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EXPERIENCES OF CAREGIVERS WHO HAVE CHILDREN IDENTIFIED AS
PICKY EATERS FOLLOWING PEER-BASED FEEDING GROUPS

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Experiences of Caregivers Who Have Children Identified as Picky Eaters

Following Peer-Based Feeding Groups

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Abstract

Picky eating affects 25% of typical developing children in the United States, but has a larger impact on families. Currently, there is limited research to enable occupational therapists to discern the best therapeutic interventions for this unique population of children. The current study used a qualitative case study methodology to explore the experiences of caregivers following their children's engagement in a peer-based feeding group. Analysis of interviews identified two general themes among caregivers: challenges with having children who are picky eaters, and benefits from their children's participation in peer-based feeding groups for both their children and themselves. Caregivers identified stressors during mealtime, societal isolation, and child refusal to try new foods as common challenges. Mutual understanding from others, a shift in accountability, and a sense of relief were identified as benefits following their children's participation in peer-based feeding groups. Results suggest that peer-based feeding groups offer both caregivers and children substantial benefits in overcoming common challenges associated with their children's picky eating.

Keywords: picky eater, peer-based feeding groups, occupational therapy

Experiences of Caregivers Who Have Children Identified as Picky Eaters Following Peer-based Feeding Groups

Approximately 25% of typically developing US children who demonstrate difficulty with feeding are labeled as picky eaters (Aviram, Atzaba-Poria, Pike, Meiri, & Yerushalmi, 2015; Stapleton, Griffiths, & Sherriff, 2012). Although there is no consensus for the term, picky eaters are viewed as those rejecting or refusing new or non-preferred foods (Taylor, Wernimont, Northstrone, & Emmett, 2015; van Horst, 2012). Assessment and intervention for picky eaters has historically focused on quantifying and increasing the number of foods the child will eat. However, it is also important to consider the behaviors and attitudes of the child and family at the table (Boquin, Moskowitz, Donovan, & Lee, 2014). Stress experienced by both the caregivers and child during mealtime impacts all aspects of feeding. As modifications at the table are made and a child continues to limit his or her diet, the intake of healthy foods often declines leading to secondary medical concerns such as weight gain, diabetes, or cardiovascular diseases (Haszard, Skidmore, Williams, & Taylor, 2014; van der Horst, 2012).

Caregiver involvement is often necessary or expected when preparing meals for and eating with a child. This social engagement of feeding and eating are considered co-occupations due to the dynamic interaction between the caregiver and child (American Journal of Occupational Therapy, 2014). That is, the performance of one has a direct impact on the performance of the other. When a child is a picky eater, both the caregiver and child can experience frustration and overall stress leading to conflict and dissatisfaction during mealtimes. As a child exhibits continued refusal behaviors, caregivers' feelings of anger and stress can be exacerbated leaving caregivers with limited strategies to address these behaviors and an inability to support healthy eating (Goh & Jacob, 2012; Mitchell, Farrow, Haycraft, & Meyer, 2013).

Researchers have found that caregivers experience secondary gains and support from group interactions through the shared experiences of other caregivers (Mitchell et al., 2013). However, the overall caregiver experience following their children's participation in peer-based feeding groups is not fully explored in the literature. This researcher sought to answer the following primary research question: What are the experiences of caregivers who have children identified as picky eaters following peer-based feeding groups? A qualitative case study methodology was used to explore the experience of caregivers following their children's engagement in a 10-week therapeutic peer-based feeding group in a Midwestern outpatient occupational therapy clinic. Gaining a better understanding of caregivers' experiences will allow therapists to tailor intervention strategies to address the needs of caregivers while also addressing children's picky eating behaviors.

Literature Review

Feeding difficulties can occur beginning in infancy and last through adulthood. The presentation of these difficulties may vary for each child, but the need for oral intake and a healthy caregiver-child interaction remains consistent (Chao & Chang, 2017; Ellis, Galloway, Webb, Martz, & Farrow, 2015). Many caregivers express concern about negative behaviors at the table such as crying, pushing foods away, limited intake, or refusal to come to or stay at the table (Boquin et al., 2014). These behaviors begin to impact healthy food choices made by the child, prompting even greater caregiver concern (Bassett et al., 2008). This literature review will look closer at the dynamics of feeding including: the characteristics of a picky eater, strategies for introducing new foods, caregiver-child interactions during mealtime, developmental stage of the child, use of group therapy in other areas, and the importance of understanding the experience of the caregiver following therapeutic peer-based group intervention for their child.

Identification of Picky Eaters

There is no standard definition of picky eating. The medical community is currently working to better define what characterizes children as picky eaters as several common traits have been identified. Picky eating is often described as consuming a limited variety of foods including low intake of healthy options such as fruits and vegetables (Boquin et al., 2014; Goh & Jacob, 2012). Common behaviors associated with picky eating include unwillingness to try new foods, preference for repeatedly eating the same foods, and consuming a limited number of foods from each food group (Boquin et al., 2014). Picky eating is not only classified by the foods that the child eats, but also the child's behavior and attitude at the table (Boquin et al., 2014). Individuals who are selective with food choices may be labeled as having neophobia (rejection of novel or unknown foods) or picky eating (rejection of large variety of foods either familiar or novel) (Lafraire, Rioux, Giboreau, & Picard, 2015). Recent changes in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) offers a new diagnostic category entitled avoidant/restrictive food intake disorder (ARFID) (American Psychiatric Association, 2013). This diagnosis applies to children who meet one of following four categories: lack of weight gain, nutritional deficiency, need for supplemental feeding, or interference of psychosocial functioning. Exclusions from this diagnosis include: medical complications impacting feeding, food insecurity or cultural choice, and body image (anorexia or bulimia). Individuals with ARFID may demonstrate a lack of interest in eating, avoidance of foods based on sensory characteristics, or concerns about the potential adverse reaction when eating (Fisher et al., 2014; Williams, Hendy, Field, Belousov, Riegel, & Harclerode, 2015). Regardless of the diagnosis used to identify a child, picky eating can cause an increase in caregiver stress as well as nutritional concerns for the child.

Child-Caregiver Interactions

Mealtime is an activity frequently shared by the caregiver and child, offering opportunities such as social communication, modeling of caregiver eating behaviors at the table, and exposure to new and sometimes healthier food choices (Bergmeier et al., 2016). Families who implement a structured mealtime and promote mealtime as a positive experience for the child exhibit less stress, especially with the presentation of new or non-preferred foods (van der Horst, 2012; Haszard et al., 2015). Initiation of a healthy mealtime at an early age can have a long-term, positive impact for the entire family (Larson, Wang, Berge, Shanafelt, & Nanney, 2016; Watts, Berge, Loth, Larson, & Neumark-Sztainer, 2018). Although research supports this structure, societal changes such as work schedules and after school activities have decreased the number of family mealtimes and meals prepared in the home (Aviriam et al., 2015; Thompson, Cummins, Brown, & Kyle, 2016). This societal transition impacts mealtime structure, reduces the opportunities for interaction between the caregiver and child, and increases foods presented out of convenience, reducing opportunities for exposure to new or non-preferred foods (Fulkerson, 2018).

Caregivers of picky eaters must encourage greater oral intake to increase the volume or variety of foods their child is willing to accept, while supporting the child's craving for control over their preferred foods (Johnson et al., 2015; Power, Bindler, Goetz, & Daratha, 2010). Children's behaviors have a direct impact on the mood of their caregivers, as well as affecting food choices presented and the feeding process (Frankel et al., 2015; Kerzner et al, 2015). Caregivers often 'give up' on presenting new foods or begin to make contingencies as their children increasingly behave negatively or demonstrate complete refusal (Alm, Olsen, & Honkanen, 2015; Goh & Jacob, 2012; Johnson et al., 2015). To relieve stress, caregivers begin

to shift toward foods prepared in a specific way, the use of distraction such as the television, or avoidance of non-preferred foods to prevent or decrease the stress during mealtime (Boquin et al., 2014). When a child does not respond positively to these strategies and attempts, caregivers' stress continues to rise.

A strained relationship between caregivers and their children may inadvertently reinforce their children's negative behaviors. Behavioral patterns such as refusal to come or stay at the table, throwing or spitting out foods, significant reduction in volume, or an increase in anxiety during mealtime are often traits displayed by a picky eater that impact caregivers' responses (Mascola, Bryson, & Agras, 2010). Chao and Chang (2015) found a lack of caregiver-child interaction and inappropriate engagement with a caregiver were more common in children identified as picky eaters. When a child demonstrates difficulty with caregiver engagement, acceptance of foods may not be established even with continuous attempts. Because patterns of picky eating seldom improve without intervention, additional support may be needed to relieve stress and reestablish a mealtime routine (Stapleton et al., 2012).

Weight can also be negatively affected while attempting to change feeding routine or type of food presented. A push for new foods and structured mealtime may increase behavioral reactions of refusal, leaving caregivers to encourage volume and potentially push too many daily calories of unhealthy food options (Antoniou et al., 2015; Farrow, Haycraft, & Blissett, 2015). The opposite is true for caregivers who have children identified as underweight. The stress of attempting to increase their children's caloric intake is a daily concern and often a challenge to complete successfully. Due to the heightened stress level of caregivers, releasing control and allowing children to make food choices can be difficult (Mitchell et al., 2013). These emotions can leave caregivers having a stronger desire to encourage their children to eat more in order to

improve nutrition and gain weight (Johnson et al., 2015). This daily push impacts the caregiver-child relationship, mealtime, overall oral intake, and overall weight gain. The stress and impact on this relationship may be better understood through the caregivers' experiences of the daily struggles feeding their children.

Strategies to Introduce New Foods

Techniques used to present new foods to children who are picky eaters vary based on the program and provider as well as the caregiver-child relationship (Holley, Farrow, & Haycraft, 2016). Most techniques utilize a variation of mealtime structure, an integration of sensory strategies with food presentation, and rely on external or social influences to support the child and caregivers during introduction of new or non-preferred foods.

Development of a healthy mealtime routine is often the first step in the presentation of foods. Creating a structured mealtime includes limiting foods between meals and addressing the dynamic interaction between caregiver and child at the table. Changes may include reducing caloric drinks, limiting access to foods, and establishing consistent expectations during the mealtime (Taylor et al., 2015). Structure around a meal may also be implemented during meal preparation. That is, time spent in preparation and during mealtime allows modeling by others and sets the social expectation for all family members allowing for a sense of participation and often success (Bergmeier et al., 2016).

There are many sensory characteristics of foods that impact children's acceptance. A younger child may initiate sensory engagement with foods through visual exploration (what is the shape and color?). However, there appears to be a transition to tactile exploration of foods (how does it feel or how will it change in my mouth?) prior to adulthood (Dovey et al., 2012). For example, vegetables were found to be more difficult to accept for adults due to the texture

whereas children may reject vegetables based on look (Alm et al., 2015). Visual exposure to increase tolerance of foods can be achieved through: cooking with the child, presenting a variety of foods on the table during mealtime, or caregiver modeling while eating the foods (Dovey et al., 2012; van der Horst, 2012).

Involving the child in food preparation allows for increased exposure to foods using a variety of sensory input including the look, touch, smell, and taste of both new and preferred foods (Lafraire et al., 2016). The child is able to experience foods in their natural form during initiation of the preparation and see all the changes that occur as the food is cooked (Coulthard, Palfreyman, & Morizet, 2016). With increased exposure to foods, anxiety associated with that food often decreases (Chao & Chang, 2017).

The use of social rewards is often used to increase motivation for the child as well as address the behavioral challenges that impact the presentation of new food. Cooke et al. (2011) explored the differences between acceptance of a non-preferred food following multiple exposures alone and multi-exposure plus a social reward. The researchers found that social reinforcement and positive praise combined with repeated exposure was necessary to sustain a long-term behavioral change. These social rewards may be in the form of a physical object or praise from others. Physical rewards should be based on the motivation of the child. Praise and modeling can be successful with either peers or caregivers, both were found to influence the decision of a child when trying a new food (Holley, Haycraft, & Farrow, 2014). Moments of social engagement may have a secondary benefit for both the caregiver and child to improve their relationship during the mealtime.

Caregiver strategies to influence exposure and acceptance of new foods may have an adverse effect if not monitored appropriately. Caregivers may use pressure to encourage

consumption of new food, desired volume of preferred foods, or greater variety of the foods presented. However, children often have a negative reaction to pressure when used to increase the volume of food, even in the absence of hunger (Ellis et al., 2016; Farrow et al., 2015; Frankel et al., 2015). For example, caregivers can negatively impact their children's willingness to consume a wider variety of foods stating that their children will 'like' a food when he or she says he or she 'doesn't like' a food (Wiggins, 2014). When caregivers do not understand the impact of their verbal and social interactions, they may inadvertently continue to negatively influence their children's eating patterns.

Modification of foods or food presentation may be necessary to provide the 'just right' challenge for the child. This initial exposure offers children preliminary experiences with food through engagement without consumption. Modifications may include: balancing the presentation of preferred and non-preferred foods on the plate, recognition of the sensory characteristics of the foods presented, and integration of mealtime structure to support the child's success and engagement with the foods. Each step may need multiple exposures to begin to increase tolerance. Caregivers providing modification and strategies for the introduction of new foods have increased success with their child's acceptance (Lafraire et al., 2016).

Developmental Needs of the Child

A child's developmental and social needs vary throughout childhood and adolescence. Caregiver interactions and engagement with their child often predict the child's interactions with peers (Chang, Shaw, Shelleby, Dishion & Wilson, 2017). With a younger child (2 to 6 years old), maternal modeling of trying new foods had a significant impact on desire, enjoyment, and responsiveness to new foods (Palfreyman, Haycraft, & Meyer, 2015). Developmentally, as children enter adolescence, they seek independence and begin to transition away from caregiver

control (Power et al., 2010). Due to this transition, peer interaction becomes a primary means for children to gain skills. Alm et al. (2015) found a shift during adolescence as children would rather argue with their caregiver about eating a non-preferred food than engage with the food. This change impacted social skills and attitudes as many children worry about how his or her condition affects peer interactions such as visiting a friend or going out to eat (Ruggeri, Luan, Keller, & Gummerum, 2018; Thompson, Cummins, Brown, & Kyle, 2015). Wildes, Zucker, and Marcus (2012) found one of the most important aspects for many adults who are picky eaters was the social consequences of their picky eating with peers.

As children seek autonomy from his or her caregivers during adolescence, the caregivers' focus may include an increased emphasis on education of healthy options paired with strategies to avoid the temptation of the unhealthy, and often preferred, food choices. Peers influence eating, which may influence a child's food choices impacting weight and body mass index (Chadwick, Crawford, & Ly, 2013; Xue, Zhang, & Wang, 2016). Cruwys, Bevelander, and Hermans (2015) reviewed 69 studies examining the relationship between social modeling and food consumption indicating that social modeling occurs on a daily basis and has a profound impact on oral intake. Social influence was not confined to familiar individuals and was often used to connect with others. Individuals in the presence of a 'healthy eater' were more likely to choose healthy options than those eating with an 'unhealthy eater' (Robinson & Higgs, 2013). Offering foods within a peer-based setting allows the opportunity for healthy food choices with social modeling using peer interaction.

Group Therapy

Group therapy opportunities may come in a variety of forms. Feeding intervention groups have shown success and support for families by offering strategies to manage behaviors

and identify foods to present for picky eating (Fraser, Wallis, & John, 2004; Haywood & McCann, 2009). “Food with Fun” and “Fun not Fuss with Food” are two programs led by early intervention specialists including caregivers and children together in a group setting to address difficulties with feeding (Fraser et al., 2004; Haywood & McCann, 2009). Caregivers participating in the group increased their understanding of strategies to be used in the home and reported a decrease in anxiety during mealtime.

Peer-based groups also utilize peer interaction to support growth within a specified problem area. Donovan, Cobham, Waters, and Occhipinti (2015) completed a study of peer-based groups for children and young adolescents with social phobia. Researchers exhibited positive outcomes in reducing anxiety when including others with similar difficulties. Participants reported a better understanding of each other and a desire for similar goals. Peer engagement produced positive changes when providing feedback for children working on prosocial behaviors (van Hoorn, van Dijk, Meuwese, Rieffe, & Crone, 2014). Allowing for social engagement during group therapy has made a difference when attempting to change a shared behavior.

The use of multi-family group therapy (MFGT) has successfully extinguished undesirable behaviors (Liu et al., 2015; Salaminou, Campbell, Simic, Kuipers, & Eisler, 2017). Families described a connection during MFGT secondary to the shared history and similarities in current life situations; families felt that others who faced similar challenges created a natural support system (Liu et al., 2015). This connection, due to similar experiences such as having a child with anorexia nervosa, allowed families to discuss supportive strategies for their child they may not have otherwise considered (Salaminou et al., 2017). Real life experiences developed during group therapy assisted with transitioning behaviors back into the home for sustained

integration into daily routines. In addition, the group setting allowed children to make independent choices within a structured environment and learn from these choices with the support of others (Liu et al., 2015).

Mitchell et al. (2013) evaluated feeding programs that focused on social interactions during mealtime. During a group tailored toward caregivers, caregiver anxiety was reduced with a secondary benefit of reducing child anxiety. Participants reported that hearing the struggles of other caregivers was a relief, reducing the isolation they felt by offering both social and emotional support. As families shared with each other, a greater understanding occurred leading to an increase of knowledge of behaviors that were exhibited by other caregivers during mealtime. Although caregivers who participated in the current study were not directly involved in group therapy, their children's participation led to similar experiences bringing the caregivers together. However, the extent to which the support is provided and how useful it is remains unknown.

Conclusion

Picky eating does not have an accepted universal definition and the experience varies for every caregiver (Boquin et al., 2014). There is a growing concern for the impact that picky eating has on family and the social functioning of the child due to caregiver stress during family mealtime and social gatherings (Fischer et al., 2014). Food presentation and education in a peer-based group has been shown to meet the developmental need for peer engagement and social feedback for the child (Donovan et al., 2015). As children begin to make behavioral changes with the introduction and acceptance of new foods, the dynamic of caregivers' experiences with their children who are picky eaters may begin to change. Caregivers may reap similar unstructured and unsolicited benefits from their child's participation in the group therapy, but

this remains unknown. Although reduction of stress and improvements in behavior are noted, there is still a gap in knowledge to understand why these changes occur. This research study will examine the overall experience of caregivers of picky eaters following therapeutic intervention in a peer-based group setting to try to fill in this gap and better understand the role of occupational therapy in this process.

Method

Study Design

This study incorporated a qualitative approach, using a case study methodology, to investigate the experiences of caregivers of children identified as picky eaters who have participated in a peer-based feeding group. A qualitative case study design was a fitting methodology for this study, as it prioritizes understanding a phenomenon following a naturally occurring experience (Yin, 2009). Individuals involved in this study were bound by similar experiences that brought them together as a case. Specifically, each participating caregiver had a child who participated in a peer-based feeding group. The qualitative case study design allowed multiple caregivers to share their experiences of caring for his or her child, who is a picky eater and participated in a peer-based feeding group. By engaging multiple caregivers, a broader understanding of the phenomenon was shared which allows a deeper and richer understanding of the caregiver experience (Baxter & Jack, 2008).

Participants

Caregivers whose children participated in a peer-based feeding group with the primary investigator at Cincinnati Children's Hospital Medical Center (CCHMC) were eligible to participate in this study. Children who participated in the feeding group were between 4 and 15 years of age. Inclusion criteria were: (a) caregivers of children who participated in a peer-based

feeding group, (b) caregivers of children who participated in at least seven out of ten sessions of the peer-based feeding group, (c) caregivers who agreed to complete an interview within six months of their final group session. Seven caregivers completed the study. All caregivers interviewed were primary caregivers who brought their children to the feeding group for the majority of the sessions, fostering a relationship with the therapist over the course of the feeding group sessions. Six of the interviews were conducted with the child's mother and one was conducted with the child's father.

Background

To better understand the caregivers' experiences, it is important to first understand the peer-based feeding program from which the participants were recruited. The peer-based feeding program at CCHMC only included children ages 4 to 15 years. These children were referred to occupational therapy for picky eating or ARFID and determined by the evaluating occupational therapist to have feeding difficulties. Picky eaters were identified by the limited food variety they consumed including hesitation to try any new foods (Boquin et al., 2014). Feeding groups took place within an outpatient setting at CCHMC. This study's primary investigator was the occupational therapist who led the feeding groups. During each session, the occupational therapist presented a variety of preferred and non-preferred foods to increase the children's exposure and engagement with these foods; this exercise was designed to reduce anxiety and create a sensory experience that progresses the child toward oral consumption of new foods. Group duration was one hour per week for approximately 10 weeks. Children who participated in the group may or may not have had past therapeutic intervention for feeding concerns. However, children with secondary complications impacting feeding such as deficits in oral motor skills, limitations with peer interaction including language barrier, difficulty with self-feeding,

medical complications, inability to remain at the table, or significant food allergies were excluded from participating in the peer-based feeding program.

Although only children identified as picky eaters engaged in the group experience, caregivers were also encouraged to share their experiences with the therapist regarding their children's feeding at home throughout the duration of the peer-based feeding group. The caregivers completed a standard questionnaire a minimum of four times during the group process, responding to the following questions/prompts: (a) tell me about feeding over the last one to two weeks; (b) has your child tried any new foods?; and (c) identify any barriers that have impacted mealtime.

Procedures

Recruitment.

Institutional Review Board approval from CCHMC and University of Indianapolis were obtained prior to starting the study. At the beginning of session seven of the feeding group, eligible caregivers were provided an information sheet by the principle investigator detailing basic information about the study. The information sheet included: (a) a general description of the study; (b) why the caregiver was being asked to participate; (c) information about the interview process; (d) the length of the study; (e) researcher contact information for questions; and (f) how to indicate a desire to participate in the study. At the end of the session, the researcher answered any caregiver questions regarding the study. Due to the potential for caregivers to feel pressured to participate in the study, caregivers were reassured that participation was completely voluntary and treatment for their child would not be impacted based on participation.

If a child had participated in a previous group and met the requirements of completion of seven sessions and their last session occurred no more than six months prior, the caregiver was contacted by the researcher via phone call or email to ask if they were interested in participating in the study. If a caregiver expressed interest, the information sheet was shared with the family by mail or email based on caregiver preference. The researcher followed up within two weeks by phone or email to discuss the study and answer any additional questions.

Data Collection.

Caregivers completed questionnaires during the course of their child's peer-based feeding group. Copies of the completed questionnaires were given to the caregivers either in person or by mail prior to the interview to assist with caregiver recollection of events and feelings that occurred during their child's participation in the group. Allowing caregivers to reflect on previously collected data assisted them in identifying experiences that may have occurred during the seven to ten weeks of their child's group therapy. Caregivers were encouraged to review this information prior to the interview.

Based on the exempt status with the IRB, the study team obtained verbal consent from the caregivers prior to beginning, with a waiver of documentation of written consent. However, prior to initiation of the interview, the researcher offered another copy of the information sheet to the caregiver. The researcher again verbally reviewed the information sheet about the study with the caregiver to ensure his or her continued interest in participating in the study. Caregivers were also reminded that participation in this study was completely voluntary. The caregiver was given the opportunity to ask any questions at that time and the primary researcher ensured the participant's questions were fully answered.

The researcher collected data using in-depth, semi-structured interviews. Three interviews were conducted face-to-face and four interviews were conducted via telephone, ranging in length from 15 to 30 minutes. Interviews were audio-recorded to ensure that all details of the data were retained for analysis purposes. Similar to grounded theory interview guides, interviews used broad questions allowing the caregiver to open up and guide the course of the interviews (Creswell, 2014). Interview questions/prompts included: (a) tell me what it's like caring for a child who is a picky eater; (b) tell me about mealtimes with your child; and (c) tell me what it's been like for you having your child in feeding group therapy. By allowing follow-up questions to be based off the caregiver response, the interview process provided a rich, in-depth understanding of the participant's experiences as a caregiver of a picky eater. Prior to completion of each interview, the caregivers were asked if they had any additional information to share. Each caregiver was also provided with the primary researcher's contact information in case they thought of additional information. No participants shared any additional information following their interviews.

Data Management and Analysis

Transcription of interviews was completed verbatim by the primary researcher prior to data analysis. Transcripts were de-identified and assigned an identification number for organization by the researcher. Neither audio recordings nor transcriptions contained any identifying information; both were stored under password protection on the researcher's computer.

The researcher engaged in reflexivity following each interview through the use of reflective journaling. Reflexivity allowed the researcher to reflect on her role as the primary therapist how this role may have biased or shaped the investigation (Creswell, 2014). Data

analysis was initiated after all interviews were transcribed. The researcher independently read through each interview transcription multiple times to gain an understanding of the information shared by each individual participant. Following this immersion in the data, margin notes were made on the transcripts to aid in the coding process, and key information about the caregivers' experiences were identified. Specifically, interview content relevant to the study's research question was highlighted by assigning "codes" made up of unique words or phrases describing aspects of the caregiver experience. These codes were further grouped into larger categories to support the data that appeared throughout the case (Yin, 2009).

Following the analysis of the individual interviews, transcripts were analyzed together using cross-case analysis in order to establish themes across all interviews (Creswell, 2013). The major themes gleaned from the categories described the key common experiences of the individuals within the larger case (Creswell, 2013). Another occupational therapist within the department at CCHMC served as a second coder and reviewed the transcripts, codes, categories, and final themes to help ensure the codes and themes developed by the primary researcher were consistent with the content of the interviews. The activities of the second coder helped to increase the credibility and authenticity of the interpretation (Yin, 2009). Finally, in a process described as member checking (Yin, 2009), overarching themes drawn from the interviews were emailed to participants providing them the opportunity to review the results and ensure that the themes correctly represented their experiences. The researcher did not receive any feedback or corrections to the derived themes. The researcher's use of reflective journaling, multiple coders, and member checking improved the trustworthiness of the study validating that the caregivers' perspective was maintained (Creswell, 2014).

Results

Six mothers and one father completed the interview; each of these caregivers were the primary caregiver during group therapy. Three of the children were involved in the most recent feeding group, while the other four had been involved in feeding group within the last six months. The children of the caregivers consisted of five girls and two boys ranging in age from 5 to 11 years old. Four of the children had individual occupational therapy (OT) for feeding treatment prior to coming to group therapy; the remaining three had group therapy as their first feeding-related treatment with OT. Of the four children new to OT, two were previously involved in either nutritional services or behavioral psychology for feeding, but not within the last two years. One child received supplemental support for nutrition by means of gastrostomy feeding; all other children received 100% of their nutrition orally.

During the in-depth interviews, participants described both the broad challenges associated with having a child who is a picky eater and the influence of the peer feeding group for the child and family. Regardless of the children's ages during participation in feeding group, the caregivers consistently described the mealtime experiences from their child's early years of eating. The information shared by the caregivers about the challenges of managing a child who is a picky eater added important background information and understanding of caregivers' past experiences.

Challenges Associated with Having a Child Who is a Picky Eater

With regard to managing the challenges associated with having a child who is a picky eater, themes identified by the study included: stressors during mealtime, societal isolation, and child refusal. Given the co-occupation of feeding and eating, these themes allow occupational therapists to understand the caregivers' perceptions of the reactions of the child, the caregiver, the family, and others during mealtime.

Stressors with Mealtime

The majority of caregivers reported implementing modifications during mealtimes which produced unanticipated experiences. Many caregivers stated they often had to abandon their belief of what mealtime should look like to adapt to the needs of their child. They indicated this seemed to occur as their child sought to gain control of the eating experience. One caregiver shared, “It was so stressful! And, she wouldn’t eat anything and I found myself feeding her in the bathtub because I could get her to play and eat at the same time.” Caregivers knew the modifications were not normal, but they felt compelled to do whatever worked to get their child to eat.

Caregivers reported that they not only modified the environment, but they also altered the type of food they offered. Altering the presentation of the food often impacted others at the table. Many caregivers noted they consistently made a separate meal for their child who was a picky eater, which reportedly increased the caregivers’ work and stress related to mealtime because the modifications were not always accepted by the child. One caregiver reported, “We make dinner almost every night...my daughter eats...my son never participates so we have to make sure we are making something for him...”. Caregivers identified that mealtime stress led to high anxiety and often arguments. Another caregiver stated, “...at mealtime it’s a constant stress...when mealtime rolls around I get anxiety and she starts feeling that...I’m not making the best choices as a parent and we end up arguing.”

Caregivers expressed a concern for their child’s health based on the limited variety or volume of the foods accepted. They also identified a loss of control at mealtime which evolved into dietary changes in order to provide a food the child would consume, often replacing a portion of the family meal. One caregiver was able to identify this challenge, “We fight almost

every single meal, because I always make something she likes and something she doesn't like..."

Caregivers said that modifications at mealtime increased concern of malnutrition due to the lack of healthy food options accepted by the child. Caregivers did not believe the foods consumed by their child provided enough nutrients necessary for healthy growth. One caregiver explained, "It's our biggest fight; and it has actually affected his health. He has high cholesterol...he never has good nutrition in him to really help him to grow or be energized." Regardless of whether the child was over or under weight, caregivers remained anxious about the child's lack of variety across all food groups and how this impacted long-term health.

Caregivers were able to identify the internal struggle between making the mealtime a more pleasurable experience (decreasing the child's refusal behavior) and wanting the child to eat the foods presented to the family. The caregivers' awareness that their child was still not eating the food he or she should to get the appropriate nutrients for overall health combined with their feelings of being unable to change the situation led to even greater caregiver stress surrounding the mealtime experience with their child.

Societal Isolation

Caregivers felt their child's apprehension with food led to a barrage of unwanted comments and advice from family members and friends. Caregivers identified that even their spouse and others living in the house lacked understanding of how to engage during mealtime. One caregiver stated, "It's been difficult because my husband doesn't understand...it's been a long road for him to learn to be patient and let my son be in charge." Caregivers reported that the unsolicited advice from extended family did not always align with the needs of the picky eater. Another caregiver stated, "...now we have family saying you should just put it in front of her and make her eat. We tried...we would force her to eat and she would start vomiting and

then she would start crying hysterically.” Caregivers reported they felt judged for the foods they allowed their child to eat, as well as behaviors their child displayed around mealtimes. Although caregivers identified trying to follow through with suggestions from others, their primary goal was to provide what was best for their child. One caregiver explained, “People judge me and make comments...it’s not about them; it’s not about their opinion. It’s about her and what she needs and my focus is on her.”

Caregivers expressed feeling isolated from others, because they could not go to restaurants or other public venues where eating was involved. Caregivers identified meals outside the home as stressful for both themselves and their children. The caregivers also theorized that their children felt isolated from peers during social situations and would even avoid opportunities where they felt they may need to eat. One caregiver said, “His friends started picking on him some about, ‘really you won’t even eat another brand of pizza’.”

Caregivers noted their children would not make modifications when in public and may not eat anything if the food was not preferred. A caregiver stated, “You can’t go to any restaurants. You have to make sure there is...something they are going to eat.” The caregivers reported increased stress because they either had to avoid gatherings involving food or they had to always be prepared with a preferred food for their child who was a picky eater. Caregivers reported tension during communal activities which made outings stressful for both the family and child. This stress was shared, “...we get tears a lot, especially when it comes to social settings and we are out in public and everyone is looking at her like why are you not eating that.”

Child Refusal

Refusal to eat non-preferred foods was a common response identified by caregivers. Caregivers reported their children exhibited a variety of behaviors around mealtime. One

caregiver recognized, "...it was a relief for her to be sick instead of having to eat the foods [thanksgiving]." Caregivers felt that arguments between caregiver and child shaped mealtime, which often led the child to increase food refusal. Another caregiver stated, "...she wouldn't try anything. It would start to cause fights between us and she would have meltdowns." One caregiver stated that her child would rather not eat than admit that she liked the new food presented, intensifying the lack of control felt by the caregiver. Caregivers speculated that the anxiety of their children was heightened during mealtime leading both the caregiver and child to have decreased patience with the situation. One caregiver shared, "...there have been times when, this is terrible, but I would put food in her mouth to try to get her to eat it because I was so frustrated."

Influence of the Peer Feeding Group for the Child and Family

Caregivers also shared their perspective on the experiences that followed their children's participation in a peer-based feeding group. The themes that emerged included: mutual understanding, shift in accountability, and caregiver relief. Each of these themes appear to support the prior experiences of the caregiver. Initially, caregivers described the stress and lack of control they felt during mealtime and with the presentation of new food. The frustration shared by the caregivers was associated with the home, community, as well as with the individual behavior of the child. Collectively, these experiences seemed to be the impetus to bring their child to the feeding group for therapeutic intervention. It was clear from the caregivers' description that having their child participate in a peer-based feeding group altered the caregivers' experience. The overall perspective of the caregiver will be better understood with greater examination of these themes.

Mutual Understanding from Others

Caregivers talked about the experience of having a picky eater, and how they and their children were often isolated from others during activities involving food and eating. Even though the caregivers remained in the waiting room while their child engaged in the feeding group they indicated that they felt surrounded by others who were struggling with similar daily barriers of living with a picky eater. Caregivers recognized that having this informal opportunity to speak with others was a validation of the personal struggles that mealtimes brought. One caregiver identified, “You know the parent dynamic you weren’t really expecting to see from group...you don’t realize how much you need [support] as a parent from another parent [who has a picky eater].” Even though many caregivers felt a lack of understanding and isolation in society, having their children participate in the feeding group offered them an opportunity to share struggles and gain support and understanding from other caregivers who were having a similar experience. Caregivers also suggested that group participation allowed their children to recognize they were not alone with their struggle with picky eating, which also decreased the caregiver stress. One caregiver stated her child was excited to see other children who were picky eaters, “It was great for her to see other kids that felt the same way about food that she did.”

Shift in Accountability

Caregivers believed accountability to others was a strong motivation for their children to work toward a difficult task, such as trying a new food. They reported that their child was more willing to complete a task that was defined during the therapeutic session versus requested by the caregiver at home. One caregiver stated, “...the peer to peer is always going to be more beneficial than dad telling her to do it.” Another caregiver stated that other kids motivated her son by asking if he completed the task he was supposed to for the therapy session. With this

shift in accountability, caregivers expressed a reduction in stress during mealtime and with the presentation of a new food because of their child's participation in the feeding group.

Caregivers identified that their children were able to make modifications to their reactions to food based on modeling from peers. One caregiver stated, "...very different challenges and very different ways that they find success in each other." Caregivers recognized that their child enjoyed teaching others about the qualities of food they enjoyed (e.g. touch, smell, taste) which allowed practice of techniques that they would use to explore new foods at home. A caregiver stated, "...other girls in the group were kind of a little more picky...she wanted to help them out." By helping others or learning new techniques within the group setting, caregivers identified that their child began to understand how to use strategies to try new food at home.

Their children's overall desire to try new foods was identified by caregivers as an outcome of the peer-based group. Caregivers stated their children learned new ways to handle situations from this peer engagement that were otherwise negative in the past. One caregiver commented, "...having children in the room, she thrives a little bit more. She has that peer aspect she likes to be the best of the group peers and so she wants to try a little bit harder." The variety of foods were noted by caregivers to increase following engagement in the group-based feeding therapy. Another caregiver explained, "...she was adamant when she tried new things when she was in group. We have to write this down...she was excited about it."

Caregiver Relief

Caregivers' perspectives of their children's engagement in a peer-based feeding group were identified as a catalyst for change in the interactions between the caregiver and child. Caregivers felt strategies provided during group therapy offered opportunities for positive

changes during mealtime. During the therapeutic group process, caregivers felt an understanding and connection with other caregivers. Caregivers also identified accountability from their child to the therapist and group as supporting change in the home. Following engagement in a feeding group, caregivers perceived a greater desire by their children to try new foods as well as opportunities to learn from others. Caregivers identified that their children now had the skill and knowledge to manage the presentation of new food in other settings.

Caregivers felt that talking with other caregivers offered a different point of view within the common situation they all shared. Each family provided insight into daily struggles from a different perspective. Just as they felt their children were able to share techniques to explore new foods, caregivers felt an opportunity to offer suggestions regarding modifications for mealtimes, based on their similar experience. By reducing the amount of stress at mealtime, caregivers felt a small amount of success. One caregiver stated, “Once I took it out of my hands, and she wanted to please you [therapist], she would do it without question...mealtime was definitely less stressful.” Caregivers recognized the volume of food accepted may take additional time but there was relief in the fact their child would now try new foods. “Now that he is out of group, when we go to dinner with my family, I’m more able to get him to try something I’m eating...because it’s just one bite and it’s not like he has to eat the whole thing...” Another caregiver stated that, “...as a parent, it was really nice to go somewhere...the stress wasn’t all on me, and I felt like this was the first time our family was getting help...”

Discussion

Picky eating is extremely common, impacting one-quarter of typically developing US children. Occupational therapists utilize both individual and group therapy to treat picky eating without a clear understanding of the benefits. This study sought to better understand caregivers’

experiences of living with a picky eater and to understand caregivers' experiences following their children's participation in group feeding sessions.

From seven caregiver interviews, the researcher found that caregivers experienced both isolation and stress associated with managing their picky eater. The isolation was tied to social situations both inside and outside the family. Caregivers felt judged by others, including their spouses, on how the picky eating was handled and the suggestions they would receive to remedy the situation. The stress caregivers felt was rooted in mealtime struggles and the modifications they often made to encourage eating with the knowledge that sometimes the modifications led to unhealthy patterns. In the current study, caregivers reflected on their choices made during mealtimes, and emphasized their feelings of frustration and at times, defeat. Mitchell et al. (2013) reviewed the literature and reported that mealtime modifications more than often increased the stress level of caregivers. The researcher highlighted that mothers of picky eaters often have higher levels of depression and anxiety. Farrow et al. (2006) also reported that among a group of 99 mothers, the most common factor associated with feeding difficulties was low self-esteem and feelings of social isolation.

Caregivers reported forming bonds with other caregivers while their children participated in group feeding sessions. Compared to non-picky eaters, Chao and Chang (2015) frequently observed strained caregiver-child interactions and reactions suggesting that picky eating impacted the child-caregiver relationship even beyond mealtime. These informal caregiver-caregiver interactions resulted in feelings of decreased isolation as well as opportunities for sharing the stressors of raising picky eaters. Being a part of a group, according to Jones and Bryant-Waugh (2012) reduces feelings of isolation and self-blame. Dahlsgaard and Bodie (2018) also emphasized the crucial role of shared caregiver experiences in reducing feelings of

isolation in group settings. In the current study, several caregivers indicated that these informal interactions allowed them to experience greater acceptance of their children and their own experiences knowing they were not alone in their journeys. As a result, they often felt great relief. The experience of relief was associated with the shift in responsibility of challenging their children during mealtime to the relationship between the therapist and child during the group sessions. Caregivers regularly recognized that their stress level impacted both how and when new food was presented, frequently creating additional stress and family discord. Having someone else involved with the presentation of new food reduced the burden caregivers often carried alone. By having children participate in feeding groups, it is likely that caregivers feel reprieve from the blame they self-afflict supporting a change in the caregiver-child relationship.

In addition to the feelings of relief, caregivers also took comfort in knowing their children were among supportive peers and had a professional to guide them. Caregivers indicated that their children were more willing to try new food items in the group setting, that peer modeling was helpful to encourage food exploration, and that their children felt less anxiety in new situations. Many caregivers pointed to visual observation and social engagement as being important to encouraging their children to try new food. Cruwys, Bevelander, and Hermans (2015) highlighted the importance of modeling in learning new skills when similarities are perceived between individuals. Modeling of food intake for example, is a broader example of social influence that does not exist in one-on-one therapeutic support. Indeed, in the feeding groups, caregivers felt that their children shared similar struggles during mealtime, and when placed together during the groups, their anxiety levels diminished with the presentation of a new food. Also noted was that children often began to take on leadership roles supporting others

during food trials – a position most of them have not experienced when being presented new foods.

A Theoretical Framework for Pick Eating Behaviors

Bandura's social-cognitive theory (SCT) may help to explain the phenomena associated with the social and behavioral dynamics of feeding groups. Indeed, SCT suggests that individuals' behaviors are shaped by their abilities to regulate behavior and modify their environments (Bandura, 2004). Bandura stated that human behavior is social, not just individual. Social dynamic, self-efficacy, and observational learning are three constructs of SCT that are relevant to the desired behavior changes identified in the current study.

Caregivers in this study reported their children experienced a number of positive behavior changes through their participation in social feeding groups. These positive changes included decreased stress associated with trying new foods as well as implementing new strategies to manage their food-related stresses at home and in the community. Moreover, caregivers recognized their own positive changes following their informal interactions with other caregivers. They became more aware of their own acceptance of their situations which led to less stress and improved mealtime dynamics at home.

Self-efficacy is the belief "that one has the power to produce desired changes by one's action" (Bandura, 2004, p. 144). Dishman, McIver, Dowda, Saunders, and Pate (2019) found that self-efficacy declined with more perceived barriers to change. By offering structured presentation of new foods and opportunities for modeling of others, group sessions often help picky eaters to overcome barriers to trying new foods and therefore would likely increase their self-efficacy. For caregivers, improvement in self-efficacy was experienced through their informal sharing with other caregivers in the waiting room. Caregivers began to recognize

strategies, through this sharing, that support greater acceptance of their children's reactions during mealtime.

Observational learning is the final SCT-related construct that may be pertinent in understanding the current study. The group's environment was explicitly established by an occupational therapist to support learning and exploration of new food. In a comprehensive review of 69 studies based on eating behaviors, Cruwys, Bevelander, and Hermans (2014) found that 64 studies demonstrated significant impact of modeling on positive eating behaviors. The review indicated that the impact of modeling had two components: 1) individuals' desire to seek out appropriate response to the presentation of food; and 2) individuals' need for affirmation from others. The caregivers reported that feeding group offered the ideal opportunity for children to appropriately observe others as well as obtain constructive feedback from their peers, which facilitated positive changes in the eating behaviors of the participating children.

Considering these three constructs of SCT allows for a deeper understanding of why caregivers felt their children emerged with a novel willingness to accept new food following the therapeutic feeding group sessions. Caregivers also identified the transition in responsibility as a focal point that supported a breakthrough of past identified barriers of mealtime stressors associated with having a child who is a picky eater. As these barriers were removed, caregivers identified improved willingness by their child to try new foods through the introduction of peer modeling, positive affirmation, and strategies provided by others.

Implications for Occupational Therapy Practice

The American Journal of Occupational Therapy (2017) acknowledges the social component of feeding including: meal preparation, eating at a restaurant or other community location, or simply feeding a child. In the current study, caregivers identified feelings of stress,

isolation, and frustration when their children refused to eat with a recognition of the impact on the caregiver-child relationship during mealtime. These findings reflect treatment implications for both caregiver and child and, moreover, emphasize the need to target both when working with picky eaters. Caregivers acknowledged the leverage that peer-based support provided for their children; they also recognized the value of other caregivers in reducing their own feelings of isolation further highlighting the benefit of group sessions for families managing picky eaters.

The benefit of peer support is an important component for occupational therapists to understand as an effective strategy to increase the acceptance of new food for children who are picky eaters. As children become less dependent on their caregivers, peer modeling becomes more influential in behavioral modification. In combination with a developmental assessment, an occupational therapist may determine if greater change may be seen with the support of a peer group versus individual therapy.

As feeding does not happen in isolation, occupational therapy recognizes the social component involves caregiver engagement. Caregivers identified feelings of stress and isolation while raising a child who is a picky eater. During feeding groups, caregivers informally engaged with each other, finding unexpected support with other caregivers who have similar experiences. This interaction not only reduced the isolation felt by the caregiver, but also supported an exchange of novel ideas and strategies. Considerations for occupational therapy include providing structured programming for the caregiver that coincides with the peer-based feeding groups offering even greater support for the caregiver-child relationship.

Given these findings, occupational therapists need to look deeper into the social aspect of feeding by assessing the developmental age of a child, caregiver stress, and the caregiver-child dynamic. The treatment of the picky eater may benefit from the multiple social components

offered by a peer-based feeding group. A combination of support for the child and caregiver may offer programming to support change in the overall mealtime experience.

Limitations of the Study

This researcher interviewed seven caregivers of picky eaters who had participated in feeding group sessions. The study's strengths include the variation in age of the children and the comfort level of the family with the therapist. Because this is a qualitative study with convenience sampling and a small sample size the results cannot be generalized. Although all caregivers were informed that they were not obligated to participate in the study, the interviews were completed by the therapist who provided the group-based feeding therapy. Having the same therapist provide the therapy and complete the interviews may have impacted caregivers' responses. This limitation was addressed using reflective journaling, two coders, and member checking to improve the trustworthiness throughout the process with the goal of decreasing researcher bias.

Future Research

Future studies may consider inclusion of the children who participated directly in the group to better understand their experience of participating in peer-based feeding groups. This qualitative study is a starting point for continued research using quantitative methods to further understand the experiences of a caregiver with a child who is a picky eater. Quantitative techniques may allow us to look at compelling aspects of feeding groups using a larger sample for the purposes of generalization. Quantitative or mixed methods approaches could be used to help researchers' better measure caregiver stress and to determine if there is a change in stress levels following participation in a feeding group compared to before participation. Longitudinal research may help identify changes that occur during and following a caregivers' and child's

engagement in a peer-based feeding group and if that change persists over time. This information may be especially beneficial for any therapist who supports families in long-term treatment, to understand the impact of group feeding sessions.

Conclusion

Nearly all caregivers had a deep desire to share their perspectives raising a child who is a picky eater. The interviews emphasized feelings of stress and isolation experienced during mealtime in particular. Caregivers were able to identify the benefits and impact of participation in peer-based feeding groups. The current study expands on the existing literature, and points to caregiver relief as previously unrecognized but important benefit that individual therapy does not offer. Further, group therapy is perceived as effective in reducing isolation for both the child during the structured group sessions and through informal caregiver interactions during but outside of the group sessions. The shift in accountability reduced caregiver stress during mealtime particularly as the children were more willing to try new foods as they were presented. Because of the plethora of benefits associated with group therapy identified for both the participating picky eaters and their caregivers, the option of group therapy for picky eating should continue to be utilized. Additional studies to identify who would most benefit compared to individual therapy should be also be considered.

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