Identifying the Scope of Occupational Therapy in Addressing Challenging Behaviors in the Pediatric Setting

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Children are likely to display a behavior that is challenging and difficult for an adult caretaker to manage at some point in their lives. While these behaviors occur in typical children, the prevalence and intensity of challenging behaviors increase significantly in children with disabilities (Simó-Pinatella et al., 2019). Behaviors that exceed what is typically expected developmentally may interfere with a child's participation and engagement. When challenging behaviors impede opportunities for engagement in daily tasks, children may need additional intervention to increase participation and promote well-being, quality of life and overall health in children that display challenging behaviors (Watling, 2020).

Pediatric occupational therapists (OTs) work with children who have varying needs and abilities and are especially equipped to address challenging behaviors through a holistic, client-centered lens. With their training in sensorimotor interventions, psychosocial approaches, cognition, and other skilled areas, occupational therapists are experts in addressing challenging behaviors through an approach that focuses on a child's strengths, builds trust, and addresses the underlying cause of dysregulation that leads to what ultimately manifests as challenging behavior (AOTA, 2020; Kuhaneck & Case-Smith, 2020). Occupational therapists are specifically equipped to assess, treat, and build skills in various domains such as sensorimotor, cognition, and psychosocial to promote independence in meaningful occupations that children need to and want to participate in (Case-Smith et al., 2015) by utilizing strength-based and client-centered approaches. Using a strength-based approach promotes self-efficacy and participation which, in turn, promotes positive and adaptive behaviors (Kuhaneck & Case-Smith, 2020; Polgar, 2004). Occupational therapists are also skilled in task analysis and can adapt activities to meet a child's

just-right challenge, modify and adapt the child's environment, utilize therapeutic use of self to build rapport, and implement client-centered interventions to motivate and encourage occupational participation and engagement (Kuhaneck & Case-Smith, 2020).

The purpose of this study is to identify and define what interventions pediatric occupational therapists currently use to address challenging behaviors and how efficacious they feel in their behavior management strategies.

Methods

This study used a mixed method triangulation design.

Participants

Phase one

Participants for phase one consisted of licensed occupational therapists of the general population who chose to complete the Qualtrics survey. Inclusion criteria include licensed occupational therapists that have worked with children ages 2-18, occupational therapists that have worked with children who exhibit challenging behaviors, occupational therapists that have worked with children with sensory differences.

Phase one

Participants for phase two were occupational therapists working in an outpatient setting that specializes in sensory integration. Participants were asked to identify a client in which they felt they had to address challenging behaviors within the session.

Data Collection

Phase one

The researchers developed a survey comprising three instruments. The first instrument gathered demographic information. The second instrument is made up of seven questions, developed by the researchers, that aim to understand how occupational therapists address and intervene with challenging behaviors during their occupational therapy sessions. The third instrument of this survey utilizes the *Difficult Behavior Self-Efficacy Scale*, developed by Hastings & Brown (2002) and modified with permission to fit the specific context of this project (R. Hastings, personal communication, August 7, 2022).

Phase two

The researchers collected data through de-identified research field notes and post-session interviews with the participants. The researchers developed a tool to systematically collect fieldnotes during observed sessions. After each session, the researchers interviewed the therapist to determine their perspective on therapeutic interventions and strategies were used to address challenging behaviors throughout their sessions.

Data analysis

Phase One

Each instrument of the survey was analyzed differently, according to the information that was gathered. For the second instrument of the survey, descriptive statistics were utilized to calculate frequencies.

Phase two

The researchers performed content analysis of the research field note data to determine which concepts arose regarding strategies that occupational therapists were observed to use within their occupational therapy sessions. Research field notes were analyzed and condensed, with recurring themes and then categorized into pre-determined concepts based on the literature.

The researchers then performed frequency counts to determine the number of times a concept appeared in the field notes. Researchers established intercoder reliability by having two coders who were blind to each other's coding determine which initial concepts belonged in each category. Content analysis of field notes was completed in the same manner.

Results

Phase one

Table 1

Phase one participant demographics

Factor		N	Percent
Gender			
	Female	258	93.8
	Male	12	4.4
	Non-binary	3	1.1
	Other	2	0.7
Years in the field			
	5 or less	121	44.0
	6-10	56	20.4
	11-19	42	15.3
	> 20	56	20.4
Education level			
	Bachelor's	35	12.7
	Master's	187	68.0
	Entry-level Doctorate	30	10.9
	PhD	10	3.6
	Other	13	4.8

Table 2

Phase two participant demographics

Factor		N	Percent
Gender			
	Female	7	100
	Male	0	0
Years in the field			
	5 or less	4	57.1
	6-10	3	42.9
	11-19	0	0
	> 20	0	0
Education level			
	Master's	2	28.6
	Entry-level Doctorate	5	71.4

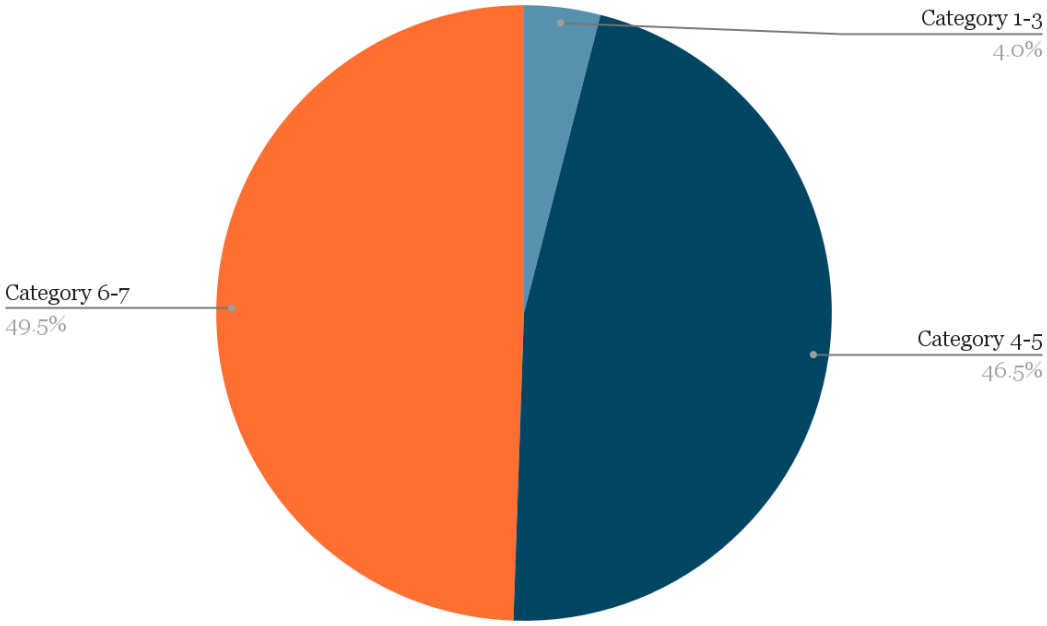
Table 3

Response rate of survey instruments

Number of surveys initiated	Number of surveys completed	Percentage
349	275	78.8

Figure 1

Total score categories: Challenging Behaviors Self-Efficacy Scale



Phase two

Table 4

Results: Concepts and findings from field note content analysis

Concepts	Definition	Frequency
Clear rules/expectations	Expressing concise boundaries which clearly communicate what is expected of the child in both a verbal and non-verbal manner including cognitive strategies, modeling and using simple language.	21
Just-right challenge	Providing the child with a reasonable challenge in which the activity matches their developmental skills, engages and motivates the child, and can be mastered with the child's effortful focus (Kuhaneck & Case-Smith, 2020).	12
Predictable schedule and advanced information	Maintaining consistent routine and providing verbal or visual information to	3

	the child prior to placing an expectation	
Environmental Factors	Altering the environment to remove the features that elicit challenging behaviors (Watling, 2020).	16
Incorporate child's strengths, interests, and preferred activities	Using each child's unique interests and attributes to promote participation, self-efficacy, and sense of collaboration between child and therapist (Kuhaneck & Case-Smith, 2020).	23
Provide sensory opportunities	Utilizing both sensory integration and sensory-based strategies to provide children with necessary input for increased regulation and reaching optimal arousal (Case-Smith, Weaver, & Fristad, 2015).	18
Provide choices for the child	Providing the child with autonomy to choose components of activities that are meaningful and motivating to them	12
Allow child's interests to drive task selection (child-led)	Allowing child to determine tasks within session to facilitate internal motivation	22
Consequences	Introducing a stimuli as a result of the child's behavior (Watling, 2020).	1
Rewards	Delivering praise or something tangible to recognize and reinforce desired behavior	4
Child-focused attention	Therapeutic use of self to convey validation of the child, and provide consistent attention throughout the session which is not contingent on task performance or behavior (Watling, 2020).	19

Multiple opportunities to respond to cues and perform demands	Providing the child with time to respond to demands and cues and not forcing immediate compliance	4
Redirection	Shifting the child's focus away from undesired task/behavior	11
Know and respond to child's emotional expressions	Reading the child and responding to underlying causes of behavior (Watling, 2020).	1

Table 5

Participants identified in field notes to implement concept

Concepts	N	Percentage of participants
Clear rules/expectations	7	100.0
Just-right challenge	6	85.7
Predictable schedule and advanced information	4	42.9
Environmental Factors	6	85.7
Incorporate child's strengths, interests, and preferred activities	6	85.7
Provide sensory opportunities	7	100.0
Provide choices for the child	6	85.7
Allow child's interests to drive task selection (child-led)	7	100
Consequences	1	14.3

Rewards	2	28.6
Child-focused attention	7	100
Multiple opportunities to respond to cues and perform demands	3	42.9
Redirection	6	85.7
Know and respond to child's emotional expressions	1	14.9

Table 6

Challenging behaviors identified in field notes and therapist interviews

	Field Notes	Interview
Elopement	X	X
Throwing items	X	X
Inattention	X	X
Physical aggression	X	X
Irritability		X
Aggression towards people or property	X	X
Mouthing objects for attention		X
Verbal outbursts	X	X
Rigidity		X
Avoidance	X	X
Elopement	X	X
Lack of response	X	X
Non-compliance	X	X
Inappropriate language	X	X

Stealing			X
Withdrawal		X	X

Conclusion

Through this study, fourteen concepts emerged which revealed how occupational therapists intervene when encountering challenging behaviors of pediatric clients within a session. Of the fourteen concepts, 8 were found to be in alignment with occupational therapy literature/theory (versus behavioral literature/theory) and used at a much higher frequency than other traditional behavioral strategies. Only 6 concepts were identified as being more related to traditional behavioral theory and were used with much less frequency. The results of this study indicate that occupational therapists utilize a unique approach to address challenging behaviors, many principles which align with the key components of sensory integration theory as identified in the Ayres Fidelity Measure. Further, survey results indicated that occupational therapists feel confident in their ability to address challenging behaviors with over ninety percent of participants responding in the affirmative regarding personal capacity to respond to challenging behaviors. Overall, this study provides evidence that pediatric occupational therapists utilize many principles of sensory integration theory to guide their interventions for children that may exhibit challenging behaviors.

The findings from the current study have implications for occupational practice. Occupational therapists are trained to utilize a holistic approach and consider internal factors such as arousal levels, sensory processing, cognition, motivation, and the emotional state of a child (Case-Smith & Schneck, 2015; Kuhaneck & Case-Smith, 2020; Polgar, 2004). Occupational therapists also understand the importance of reframing behavior as a product of a child's overall physiological and emotional state and they work to understand and do their best to

address the underlying cause of behavior. This unique focus on the person and the interaction with the environment is a hallmark of occupational therapy treatment. This study was an initial step in identifying and describing occupational therapy interventions used for addressing challenging behavior. Now identified these interventions can be examined for effectiveness.

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