective to these patients and should be part of the multidisciplinary team to ensure all environmental, psychosocial, and occupational needs are being met. Overall, this clothing group provides patients at the Charis Center a space to improve their relationship with clothing, explore their identity, and how they present to the world through their clothes. Through this, patients are better able to fulfill their roles as students, athletes, sons/daughters, partners, and friends.

Future Direction

Future research is needed to examine the impact eating disorders have on the relationship with clothes. Future occupational therapy students or practitioners are needed in this area to continue advocacy and education efforts on the distinct role of occupational therapy in eating disorder recovery.

References

- Adam, H., & Galinsky, A. D. (2012). Enclothed cognition. *Journal of Experimental Social Psychology, 48*(4), 918-925. <https://doi.org/10.1016/j.jesp.2012.02.008>
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). <https://doi.org/10.1176/appi.books.9780890425787>
- Bishop, K., Gruys, K., & Evans, E. (2018). Women, clothing size, and inequality. *Gender and Society, 32*(2), 180-203. <https://doi.org/10.1177/0891243218756010>
- Brown, C., Stoffel, V. C., & Munoz, J. P. (2019). *Occupational therapy in mental health: A vision for participation*. Second Edition. FA Davis.
- Clark, M., & Nayar, S. (2012). Recovery from eating disorders: A role for occupational therapy. *New Zealand Journal of Occupational Therapy, 59*(1), 13-17.
- D'Amico, M., Jaffe, L., & Gibson, R. W. (2010). Centennial Vision—Mental health evidence in the American Journal of Occupational Therapy. *American Journal of Occupational Therapy, 64*(4), 660-669. <https://doi.org/10.5014/ajot.2010.09180>
- Deloitte Access Economics. (2020). *Social and economic cost of eating disorders in the United States of America*. <https://cdn1.sph.harvard.edu/wp-content/uploads/sites/1267/2020/07/Social-Economic-Cost-of-Eating-Disorders-in-US.pdf>
- Dunn, W., Brown, C., & McGuigan, A. (1994). The ecology of human performance: A framework for considering the effect of context. *The American Journal of Occupational Therapy, 48*(7), 595-607. <https://doi.org/10.5014/ajot.48.7.595>

- Grilo, H. (2017). Psychological and behavioral treatments for binge-eating disorder. *The Journal of Clinical Psychiatry*, 78(1), 20-24.
- Harden, A. J., Butler, S., & Scheetz, M. (1998). Body perceptions of bulimic and nonbulimic groups. *Perceptual and Motor Skills*, 87(1), 108-110.
<https://doi.org/10.2466/pms.1998.87.1.108>
- Jalali-Farahani, S., Amiri, P., Zarani, F., Zayeri, F., & Aziz, F. (2022). Development and validation of the body image scale for youth (BISY). *Journal of Eating Disorders*, 10(136), 1-13. <https://doi.org/10.1186/s40337-022-00657-z>
- Jones, M. G., Lee, T., Chesnut, K., Carrier, S., Ennes, M., Cayton, E., Madden, L., & Huff, P. (2019). Enclothed cognition: putting lab coats to the test. *International Journal of Science Education*, 41(14), 1962-1976. <https://doi.org/10.1080/09500693.2019.1649504>
- Jong, M. D., Schoorl, M., & Hoek, H. W. (2018). Enhanced cognitive behavioral therapy for patients with eating disorders: a systematic review. *Current Opinion in Psychiatry*, 31(6), 436-444. DOI:10.1097/YCO.0000000000000452
- Karl, A. K., Hall, M. L., & Peluchette, V. J. (2013). City employee perceptions of the impact of dress and appearance: You are what you wear. *Public Personnel Management*, 42(3), 452-470. <https://doi.org/10.1177/0091026013495772>
- Locke, L. C., & Pepin, G. (2019). Eating disorders. In C. Brown, V. C. Stoffel, & P. J. Munoz (Eds.), *Occupational therapy in mental health: A vision for participation* (2nd ed., pp. 154-168). FA Davis.

- Lopez-Perez, B., Ambrona, T., Wilson, T. E., & Khalil, M. (2016). The effects of encllothed cognition on empathic responses and helping behavior. *Social Psychology, 47*(4), 223-231.
- Mack, R. A., Stanton, C. E., & Carney, M.R. (2023). The importance of including occupational therapists as part of the multidisciplinary team in the management of eating disorders: a narrative review incorporating lived experience. *Journal of Eating Disorders, 11*(37), 1-8. <https://doi.org/10.1186/s40337-023-00763-6>
- Mack, R. (2019). *Treating eating disorders: An inside look at occupation-based interventions*. American Occupational Therapy Association. <https://www.aota.org/publications/ot-practice/ot-practice-issues/2019/eating-disorders>
- Mental Health America. (2022). *The state of mental health in America*. <https://mhanational.org/sites/default/files/2022%20State%20of%20Mental%20Health%20in%20America.pdf>
- Mason, M. B., Lavendar, J. M. Wonderlich, S. A., Crosby, R. D., Engel, S. G., Mitchell, J. E., Crow, S.J., Le Grange, D., & Peterson, C. B. (2018). Examining a momentary mediation model of appearance-related stress, anxiety, and eating disorder behaviors in adult anorexia nervosa. *Eating and Weight Disorders, 23*, 637-644. <https://doi.org/10.1007/s40519-017-0404-y>
- Muratore, A. F., & Attia, E. (2021). Current therapeutic approaches to anorexia nervosa: State of the art. *Clinical Therapeutics, 43*(1), 85-94. doi:10.1016/j.clinthera.2020.11.006
- National Institute of Mental Health. (2023, January). *Eating Disorders*. NIMH. <https://www.nimh.nih.gov/health/topics/eating-disorders>

Riley Children's Health. (2022). Charis center for eating disorders.

<https://www.rileychildrens.org/departments/charis-center-for-eating-disorders>

Tatham, M., Turner, H., Mountford, V. A., Tritt, A., Dyas, R., & Waller, G. (2015).

Development, psychometric properties and preliminary clinical validation of a brief, session-by-session measure of eating disorder cognitions and behaviors: *The ED-15*.

International Journal of Eating disorders 48(7), 1005-1015. doi: 10.1002/eat.22430

Tiggemann, M., & Lacey, C. (2009). Shopping for clothes: Body satisfaction, appearance

investment, and functions of clothing among female shoppers. *Body Image*, 6, 285-291.

doi:10.1016/j.bodyim.2009.07.002

Trautman, J., Worthy, S. L., & Lokken, K. L. (2007). Body dissatisfaction, bulimic symptoms,

and clothing practices among college women. *The Journal of Psychology*, 141(5), 485-

498. doi: 10.3200/JRLP.141.5.485-498

Vindegaard, N., & Benros, M. E. (2020). COVID-19 pandemic and mental health consequences:

Systematic review of the current evidence. *Brain, Behavior, and Immunity*, 89, 531-542.

<https://doi.org/10.1016/j.bbi.2020.05.048>

Appendix A

Clothing Group Directive

Objective 4: Increase Positive Body Image Growth

WEEK 5: Positive Body Image Growth

Main IOP Program Areas:

1. Demonstrate ability to reduce ED thoughts and behaviors
2. Identity Growth and Empowerment
3. Communication Growth
4. Positive Body Image Growth

WEEK 5, THURSDAY, HOUR 1

Thursday Group: 5-minute Emotional Check-in

Thursday Group: 55-15-minute Wall process

Group: 45-minute Clothing selection and self-expression

Title: Clothing: Dress the Part

Group: 45 minutes: Enclothed Cognition Psycho-ed Group

Objective

1. Reduce subjective distress around clothing selection. Identify and express values through clothing.
2. Improve overall relationship with clothing and decrease body image distortion.

Materials

Provider:

1. *Dress the Part Psycho Ed* provider and patient handout
2. Image Examples for Enclothed Cognition.
3. Laptop to present 2 educational videos (can connect it to the TV)
4. The 3 mannequins dressed in sample outfits set aside in group room.
5. Clothing rack with available clothes to select from.

Group Members:

1. *Dress the Part Psycho Ed* provider and patient handout

Description of Activity

Step 1: 10 minutes

- a. Introduce the concept of enclothed cognition by viewing the video: "Enclothed Cognition" 2-minute video: <https://youtu.be/MtPPaCBJdw0>
- b. Discuss the following questions:
 1. Based on the video, how does what you wear, influence how you think and feel about yourself?
 2. What impressions do you believe others might have about you based on what you wear?

3. What impressions do you want people to receive based off what you wear?
(Consider your values and identity. Are they reflected in your wardrobe)
- c. Review the following photos and discuss the point of enlothed cognition as it relates to the photos below.

Step 2: 15 minutes

- a. Introduce how clothing and sizing is subjective and play the video below.
 - i. “Why Women’s Clothing Sizes Don’t Make Sense” 4.5-minute video
https://ed.ted.com/best_of_web/IdnOg8Vt
- b. Discuss the following questions:
 1. What surprised you in learning about how our clothing sizing system originated and evolved?

Step 3: 20 minutes

- c. Direct attention to the already dressed mannequins and discuss the following questions below.

Consider the following questions:

1. How might a person feel in the outfit they are wearing?
2. What impressions do you have of these the individual based on the outfit?
3. What do you think these individuals value?
4. What personality or behavioral traits might this person have by what they wear?
5. How did your perception change of this person based on what was worn?

d. Introduce the activity for the second hour and explain:

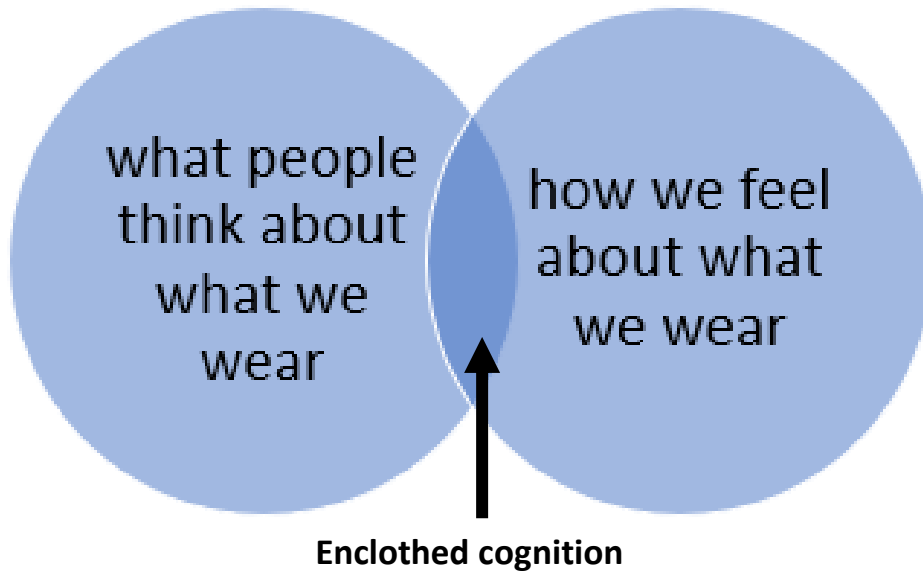
- xvi. Encourage patients to select clothing items that best represent who they are, their values, and how they wish to express themselves to others.
- xvii. The patients will select at least 1-2 outfits—depending on group size—and will identify a mannequin to wear the outfit.
 1. If 6-8 patients, they will share a mannequin and an outfit change will be conducted during the second hour.
- xviii. During snack, one facilitator will dress the mannequins for the second hour.

Homework: none

Dress The Part

Enclothed cognition

Enclothed cognition examines the influence that clothing has on our thoughts and feelings. Beyond just protecting our bodies from the elements, clothing can influence how we think, feel, and interact with others every day. Clothing communicates non-verbal messages through color, fit, neatness, and environmental/social appropriateness.



Clothing selection and clothes shopping

1. How does ED show up when shopping for clothes?

2. Identify possible ED thoughts as it concerns clothing selection, sizing, and trying on clothes. Write them here:

WEEK 5, THURSDAY, HOUR 2**Group: 30-Minute Enclothed Cognition Psycho-ed Group****Title: Dress the Part: Mannequin Clothing Intervention.****Objective**

1. Reduce subjective distress around clothing selection. Express values and identity through clothing.
2. Improve overall relationship with clothing and decrease body image distortion.

Materials**Provider:**

1. Enclothed Cognition Part 2 discussion questions
2. Mannequins and selected outfits.

Group Members:

1. Enclothed Cognition Part 2 discussion questions

Description of Activity**Step 1:**

- a. Mannequins should be dressed and ready with patient selected outfits during break.
- b. Display the mannequins and ask for volunteer group members to explain the reasons behind the outfit selections. Answer first 4 questions on the handout.
- c. Encourage group observations of outfit and then repeat process for all outfits.

Step 2:

- a. If additional outfit changes are needed, both group facilitators can prepare the mannequins in the next outfits.
- b. Repeat step 1 and encourage group dialogue.

Homework

None.

Mannequin Activity Questions for Discussion:

1. What influenced you to select the outfit you selected?

2. What parts of your personal values and identity are represented in this outfit?

3. Would this be an outfit you would be able to wear today? Why or why not?

(Would your ED prevent you from making this clothing choice?)

4. Did you identify another block on your “wall” during this exercise?

WEEK 5, THURSDAY, HOUR 3**Thursday Group: 10-Minute Break****Thursday Group: 20-Minute Enclothed Cognition Part 2****Thursday Group: 40-Minute Wall Process action steps, support, and coping skills.****Group: 20-Minute Enclothed Cognition Part 2 continued.****Title: Dress the Part: Enclothed cognition group****Objective**

1. Reduce subjective distress around clothing selection. Express values and identity through clothing.
2. Improve overall relationship with clothing and decrease body image distortion.

Materials**Provider:**

1. Mannequins if still needed for outfit processing and reflection.
2. Clothing Selection and Shopping Plan handout
3. Art activity reminder half-slip (to handout to patients).

Group Members:

1. Clothing Selection and Shopping Plan handout
2. Art activity reminder half-slip.

Description of Activity**Step 1:**

- a. Complete remaining processing of outfits not completed in the second hour.

Step 2:

- b. Review the last 2 hours of group exploration:
 - xix. Concept of enclothed cognition
 - xx. Flaws and subjectivity of the sizing industry
 - xxi. Use of clothing as self-expression and an extension of your values and taste.
 - xxii. How to select clothing that represents your personal identity and values rather than modifying yourself to the clothing.
- c. Introduce clothing selection and shopping plan handout. Briefly touch on the handout items. Assign plan for homework.

***Remind patients to bring in an item of clothing that: No longer fits, or triggers ED thoughts and behaviors. Inform patients they will be cutting up the piece of clothing for art activity.**

Homework

Complete the clothing selection and shopping plan. Share with parents.

Appendix B

Clothing Shopping Guide



Clothing Shopping Guide

This guide is designed to serve as a reminder of all the strategies and tools you can use to prevent or manage stressful thoughts and make the shopping process easier.

Before you go shopping:

- Get rid of old clothes that no longer fit or may be triggering or consider donating clothing. Avoid handing clothes down in family to avoid comparison.
- Collaborate with family members and therapist to decide if online shopping or in-person shopping is more appropriate.
- Make a list of clothes that you need and where you plan to go.
- If time and schedule permits, plan to just look around the first time you go shopping.
- Plan to go during a less busy time of the day and bring clothes home to try on.

While you are shopping:

- Check in with yourself.
 - How are you feeling? Name one emotion you are feeling (excited, anxious, nervous, happy, sad, angry, calm).
- Bring a support person, if possible.
 - Find a family member or friend who can tag along (preferably someone who is not there to shop for themselves).
 - Consider having the support person use small pieces of masking tape to cover sizes when trying on clothes.
 - If online shopping is the best option, have your support person take measurements without revealing the numbers to determine the appropriate size and consider purchasing a few sizes to account for variations.

- Remember the truth about sizing.
 - There are no sizing standards in the clothing industry so sizing may change significantly depending on the brand or store.
 - Size holds no true meaning or value and is not a reflection of who you are as an individual.
- Focus on the function of clothes.
 - Clothes are simply items used to cover the body.
 - Try to find a balance between clothes that are comfortable and fit appropriately.
 - We are not meant to fit clothes; clothes are meant to fit us.
- Use a coping strategy as needed.
 - 5,4,3,2,1 grounding
 - Name 5 things you see
 - Name 4 things you hear
 - Name 3 things you feel
 - Name 2 things you touch
 - Name 1 thing you smell
 - 5-finger breathing
 - Stretch out one hand so you have space in between all your fingers and use the pointer finger of your other hand to trace your fingers starting with your thumb.
 - As your index fingers goes up to the tip of your thumb, take a slow deep breath in and as you bring your index finger down towards your pointer finger, breathe out.
 - Repeat on all fingers.
 - Object observation grounding
 - Find an object in the room.
 - Use your senses and think about all the details and different parts of this object (color, shape, texture, smell, noise, size).
 - Now think about the purpose of the object, where it was made, where it came from, who put it there, how did they put it there, how long it has been there, and who has used it.
 - Consider any stories related to this object or make up a story of your own.

- Affirmations for Shopping:
 - My worth is not defined by the size of my clothes.
 - I am proud of who I am.
 - I trust myself and my body.
 - I will be kind to myself.

Appendix C

Eating Disorder-15

ED-15

This questionnaire considers your eating attitudes and behaviours over the last week. Please complete this measure by ticking the appropriate answers for all items.

		Not at all	Rarely	Occasionally	Sometimes	Often	Most of the time	All the time
	Over the past week, how often have I:							
1	Worried about losing control over my eating.	0	1	2	3	4	5	6
2	Avoided activities or people because of the way I look	0	1	2	3	4	5	6
3	Been preoccupied with thoughts of food and eating	0	1	2	3	4	5	6
4	Compared my body negatively with others'	0	1	2	3	4	5	6
5	Avoided looking at my body (e.g., in mirrors; wearing baggy clothes) because of the way it makes me feel	0	1	2	3	4	5	6
6	Felt distressed about my weight	0	1	2	3	4	5	6
7	Checked my body to reassure myself about my appearance (e.g., weighing myself; using mirrors)	0	1	2	3	4	5	6
8	Followed strict rules about my eating	0	1	2	3	4	5	6
9	Felt distressed about my body shape	0	1	2	3	4	5	6
10	Worried that other people were judging me as a person because of my weight and appearance.	0	1	2	3	4	5	6

If you have never used any of the following behaviors, please respond with N/A.

For those that you have used, over the past week, how many times have you:		<i>Number of times</i>
a	Binged (felt out of control of your eating, and eaten far more than a person normally would at one go)	
b	Vomited to control your weight (whether you had to make yourself sick or not) *	
Finally, on how many days in the past week have you:		<i>Number of days</i>
c	Used laxatives to control your weight or shape	
d	Restricted or dieted in order to control your weight	
e	Exercised hard in order to control your weight	

* i.e., Using your fingers or medicines to make yourself sick, or vomiting without such aids

Appendix D

Clothing and Shopping Survey

1) My eating disorder influences the way I dress.

- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

2) I experience stress/anxiety while shopping for clothes.

- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

3) I experience stress/anxiety while trying on clothes.

- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

4) I use coping strategies while shopping for clothes.

- A. Very often
- B. Often
- C. Sometimes
- D. Rarely
- E. Never

5) I use coping strategies while trying on clothes.

- A. Very often
- B. Often
- C. Sometimes

- D. Rarely
- E. Never

6) I participate less in social activities because of how I feel about myself in my clothes.

- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

7) I find value in being a certain size.

- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

8) I have trouble getting ready for social activities because of how I feel about myself in my clothes.

- A. Strongly agree
- B. Agree
- C. Neither agree nor disagree
- D. Disagree
- E. Strongly disagree

Appendix E

Occupational Therapy in Eating Disorder Recovery

OCCUPATIONAL THERAPY

Occupations are activities that people want to do, need to do, or are expected to do that bring meaning and purpose to life.

OT

is defined as "the therapeutic use of everyday life activities (occupations) with individual's or group's for the purpose of enhancing or enabling participation in roles, habits, and routines in home, school, workplace, community and other settings."

OT's utilize a strength-based and holistic approach to address health, well-being, and quality of life. With our unique and client-centered lens, OT's are educated to treat patients across the lifespan in a variety of settings (hospitals, home health, outpatient, early intervention, skilled nursing, mental health, schools, etc.).

OT in ED recovery

- Build healthy habits and routines
- Media literacy
- Mealtime support
- Life balance
- Meal preparation, ordering food, eating with others, clothing shopping,
- Work, self-care, leisure participation
- Healthy coping skills
- Return to school/work
- Emotional regulation
- Mindfulness practices
- Sensory processing
- Social participation (interest checklist, relationship building)
- Role competence
- Relapse prevention
- Environmental adaptations
- Patient advocacy

Appendix F
Feeding Therapy PowerPoint

Feeding Therapy

— Sydney Larson, OTS —

Feeding:

- Feeding, eating, and swallowing are complex activities that require effective, coordinated function of the motor, sensory, and cognitive systems.
- Feeding involves the peripheral nervous system, oropharyngeal mechanisms, cardiopulmonary system, gastrointestinal tract, craniofacial structures, and musculoskeletal system.

(Goday et al., 2019)

Prevalence of Feeding Difficulties:

- Approximately 20-50% of typically developing children and 70-89% of children with developmental disabilities experience some level of challenges with feeding.
- ARFID is more common in children with Autism Spectrum Disorder (ASD).
 - Should be considered through a multidisciplinary lens to account for oral motor and sensory aspects to feeding.

(Benjasuwantep et al., 2013; Farag et al., 2021)

What is Feeding Therapy?

- An individualized therapy approach for children and adolescents with impaired oral intake to improve relationship with food, grow acceptable food range, and improve oral motor skills.
- Interventions utilize a behavioral modification approach, sensory interventions, oral motor development approach, family interventions, and relationship-based interventions.
 - Consider the physiological, environmental, psychosocial, and cultural factors of the child.
- Education for patients & family on sensory processing challenges to assist with feeding and daily function.
- Improve overall mealtime routines.

(Clark et al., 2007; Howe & Wange, 2013)

Who Provides Feeding Therapy?

- Occupational Therapy Practitioner and Speech Language Pathologists are trained to provide feeding and swallowing therapy.
-

Clinical Problems Indicating a Referral is Needed:

- Autism diagnosis with sensory challenges
- Texture challenges with food or sensitive to the color, shape, smell or taste of food
- Gagging/vomiting
- Slow or inefficient chewing
- Fatigue during meals
- Avoid certain textures
- Food falling from mouth
- Coughing/choking
- Refusing variety of textures
- Food range of less than 20 foods

(Children's Hospital of Orange County, n.d.)

Components	Symptoms	Referral
Psychological	Food avoidance Disruption in relationships Disruption in social functioning Symptoms of anxiety & OCD Fear surrounding food	n/a
Nutritional	Nutritional deficiency Weight loss	n/a
Sensory	Texture challenges with food or sensitive to the color, shape, smell or taste of food Refusing certain textures	OT/Speech
Motor	Gagging/vomiting Fatigue during meals Coughing/choking	OT/Speech

Referral Information:

- Riley Hospital- Indianapolis, IN
 - Send in referral through cerner for an OT eval and treat
 - Can receive feeding eval through the feeding team or outpatient therapy
- Children's Theraplay- Carmel, IN
 - Anyone through the age of 13
 - Requires a physician's referral, can refer online
- Feeding friends- Indianapolis, IN
 - Anyone through the age of 18
 - Send in referral from physician

How Can You Use This Information?

- Make appropriate referrals/advocate to physicians to make referrals.
 - Ensure all potential barriers to eating, feeding, and swallowing are being evaluated and treated.
- Educate caregivers on what feeding therapy is and why their child may benefit from this type of therapy.

References

Benjasuwantep, B., Chaithirayanon, S., & Eiamudomkan, M. (2013). Feeding problems in healthy young children: Prevalence, related factors, and feeding practices. *Pediatric Reports*, 5(10), 38-42. doi:10.4081/pr.2013.e10

Children's Hospital of Orange County. (n.d.). *Feeding Therapy*. CHOC. Retrieved March 31, 2023, from <https://www.choc.org/programs-services/rehabilitation/frequently-asked-questions-feeding-therapy/>

Clark, G. K., Avery-Smith, W., Wold, L. S., Anthony, P., Holm, S. E., Clark, G. F., Roberts, P., Cox, M. S., Kurfuerst, S. T., Lynch, A. K., & Schuberth, L. M. (2007). Specialized knowledge and skills in feeding, eating, and swallowing for occupational therapy practice. *American Journal of Occupational Therapy*, 61(6), 686-700. <https://doi.org/10.5014/ajot.61.6.686>

Farag, F., Sims, A., Strudwick, K., Carrasco, J., Waters, A., Ford, V., Hopkins, J., Whittingum, G., Absound, M., & Kelly, V. (2021). Avoidant/restrictive food intake disorder and autism spectrum disorder: Clinical implications for assessment and management. *Developmental Medicine & Child Neurology*, 64(2), 176-182. DOI: 10.1111/dmch.14977

Goday, P. S. Huh, S. Y., Silverman, A., Luken, C. T., Dodrill, P., Cohen, S. S., Delaney, A. L., Feuling, M. B., Noel, R. J., Gisel, E., Kenzer, A., Kessler, D. B., Camargo, O. K., Browne, J., & Phalen, J. A. (2019). Pediatric feeding disorder- Consensus definition and conceptual framework. *J Pediatr Gastroenterol Nutr*, 68(1), 124-129. [10.1097/MPG.0000000000002188](https://doi.org/10.1097/MPG.0000000000002188)

Howe, T., & Wang, T. (2013). Systematic review of interventions used in or relevant to occupational therapy for children with feeding difficulties ages birth-5 years. *The American Journal of Occupational Therapy*, 67, 405-412. <https://doi.org/10.5014/ajot.2013.004564>

Appendix G

Feeding Referral Handout

Clinical Signs Indicating a Feeding Referral is Necessary

An Autism diagnosis with sensory challenges
Texture challenges with food or sensitivity to the color,
shape, smell, or taste



Gagging/vomiting
Slow or inefficient chewing
Fatigue during meals
Avoidance of certain textures
Food falling from mouth
Coughing/choking
Refusing variety of textures
A food range of less than 20 foods



Referral Information

Riley Hospital- Indianapolis, IN

317-944-8211

Send in physician's referral through Cerner for OT eval and treat

Email Jenna Trost jtrost@iuhealth.org to get patients in sooner if necessary

Children's Theraplay- Carmel IN

317-872-4166

Accept patients through the age of 13 years old

Requires a physician's referral

Feeding Friends- Indianapolis, IN

317-284-1166

Accept patients through the age of 18 years old

Requires a physician's referral