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Performers' Experiences of Participation in Sensory Friendly Performances

Molly M. Vilaithong *Dominican University of California*

Brooke E. Grupe *Dominican University of California*

Lucy Chen *Dominican University of California*

Andrea N. Wurster *Dominican University of California*

Carleigh J. Robinson *Dominican University of California*

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Molly M. Vilaithong, Brooke E. Grupe, Lucy Chen, Andrea N. Wurster, and Carleigh J. Robinson
Candidate

Julia Wilbarger, PhD, OTR/L
Program Chair

Caroline Umeda, PhD, OTR/L
First Reader

Performers' Experiences of Participation in Sensory Friendly Performances

By

Lucy Chen, Brooke Grupe, Carleigh Robinson, Molly Vilaithong, and Andrea Wurster

A culminating thesis, submitted to the faculty of Dominican University of California in partial fulfillment of the requirements for the degree of Master of Science of Occupational
Therapy

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Abstract

Background: Individuals with disabilities have decreased levels of community social participation and encounter environmental barriers that limit access to community participation in cultural arts, which negatively impacts quality of life. Existing literature on sensory friendly theatre focuses on parent and organizational stakeholders and supports the promise of sensory friendly programming designed with occupational therapy consultation to increase access for individuals with sensory processing challenges.

Purpose: This study explored the lived experiences of youth performers in a sensory friendly performance. The research examined youth performers' sensory friendly participation experiences, including their perceptions of sensory friendly program components and their preparation and training for the sensory friendly performance.

Design: A qualitative phenomenological approach was used to investigate performers' sensory friendly performance experiences. Semi-structured focus group interviews were conducted, transcribed, and analyzed to determine common themes.

Results: Thematic analysis yielded the following four themes: sensory friendly performances as novel experiences, enjoyable performer experiences, performing was different but not lesser, and performers encouraged the expansion of sensory friendly performances. Themes were consistent with the research found in the existing literature. Results contributed suggestions for improvements in training and promoting the sensory friendly performance. Performers deemed modifications as benign and were not largely impacted by them during their performance. Performers felt the performance's mission strongly aligned with their own views on inclusion.

Key words: Sensory friendly, participation barriers, community social participation, sensory processing, accessibility, organization-level occupational therapy consultation

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Section I: Research Proposal

This section contains the proposal as compiled and presented for submission according to Dominican University's Occupational Therapy department's standards, and with an occupational therapy lens. As the research continued into results and discussion, the goal of submitting to a journal outside of the occupational therapy field was clarified and all writing thereafter was in accordance with those standards (Section II).

Introduction

Cultural arts are established as a means of expression and connection with others, and include music, art, drama, and dance (Langer, 1966). The cultural arts often become a cornerstone in community participation and one way people participate is through attendance at cultural arts gatherings, such as live theatre performances. Participation in the community is positively associated with quality of life (QoL) and health outcomes (Bedell et al., 2013; Lee et al., 2008; Mandich et al., 2003; Rafeedie, 2018; Stav et al., 2012; World Health Organization [WHO], 2007). Community activities fall under the Occupational Therapy Practice Framework's (OTPF) occupational category of social participation (American Occupational Therapy Association [AOTA], 2014). The literature shows that individuals with disabilities participate less frequently in community activities, which negatively impacts their QoL (Bedell et al., 2013; Lee et al., 2008; Rafeedie, 2018; Solish et al., 2010; Stav et al., 2012).

Occupational therapy (OT) is uniquely situated to address this challenge and is increasing its presence and role in population health. The American Occupational Therapy Association's "Vision 2025" encompasses this reality in the hope that "[a]s an inclusive profession, occupational therapy maximizes health, well-being, and QoL for all people, populations, and communities through effective solutions that facilitate participation in everyday living" (AOTA, 2020; Hammel, 2008). By increasing access to cultural arts for individuals who typically face challenges participating in the community, OTs can increase social participation and positively affect this population's QoL.

OTs are skilled in analyzing the interaction between person, environment, and occupation, and focus on creating a goodness of fit between all three to optimize participation (Ideishi, 2013). Additionally, OTs are trained in identifying and addressing barriers to

participation in all areas of meaningful occupations, including social participation (AOTA, 2014). OTs are broadening their scope by directing attention toward “strengthen[ing] their role in programs that encourage social skills and community participation in natural settings” (Koenig & Rudney, 2010, p. 437). Thus, OTs are well-suited to design cultural arts access programs and offer a unique perspective on supporting the social participation of individuals with disabilities within the community (Ideishi et al.; 2010; Ideishi & Mendonca, 2013; Umeda et al., 2017).

One way OTs are supporting access to the cultural arts is by teaming with theatre organizations to implement sensory friendly performances. Sensory friendly performances are “[a]ccess programming developed with organization-level occupational therapy consultation that incorporates environmental modifications, preparatory materials, and trained staff to create a theatre-going experience flexible and supportive enough to promote participation of children and families with diverse abilities” (Ideishi et. al., 2013). This research specifically examines sensory friendly performances as a means to social participation and increased QoL for individuals with sensory processing challenges. The purpose of this study is to contribute to the foundational research base for cultural arts access programming designed with OT consultation. This research study contributes data that, in combination with other studies, can be used to inform effective practices for OT consultants working to maximize community participation access for individuals with sensory processing challenges.

Literature Review

Social Participation and Quality of Life

Social participation is defined in the OTPF as “the interweaving of occupations to support desired engagement in community and family activities as well as those involving peers and friends...involvement in a subset of activities that involve social situations with others and that support social interdependence” (AOTA, 2014). Social participation as a fundamental occupation has an established connection to health and quality of life (Lee et al., 2008; Mandich et al., 2003; Rafeedie, 2018; Stav et al., 2012; WHO, 2007). Moreover, societal determinants of health (SDOH) are conditions impacting health and wellness; this includes safe social environments for participation in community-based leisure activities (Office of Disease Prevention and Health Promotion [ODPHP], 2010). Implementing “social and physical environments that promote good health for all” (Centers for Disease Control and Prevention [CDC], 2018), links social participation as a health outcome of these SDOH. Addressing SDOH highlights areas of increased opportunity for wellness and QoL.

QoL is a personal assessment of well-being formally defined as “an individuals’ perception of their position in life, in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns” (Weintraub & Bar-Haim Erez, 2009, p. 724; WHO, 2007).

Cultural Arts

Participation in cultural arts plays a significant role in peoples’ lives. The arts can be defined as “the practice of creating perceptible forms expressive of human feeling” (Langer, 1966, p. 6). The cultural arts allow individuals to “develop the mind and body, refine feelings, thoughts, and tastes, and reflect and represent our customs and values as a society.” (Walker,

n.d.). The aforementioned concepts are critical to the definition of cultural arts, and in this way, participation in cultural arts is integral to a holistic human experience. Examples of cultural arts include, but are not limited to, museums, musical performances, live theatre, and dance performances.

Theatre Etiquette

Cultural arts performance settings expect certain social behavior and etiquette is. Some traditional theatre rules include arriving on time, sitting still during the performance, turning off electronic devices, maintaining personal space to prevent obstructing others' view, applauding/cheering at appropriate times, and avoiding distracting others (Seid, 2008). These expectations need adjusting to promote accessibility for individuals with sensory processing challenges while still maintaining the nuance and integrity of the performance (Ideishi et al., 2013).

Characteristics of Individuals with Sensory Processing Challenges

Individuals with sensory processing challenges have difficulty organizing and integrating information from the various senses in an adaptive way (Ayres et al., 2005; Critz et al., 2015; Seattle Children's Hospital, 2019). The concept of sensory processing developed from Ayres' research on sensory integration (Ayres et al., 2005; Miller et al., 2009). Ayres (2005) defined sensory integration as "the organization of sensations for use" (p. 5). Sensory integration is "recognized as a way of viewing the neural organization of sensory information for functional behavior" (Parham & Maillous, 2015, p. 258). The brain unconsciously gives meaning to experiences by filtering and integrating incoming sensory information. This allows for adaptive responses, purposeful movement, and is foundational for learning and socialization (Ayres et al., 2005).

Many individuals experience sensory processing challenges, including those diagnosed with developmental and neurodevelopmental disabilities (American Association on Intellectual and Developmental Disabilities [AAIDD], 2019; Ayres et al., 2005; Engel-Yeger et al., 2011; Parham & Mailloux, 2015). Developmental disabilities refers to a group of conditions that impact intellectual and adaptive functioning due to physical, learning, language or behavior deficits (AAIDD, 2019; CDC, 2019a). The age of onset is before 18 years old, thus impacting a child's developmental progress and occupational performance (AAIDD, 2019; CDC, 2019a; Rodgers, 2009). Intellectual disability is the most common developmental disability and is characterized by three diagnostic criteria: significant limitations in intellectual ability, impairment in adaptive behavior needed to live independently, and onset during the developmental period (AAIDD, 2019; Rodgers, 2009; American Psychiatric Association [APA], 2013). Individuals with neurodevelopmental disabilities have challenges with neurologic functioning, resulting in challenges with memory, speech and language, motor skills, learning, and behavior (United States Environmental Protection Agency [EPA], 2019). Although each of these conditions are unique, these individuals often experience similar sensory processing challenges (Engel Yeger et al., 2011; Parham & Mailloux, 2015). Since individuals with various developmental disorders, including ID and neurodevelopmental disorders, face similar sensory processing challenges, categorizing these groups as "individuals with sensory processing challenges" is appropriate for the context of this research.

Cultural Arts Participation Barriers for Individuals with Disabilities

Research shows that many barriers to participation for individuals with disabilities exist (Bedell et al., 2013; King et al., 2013; Law et al., 2007; Rimmer et al, 2004; Umeda, 2017). These barriers often contribute to decreased social participation (Koenig & Rudney,

2010). Though there is limited research on the specific barriers individuals with sensory processing challenges encounter while attending cultural art venues, existing literature highlights environmental components as a limiting factor to social participation. Environmental barriers in the cultural arts setting for individuals with sensory processing challenges may include stimulating light/sound, standard theatre seating, and unclear pathways (Bedell et al., 2013; Umeda, 2017). While these environmental barriers have important implications, individuals with sensory processing challenges often face additional barriers such as the social demands of the activity.

Cultural arts performances are highly structured, requiring the audience to follow a timeline and behave in a specific manner. Social demands of the performance environment present barriers for individuals with sensory processing challenges. Little et al. (2014) found that children with sensory processing challenges are less likely to participate in structured activities due to increased social demands. Children with sensory processing challenges oftentimes display feelings of anxiety in response to the structure and expectations of theatre (Fletcher et al., 2018). Furthermore, parents often fear that their child's behavior will not be accepted or understood because they do not fit the social norms of the event (Anaby et al., 2013; Bedell et al., 2013; Kempe, 2014; Law et al., 2007; Shiloh & LaGasse, 2014; Umeda, 2017).

Increasing Access to Cultural Arts for Individuals with Sensory Processing Challenges

Sensory friendly experiences are initiatives that aim to provide individuals with sensory processing challenges the opportunity to participate in cultural arts by modifying the social and environmental contexts. Sensory friendly experiences have emerged in commonly visited venues such as museums, concerts, and live theatres, and often include environmental modifications,

decreased crowd size, and inclusive learning materials (Ideishi et al., 2013; Leichtman et al., 2014; Umeda et al., 2017).

Sensory friendly experiences designed for live theatre settings are referred to as ‘sensory friendly performances’. Sensory friendly performances provide an environment that adjusts to the needs of individuals with sensory processing challenges (Fletcher-Watson & May, 2018) by providing accommodations such as plot summaries, a list of potential sensory triggers, video trailers, quiet areas, and screens outside (Fletcher-Watson & May, 2018; Leichtman et al., 2014; Shiloh & LaGasse, 2014; Umeda, 2017). Sensory friendly concerts can also promote social inclusion by accommodating for different sensory needs and creating an understanding and accepting environment which positively affects overall well-being (Shiloh & LaGasse, 2014). The existing literature suggests that there is no universal solution when developing a sensory friendly performance (Fletcher-Watson & May, 2018; Umeda, 2017).

Literature indicates that sensory friendly programming has positive impacts. Parents emphasized that sensory friendly performances provided them a rare and valuable opportunity to venture into a community setting that felt safe and accepting (Shiloh & LaGasse, 2014; Umeda, 2017). Umeda (2017) found the enjoyment of the experience extended beyond the duration of the performance, as parents described their child’s anticipation leading up to the performance and their excitement describing the performance to others afterward. Throughout the performance, children experienced safety, belonging, engagement, and joy (Umeda, 2017). The sensory friendly performances also provided families the opportunity to meaningfully engage together (Silverman & Tyszka, 2017; Umeda, 2017). When attending sensory friendly performances, parents reported that they felt an overall sense of familial wellbeing when the family was able to stay longer in a public setting (Silverman & Tyszka, 2017). Parents felt comfortable bringing

their children without “fear that their child’s idiosyncratic and non-status quo behaviors will be an embarrassment” and attendees perceived sensory friendly performances to be an inclusive and accepting environment (Shiloh & LaGasse, 2014, p.117). In short, existing research suggests that sensory friendly performances allow parents to feel at ease (Shiloh & LaGasse, 2014; Silverman & Tyszka, 2017; Umeda, 2017). Performer perspectives of sensory friendly performances has not yet emerged in the literature.

Occupational Therapy Consultation

OT consultation at the organizational level is a “rapidly expanding area of OT practice” (Epstein & Jaffe, 2003, p. 533). Consultation is within OT’s scope of practice as an indirect way to provide services to community organizations or populations (AOTA, 2014). Within the consultation process, the practitioner promotes interactive communication while utilizing a systems perspective to analyze the dynamic interaction between the environment and available resources (Epstein & Jaffe, 2003).

Several theoretical models of consultation exist in the literature, but the organizational development model and the program development model are the most applicable to this research. The organizational development model focuses on management and examines the “organizational structure, leadership styles, and interpersonal communication and relationships” (Epstein & Jaffe, 2003, p. 523). The program development model aims to establish new programs or adapt existing programs to improve services through the process of assessment, development, implementation, and evaluation (Epstein & Jaffe, 2003). Organization-level OT consultative services within the cultural arts aim to promote health equity and social participation for individuals with developmental disabilities (Umeda, 2017).

Some sensory friendly programs described in the literature were created and implemented by advocacy groups or the organization itself, without OT consultation. However, using skilled expertise to promote social participation in the cultural arts (Ideishi et al., 2013), OT consultants can develop community programs that are rich in meaning, sustainable, and well-suited to all involved.

Organizational-Level OT Consultation in the Literature

While there is limited existing literature on organizational-level OT consultation in sensory friendly programming, the preliminary existing research indicates positive results. Fletcher et al. (2018) assessed the effectiveness of staff training in sensory friendly theatres and found improvements in staff's confidence and knowledge for participation planning. Other community cultural arts programs with OT consultation include Sensory-Friendly Sundays at museums (Silverman & Tyszka, 2017). In this case, specialized programming for individuals with sensory processing challenges improved both the quality and duration of the visits. Another study created learning tools and implemented environmental modifications to facilitate participation at an aquarium (Ideishi et al., 2010). Informal evaluations using parent-reports found that supportive accommodations and environmental modifications provided with OT consultation had overall positive family experiences (Ideishi et al., 2010; Leichtman et al., 2014). Umeda (2017) implemented preparatory materials, environmental modifications, and staff training to develop sensory friendly theatre performances which provided families with a deeply meaningful experience with their children. This same study explored organizational perspectives, determining that the sensory friendly performances were worthwhile and meaningful to staff and the organization's mission, which includes increasing access. Theatre staff also expressed the

value of having the support of OT consultation to meet the needs of the audience and successfully implement a sensory friendly performance (Umeda, 2017).

OT consultation is an important component in providing skilled services to help create inclusive sensory friendly performance opportunities for individuals with sensory processing challenges. The takeaways from existing literature indicate the positive effects of OT consultation at the organizational level. It is important to build on current knowledge to identify best practices for organizational level consultation in order to expand this realm of OT and further benefit community practices. (Umeda, 2017).

Stakeholder Perspectives on Participation in Sensory Friendly Performances

Parent and Family Perspectives

Families with children with sensory processing challenges often encounter many obstacles when attending cultural arts performances without OT consultation. Parents often felt “unwelcome” in public environments and, as a result, avoided attending them (Bedell et al., 2013; Kulik & Fletcher, 2016). Parents reported that environmental factors such as lack of support and understanding from the public were barriers to participation when attending events (Bedell et al., 2013). When given the chance to attend a sensory friendly performance, families had an opportunity to have a deeply meaningful experience together (Umeda, 2017). Parents reported the sensory friendly theatre experience provided an inclusive but safe participation experience (Umeda, 2017). Attending a sensory friendly cultural arts venue allowed parents to feel successful in their family outing, leaving with a sense of wellbeing (Silverman & Tyszka, 2017). In another case, parents were surprised by their child’s duration of engagement in a sensory friendly aquarium visit, leading them to state, “it was a beautiful time” (Ideishi et al., 2010).

Organization Perspectives

Currently, there is limited research of organizations' perspectives on sensory friendly performances because OT consultation in this realm is relatively new. During sensory friendly performances, staff perspectives are important to consider since they are responsible for deciding whether sensory friendly performances will be implemented, and they often interact with visitors with sensory processing challenges during the pre-and post-performance period. Following collaboration with OTs, one study stated staff members at the Dallas Children's Theatre felt more confident and knowledgeable following the collaboration with OTs. They reported that sustained collaborative relationships with OTs can increase skills, promote autonomy and success in promoting theatre mission while providing sensory friendly programs (Fletcher et al., 2018). Theatre staff responded to the development of a sensory friendly theatre performance as a highly worthwhile endeavor and stated that OT consultation was crucial to the success and progress of the programming. Staff felt OT was able to design a program that fit the unique needs of their target audience and provide them with valuable information on the populations they might be working with (Umeda, 2017).

Unrepresented Stakeholders

Performers are one key stakeholder group that is not represented in literature. Little is known of performers' lived experiences participating in sensory friendly performances. In order for sensory friendly performances to be successful, consideration of all perspectives are necessary to ensure the longevity and interest of the programming. More research addressing the perspectives of performers is crucial to creating effective partnerships between all parties involved in the creation of sensory friendly performances and honor the integrity of the craft, while also being inclusive to a more diverse population.

Statement of Purpose

Summary and Appraisal of Literature

The link between participation in the community and increased QoL has been well documented by several reputable sources, including systematic reviews, case studies, and exploratory studies. Additionally, the literature indicates that people with disabilities participate in the community less, which leads to health disparity for this population (Lee et al., 2008; Rafeedie, 2018; Solish et al., 2010; Stav et al., 2012). Therefore, it is imperative to continue to build a research base that will guide OT consultants on how to best apply their knowledge and practice expertise, in order to advocate for and meet the needs of diverse clientele. While existing literature is reputable, it is limited to exploratory research (i.e. case studies, needs assessments, descriptions of pilot programs) generated by a small pool of researchers and is not yet at a place to inform best practice guidelines for OT consultation in this field. The research is in the very early stages and has yet to establish a comprehensive conceptualization of the impact of these programs and the utility of the OT consultation delivery model. Qualitative research spanning multiple stakeholder perspectives across various settings will create grounds to begin the development of OT best practices in the cultural arts.

Research Gap

Obtaining the unrepresented perspectives of performers could lead to the development of performances that simultaneously maintain the integrity of the craft while creating a safe space for individuals with sensory processing challenges. Additionally, their perspectives are crucial to conceptualizing effective partnerships between all stakeholders involved in creating sensory friendly performances.

This research contributes performer perspectives of sensory friendly performances. By exploring their lived experience in sensory friendly theatre, this study aims to contribute to the foundational research examining the impacts of sensory friendly programs developed with OT consultation. With this knowledge, OTs can gain leverage and insight on best practices for sensory friendly programs. This study will target the following research questions:

1. What are the experiences of performers performing in sensory friendly theatre performances with OT consultation?
2. In what ways, if any, do sensory friendly performances affect performers' perceptions of their craft/art?
3. How do performers train and prepare for performing in sensory friendly performances?

Theoretical Framework

Social Model of Disability

The social model of disability asserts that it is not the individual's impairment that hinders engagement and social participation, rather it is the barriers that society creates and imposes on them (Union of the Physically Impaired Against Segregation [UPIAS], 1997). According to this model, "it is the collective responsibility of society at large to make the environmental modifications necessary for the full participation of people with disabilities in all areas of social life" (WHO, 2007, pp. 18-19). The social environment, as well as societal beliefs, must be modified to support the full inclusion of individuals in the community (UPIAS, 1997).

In this study, the social model of disability informs the sensory friendly programming developed in partnership with OT, where modifications aim to remove societal barriers in sensory friendly performances to increase social participation and overall QoL of individuals with sensory processing challenges.

Person Environment Occupation Performance

The PEOP model consists of the person, environment, occupation, and performance (Baum et al., 2015). In this ecological model, occupational performance and participation interact, with occupational performance constantly shifting according to changes of the person and environment. The quality of a person's experience, regarding satisfaction and function, is the outcome of the fit between the different components (Brown, 2014). The environmental and person factors of the PEOP model all affect participation potential (Baum et al., 2015).

The first component, the person, is a holistic view that acknowledges the mind, body, and spirit. Variables associated with the person include values and interests, skills and abilities, and life experiences (Brown, 2014). The next component, the environment, is where occupational

performance takes place and consists of physical, cultural and social components. Physical aspects of the environment may include a location, such as a performance venue, or a component of a location, such as bright lights. Cultural components of the environment include the unspoken expectations that are present when attending a performance. Furthermore, the social aspect of the environment includes the people attending a performance or staff that tend to guests. The last component, occupation, is a goal-directed, meaningful pursuit that extends over a period of time. In this study, performing in a sensory friendly performance is the occupation. The PEOP model states that participation depends on the person and environmental factors, therefore this research can address both personal and environmental realms to enable participation in the cultural arts (Umeda, 2017).

Understanding interactive systems of person, occupation, environment, and participation are essential to gain insight into performers' perspectives of participating in sensory friendly performances. This research focuses around a collaboration with a performance venue to explore performers' experiences in sensory friendly performances. Being that the PEOP model outlines a process of OT in partnership with organizations to serve a target population, this ecological model is well suited for this research (Baum et al., 2015).

Occupational Justice

According to the OT Code of Ethics, equal opportunities for occupational engagement in the community is a fundamental right (AOTA, 2015). OTs play a vital role in addressing health equity and community well-being by promoting the intentional inclusion of all individuals. Under AOTA's ethical principle of justice, OTs should make every effort to promote occupational engagement for people who may benefit from them (AOTA, 2015). Occupation is typically not "individual in nature" and is experienced "beyond the limits of the singular person"

(Dickie et al., 2006, pp.83-85; Fogelberg & Frauwirth, 2010, p. 131). Through an occupational justice perspective, OTs advocate for and promote occupational rights by upholding the expectation that all individuals have the right to equal opportunities to engage in varied and meaningful occupations in order to meet basic needs and maximize potential (Hammell, 2008; Townsend & Wilcock, 2004). Each individual has the right to develop through participation in occupation for health and social inclusion (Townsend & Wilcock, 2004). Therefore, OTs have an ethical obligation to promote health by preventing the occupational marginalization of individuals with sensory processing challenges in all aspects of life, including participation in cultural arts.

Ethical and Legal Considerations

The AOTA Ethical Principles and Standards of Conduct (AOTA, 2015) guided this research in order to pursue ethical and legal integrity. As such, an Institutional Review Board for the Protection of Human Participants (IRB) proposal was drafted at the Dominican University of California. This research had potential to bring about emotional responses and focused around a vulnerable population, so the possibility of unfavorable effects on the participants were considered, documented, and planned for. The IRB proposal included a list of potential risks to participants, minimization of risks, potential costs to participants, and potential benefits to participants. In the IRB, the ethical principle of autonomy for participants was acknowledged with the option to withdraw from the study at any time, for any reason.

The IRB thoroughly detailed the process for protecting confidentiality by developing safeguards to protect the privacy of participants - addressing the ethical principle of fidelity. Personal identifying information was present on the demographic form but was not present on the participant's focus group transcription. Demographic data from forms were transferred to an excel file and the hard copies kept in a locked drawer in the principle investigator's office, then destroyed within 1 year of study completion. Only first names were used in the initial recordings and the original audio files were deleted from the recording device within 24 hours. Audio recordings were transferred to study-specific hard drives, which were stored in a locked cabinet in the office of the primary investigator. Transcripts only used pseudonyms and audio recordings were accessible only to members of the research team, including OT capstone students, responsible for transcribing the focus group data. After transcription, the raw audio files will be deleted from the hard drives. Thereafter, all transcripts will be de-identified and only handled by

the research team for data coding and analysis in *Dedoose*, a web-based qualitative analysis platform.

Methods

This study utilized phenomenological qualitative methods to explore the perspectives of performers in a sensory friendly theatre performance.

Study Design

In accordance with qualitative phenomenological methodology, this approach analyzes significant statements and generates “meaning units” to then describe the larger common narrative (Moustakas, 1994) surrounding the lived experience of performers in the sensory friendly performance. Semi-structured focus groups were used as the primary method of data collection to gain insight into the meaning of the performers’ experiences. This methodology allows for a more profound understanding of their experiences through emerging themes and common meaning.

Program

This research was based on a pilot sensory friendly program developed between a Masters of Science in Occupational Therapy (MSOT) program and a community youth theatre company, *23 Elephants*. This program was modeled after similar sensory friendly programs developed with OT consultation (Ideishi et al., 2013; Umeda, 2017), yet customized to the needs and structure of this performance venue.

Environmental Modifications

To create an environment more suited for individuals with sensory processing challenges, environmental modifications were made to the social and physical environment. Changes to the physical environment involved creating zones to accommodate specific sensory needs. A “chill-out” area was configured in the lobby of the theatre to create a space where individuals with sensory processing challenges could meet their sensory needs as they arise during the

performance. Modifications to the house, the part of the theatre seating the audience during the performance were made to accommodate varying audience member needs. In the house, a “tech friendly” zone and movement area was designated for those with corresponding needs. The last row of seats remained empty to allow for expedited exit. House lights remained on at a dimmed level, and the house was sold to a maximum of seventy five percent capacity. Visuals, such as stop signs, colored tape and signs specifying the different zones, were utilized throughout the house to help orient the audience to the facility. Though there were no extra staff at this performance, there were additional volunteers from the partnering MSOT program.

Additional modifications were made to address the social environment to create a welcoming space for the sensory friendly performance. The primary changes to the social environment included the artistic director preparing the actors on what to expect during the show and giving a pre-show announcement reminding the audience that the performance is sensory friendly, with a brief reference to the zones. Programming also included a storybook modeled after Gray’s Social Stories™ (2020) about the performance, available to audience members in the lobby.

Specialized Training

In using a “train the trainer” model (CDC, 2019b), a registered and licensed OT and MSOT professor provided specific training to the artistic director of *23 Elephants*. The OT provided information about modifications to the theatre setting, the mission of the performance, and specific information on what to expect from the audience. During a later rehearsal, the artistic director briefed the performers on the general structure of the sensory friendly program, including what to expect, the objective of the program, and orientation to the zones of the social

environment. The director was also instructed to give a pre-show announcement orienting audience members to environmental modifications.

Participants

Participants were youth performers recruited from the cast of a production of *Mamma Mia*. All of the performers were invited to participate in the sensory friendly performance, developed as one in the series. Performers and their parents were informed of the study via hard-copy letters distributed at rehearsals. Consent forms were distributed and collected by the director and then returned to the primary investigator. Participation was completely voluntary, and performers and their guardians were not offered compensation for participating in the study. The study included a total of 13 participants, ages 10-15.

Data Collection

Qualitative data was collected via in-person 30-60 minute focus groups of 3-4 participants that occurred immediately following the sensory friendly performance. A series of open-ended questions that concentrated on the experience of performing in a sensory friendly performance (see Appendix A) guided the semi structured focus group interviews. Some of the questions inquired about previous experience with sensory friendly performances and individuals with sensory needs, as well as how the sensory friendly performance compared to other performances. Participants also completed a brief questionnaire (see Appendix B) to collect demographic data including age, gender, performance experience, as well as prior experience with sensory friendly performances.

Data Analysis

Qualitative Data

An inductive thematic approach was used to facilitate naturally emerging themes from the performers' experiences. Audio recorded interviews were transcribed into Microsoft Word by investigators using *Express Scribe*, an audio player software, to maximize accuracy of transcription. After finalizing the four focus groups' transcripts, investigators individually open-coded the first transcript by hand to develop a preliminary codebook. Investigators then organized into groups of three to further refine the preliminary codebook through analysis and discussion. Then, two delegates, one from each group of three, analyzed and discussed the coding. The final step in determining and clarifying the codebook was in comparing the six student research investigators' coding to the primary investigators' coding. The codebook was agreed upon by primary and co-investigators with definitions and inclusion criteria for each code.

Further plans for data analysis include uploading all transcripts into *Dedoose*, a web-based qualitative coding software. The predetermined codes will be applied to the audio recordings via *Dedoose*, which will produce summaries of each code. The summaries will be analyzed by the investigators to identify themes across performer experiences. In line with a phenomenological research approach, themes ultimately finalized upon between the primary investigator and co-investigators will reflect the essence of the performers' experiences (Moustakas, 1994).

Trustworthiness

In an effort to further promote trustworthiness, investigators utilized a semi structured interview format including a predetermined set of questions. Additionally, co-investigators

promoted trustworthiness of the data by joint development of the initial codebook (as detailed above), and utilization of multiple researchers to code transcripts. Investigators independently coded transcripts, which were then triple cross-referenced to minimize bias during the coding process and increase trustworthiness. After utilization of *Dedoose* software, themes will be finalized based on discussion by all investigators of openly coded summaries to promote trustworthiness.

Potential Limitations

Investigator bias is the primary potential limitation of this study. The positions of the investigators in relation to the purpose of this study is academic in nature, however the investigators are occupational therapists and OT students involved in the creation and implementation of the sensory friendly programs. This involvement could have influenced interviews and coding transcripts for themes, however, this bias was minimized by using predetermined interview questions and cross-referencing open coded data, before finalizing themes and interpreting the data.

Section II: Prepared Manuscript for Journal Submission

Section II consists of a prepared manuscript for submission to a journal for publishing. This section is reformatted and edited according to the journal's audience and guidelines, as well as builds on Section I by disseminating results to further discussion and implications for future research.

Introduction

Community social participation experiences, such as attending cultural arts events, have established connections to health and QoL and are considered social determinants of health (Bedell et al., 2013; Lee et al., 2008; Mandich et al., 2003; Office of Disease Prevention and Health Promotion [ODPHP], 2010; Rafeedie, 2018; Stav et al., 2012; World Health Organization [WHO], 2007). Established research illustrates that children with sensory processing differences and their families face barriers to community participation experiences due to a myriad of environmental barriers. Sensory friendly theatre programs, created collaboratively by theatre organizations and occupational therapy consultants, are specifically designed to dismantle these barriers and provide individuals with sensory processing differences and their families with an inclusive theatre going experience. The research base for these innovative access initiatives is still emerging. Existing studies have investigated the perspectives of parents of children with disabilities and theatre staff (Ideishi et al., 2010; Umeda, 2017; Silverman & Tyska, 2017), with results suggesting that sensory friendly theatre can have positive outcomes for both families with children with disabilities and theatre organizations. However, to date, there are no studies examining the experiences and perspectives of performers in sensory friendly shows. Therefore, the purpose of this study was to contribute to the research base for sensory friendly theatre by exploring the lived experiences of youth performers performing in a sensory friendly performance. This growing research base is needed to guide theatre organizations and other stakeholders invested in developing and implementing successful sensory friendly theatre programs in the future.

Social Participation and Quality of Life

Social participation in the community, including cultural arts events, has an established connection to quality of life (QoL) and health outcomes (Bedell et al., 2013; Lee et al., 2008; Mandich et al., 2003; Rafeedie, 2018; Stav et al., 2012; World Health Organization [WHO], 2007). Cultural arts events are also considered societal determinants of health (SDOH). SDOH are conditions impacting health and wellness, including safe social environments for participation in community-based activities (Office of Disease Prevention and Health Promotion [ODPHP], 2010). Implementing “social and physical environments that promote good health for all”, (Centers for Disease Control and Prevention [CDC], 2018), links social participation as a health outcome of these SDOH. Addressing SDOH highlights areas of increased opportunity for wellness and QoL.

Individuals with Sensory Processing Challenges: Barriers to Participation

Research shows that individuals with disabilities face many community and social barriers that decrease social participation (Bedell et al., 2013; King et al., 2013; Law et al., 2007; Rimmer et al., 2004; Umeda, 2017; Koenig & Rudney, 2010). Many individuals experience sensory processing challenges, including those diagnosed with developmental and neurodevelopmental disabilities (American Association on Intellectual and Developmental Disabilities [AAIDD], 2019; Ayres et al., 2005; Engel-Yeger et al., 2011; Parham & Mailloux, 2015). Having sensory processing challenges makes it difficult to organize and integrate information from the various senses in a functional way (Ayres et al., 2005; Critz et al., 2015; Seattle Children’s Hospital, 2019). This can make it challenging for these individuals to comfortably understand their environment as they try to filter distracting stimuli and focus on relevant pieces of the environment. While each person is unique, many individuals with sensory

processing challenges experience similar difficulties (Engel Yeger et al., 2011; Parham & Maillous, 2015); therefore, the term “individuals with sensory processing challenges” is appropriate for the context of this research.

Traditional theatre-going has highly structured social demands, including sitting still during the performance and turning off electronic devices (Seid, 2008). However individuals with sensory processing challenges often use movement or electronic devices for regulation or communication, and may be unable to control their movements, may use movement to express excitement or engagement, or may need to take more breaks and leave the auditorium more than a neurotypical audience member. Due to these social demands, individuals with sensory processing challenges are less likely to participate in these activities (Little et al., 2014) as they prompt feelings of anxiety (Fletcher et al., 2018). Parents often fear that their child’s behavior will not be accepted or understood because they do not fit the social norms of the event (Anaby et al., 2013; Bedell et al., 2013; Kempe, 2014; Law et al., 2007; Shiloh & LaGasse, 2014; Umeda, 2017). Social expectations need adjusting to promote accessibility for individuals with sensory processing challenges while still maintaining the nuance and integrity of the performance (Ideishi et al., 2013).

The barriers to social participation are significant because when individuals with disabilities participate less frequently in community activities, their health and QoL are negatively impacted (Bedell et al., 2013; Lee et al., 2008; Rafeedie, 2018; Solish et al., 2010; Stav et al., 2012). This leads to a health disparity for this population.

Social Model of Disability

According to the social model of disability, it is society’s responsibility to address these barriers to social participation. This model asserts that the barriers that society creates and

imposes on individuals with disabilities hinders social participation (Union of the Physically Impaired Against Segregation [UPIAS], 1997). “[I]t is the collective responsibility of society at large to make the environmental modifications necessary for the full participation of people with disabilities in all areas of social life” (WHO, 2007, pp. 18-19). Modifications need to be made to remove societal barriers to increase social participation and QoL of individuals with sensory processing challenges.

Sensory Friendly Programs

Sensory friendly experiences are initiatives that aim to provide individuals with sensory processing challenges with opportunities to participate in cultural arts by modifying the social and environmental contexts (Ideishi et al. 2013). Sensory friendly experiences have emerged in commonly visited venues such as museums, concerts, and live theatres. These experiences often include environmental modifications, decreased crowd size, and inclusive learning materials (Ideishi et al., 2013; Leichtman et al., 2014; Umeda et al., 2017). Sensory friendly experiences designed for live theatre settings are referred to as ‘sensory friendly performances’. Sensory friendly performances create a performing arts environment that is welcoming (Ideishi et al., 2017) and adjusts to the needs of individuals with sensory processing challenges (Fletcher-Watson & May, 2018).

Occupational Therapy Consultation in Sensory Friendly Programs

Occupational therapy (OT) is an allied health profession with a growing presence in the cultural arts. OTs have acted as collaborators and teamed up with theatre organizations to implement sensory friendly performances. OT consultation in developing sensory friendly programs often incorporates environmental modifications, preparatory materials, and trained staff to create a flexible and supportive theatre-going experience (Ideishi et al., 2013; Fletcher-

Watson & May, 2018; Leichtman et al., 2014; Shiloh & LaGasse, 2014; Umeda, 2017). OTs are well-suited to partner with cultural arts organizations to create these access programs and offer a unique perspective on supporting the social participation of individuals with disabilities within the community and positively affect QoL (Ideishi et al., 2010; Ideishi & Mendonca, 2013; Umeda et al., 2017).

Interdisciplinary Collaborations Addressing Participation Barriers

Innovative collaborations between cultural arts organizations, like theatres, and occupational therapists (OTs) have addressed these barriers to promote access for individuals with sensory processing challenges and their families through the development of programming (i.e. sensory friendly performances) that is rich in meaning, sustainable, and well-suited for all involved. The preliminary existing research done on these innovative and interdisciplinary collaborations has yielded positive results, such as improving the quality and duration of the attendee's visit to the sensory friendly event (Silverman & Tyszka, 2017) and overall positive family experiences (Ideishi et al., 2010; Leichtman et al., 2014; Umeda, 2017).

Parent and Family Perspectives of Sensory Friendly Programming

Families with children with sensory processing challenges often encounter many obstacles when attending cultural arts performances without OT consultation. Parents often feel “unwelcome” in public environments and avoid attending them (Bedell et al., 2013; Kulik & Fletcher, 2016). However, when given the chance to attend a sensory friendly performance, families had a rare and valuable opportunity to venture out into the community and have a deeply meaningful experience together (Silverman & Tyszka, 2017; Shiloh & LaGasse, 2014; Umeda, 2017). Parents reported the sensory friendly theatre experience provided an inclusive participation experience, with children experiencing safety, belonging, engagement, and joy

(Umeda, 2017). Parents felt at ease bringing their children (Umeda, 2017; Silverman & Tyska, 2017) without “fear that their child’s idiosyncratic and non-status quo behaviors will be an embarrassment” (Shiloh & LaGasse, 2014, p.117). Parents were surprised by their child’s anticipation leading up to the event, the duration of engagement during the event, and their excitement describing the event to others afterward, leading them to state, “it was a beautiful time” (Ideishi et al., 2010; Umeda, 2017; Silverman & Tyska, 2017).

Organization Perspectives of Sensory Friendly Programming

Currently, there is limited research on organizations’ and staff perspectives on sensory friendly performances. Staff perspectives are important to consider as they are responsible for deciding whether sensory friendly performances will be implemented, and they often interact with the visitors during the pre-and post-performance period. One study stated staff members at the Dallas Children’s Theatre felt more equipped in providing sensory friendly programs following the collaboration with OTs. They reported that sustained collaborative relationships with OTs can increase skills, promote autonomy and success in promoting the theatre mission while providing sensory friendly programs (Fletcher et al., 2018). In Umeda’s 2017 study, staff determined that the sensory friendly performances were meaningful to them and the organization’s mission, which includes increasing access. They felt OT was able to design a program that fit the unique needs of their target audience and provide them with valuable information on the populations they might be working with (Umeda, 2017). Theatre staff responded to the sensory friendly theatre performance as a highly worthwhile endeavor and stated that OT consultation was crucial to the success and progress of the programming.

Lack of Research on Performers' Perspectives

For sensory friendly performances to be successful and sustainable, consideration of all stakeholder perspectives is necessary. Performers are one key stakeholder group not represented in literature. Their lived experiences participating in sensory friendly performances have not yet been explored. Obtaining the unrepresented perspectives of performers is vital to honoring the integrity and nuance of the craft, while also creating safe spaces for individuals with sensory processing challenges and being inclusive to a more diverse population. This is crucial to conceptualizing effective partnerships between all parties involved in the creation of sensory friendly performances.

Study Aim

By exploring performers' lived experiences in sensory friendly theatre, this study aims to contribute qualitative data to the foundational research examining the impacts of sensory friendly theatre programs developed with OT consultation. This knowledge will help to guide theatre organizations, OTs, and other stakeholders desiring to implement sensory friendly programs that maximize theatre access for people with sensory processing differences and their families. With knowledge spanning multiple theatre stakeholder groups, theatres and OTs can gain insight on best practices for creating successful sensory friendly programs to maximize community participation access for individuals with sensory processing challenges.

Research Questions

This study targets the following research questions:

1. What are the experiences of performers performing in sensory friendly theatre performances with OT consultation?

2. In what ways, if any, do sensory friendly performances affect performers' perceptions of their craft/art?
3. How do performers train and prepare for performing in sensory friendly performances?

Methods

This study utilized phenomenological qualitative methods to explore the perspectives of performers in a sensory friendly theatre performance. This research was submitted and approved by the university's Institutional Review Board for the Protection of Human Participants (IRB).

Study Design

In accordance with qualitative phenomenological methodology, this approach analyzes significant statements and generates “meaning units” to then describe the larger common narrative (Moustakas, 1994) surrounding the lived experience of performers in the sensory friendly performance. Semi-structured focus groups were used as the primary method of data collection to gain insight into the meaning of the performers' experiences. This methodology allows for a more profound understanding of performer experiences through identification of common themes.

Program

This research was based on a pilot sensory friendly program developed between Dominican University's Occupational Therapy Department and a community youth theatre company. This program, designed to increase theatre access for individuals with sensory processing challenges, was modeled after similar sensory friendly programs developed with OT consultation (Ideishi et al., 2013; Umeda, 2017), yet customized to the needs and structure of this performance venue.

Physical Environment Modifications

To create an environment more suited for individuals with sensory processing challenges, changes to the physical environment were made. A “chill-out” area was configured in the lobby of the theatre to create a space where individuals with sensory processing challenges could take

breaks as needed during the performance. Modifications to the house, the part of the theatre seating the audience during the performance, were made to accommodate varying audience member needs. In the house, a “tech friendly” zone and movement area was designated for those with corresponding needs. The last row of seats remained empty to allow for an expedited exit. House lights remained on at a dimmed level, and the house was sold to a maximum of seventy-five percent capacity. Visuals, such as stop signs, colored tape, and signs specifying the different zones, were utilized throughout the house to help orient the audience to the facility. Though there was no extra staff at this performance, there were a few additional volunteers from the MSOT program.

Social Environment Modifications

Additional modifications were made to address the social environment to create a welcoming space. Changes to the social environment included a preparatory social narrative about the performance, available in the lobby for audience members. Additionally, the artistic director prepared performers for what to expect during the show and gave a pre-show announcement reminding the audience that the performance is sensory friendly, with a brief reference to the zones.

Occupational Therapy Guidance

Using an organization-level consultation model (Umeda, 2017), an OT consultant collaborated with the theatre’s artistic director to develop the sensory friendly performance program. Based on her previous experiences with sensory friendly theatre program development, the OT provided the artistic director with suggestions for potential modifications to the theatre environment, and provided insight about possible audience member behaviors and diagnoses. She also provided general guidance on information that would be helpful to convey to staff,

volunteers, and performers who would be involved in the sensory friendly show. During a dress rehearsal for the show, the artistic director briefed the performers on the general structure of the sensory friendly program, including what to expect, the objective of the program, and orientation to the zones of the social environment. The director also gave an on-stage pre-show announcement that oriented audience members to environmental modifications and unique features of the sensory friendly performance.

Participants

Participants were youth performers from the cast of the sensory friendly performance of *Mamma Mia*. Performers and their parents were informed of the study via hard-copy flyers distributed at rehearsals. Consent forms were distributed and collected by the director and returned to the primary investigator. Participation was completely voluntary; neither performers nor their parents/guardians were offered compensation for participating in the study. The study included a total of 13 participants, ages 10 to 15.

Data Collection

Qualitative data was collected via in-person 30-60 minute focus groups of 3-4 participants that occurred immediately following the sensory friendly performance. A series of open-ended questions that concentrated on the experience of performing in a sensory friendly performance (see Appendix A) guided the semi-structured focus group interviews. Some of the questions inquired about previous experience with sensory friendly performances and individuals with sensory needs, as well as their experience during the sensory friendly performance and how it compared to other performances. Participants also completed a brief questionnaire (see Appendix B) to collect demographic data including age, gender, performance experience, as well as prior experience with sensory friendly performances.

Data Analysis

An inductive thematic approach was used to facilitate naturally emerging themes from the performers' experiences. Audio-recorded interviews were transcribed into Microsoft Word by investigators using *Express Scribe*, an audio player software, in groups of three to maximize the accuracy of the transcription. After finalizing the four focus groups' transcripts, investigators individually open-coded the first transcript by hand to develop a preliminary codebook. Investigators then organized into groups of three to further refine the preliminary codebook through analysis and discussion. Then, two delegates, one from each group of three, analyzed, and discussed the coding. The final step in determining and clarifying the codebook was in comparing the six student research investigators' coding to the primary investigators' coding. The codebook was agreed upon by primary and co-investigators with definitions and inclusion criteria for each code.

Transcripts were uploaded into *Dedoose*, a web-based qualitative coding software. The predetermined codes were applied to the audio recordings via *Dedoose*, which organized and grouped coded excerpts by code. Code summaries then were analyzed by the investigators to identify themes across performer experiences. In line with a phenomenological research approach, final themes reflect the essence of the performers' experiences (Moustakas, 1994).

Trustworthiness

In an effort to support trustworthiness during data collection, investigators utilized a semi-structured interview format with a standard set of questions, jointly developed the initial codebook (as detailed above), and utilized multiple researchers to code transcripts. Any coding discrepancies were resolved through discussion amongst the investigators. Themes were

finalized by all investigators through discussion of openly coded summaries after utilizing *Dedoose* software in order to promote trustworthiness.

Results

The following themes emerged from the final analysis: sensory friendly performances as novel experiences, enjoyable performer experiences, performing as different but not lesser, and performers encouraged the expansion of sensory friendly performances.

Sensory Friendly Performances as Novel Experiences

All thirteen participants had no prior experience performing in a sensory friendly performance. The majority of participants expressed a range of ideas about the purpose of the show, the general demographics of the audience, and the performance itself. Several participants noted that they originally believed sensory friendly meant that the performance would be altered to be free of offensive language. One participant stated, “Yeah, at first, I thought they meant like no swearing or something.” Another reported, “I... thought that it was just like censoring the show so that it was like child-appropriate”. Other youth participants believed that the term “sensory friendly” signified the purpose of the show was to cater to individuals with commonly-known physical disabilities, such as visually impaired, hearing impaired, and wheelchair-bound. When asked about additions to the performance, one participant stated, “A wheelchair [zone] would be good or maybe more close seating for maybe people who can’t hear as well.” Additionally, four of the participants reported incorrectly anticipating inappropriate or uncomfortable behaviors from the audience (i.e. making disturbing noises or running towards/on the stage). One participant stated, “ They told us...we shouldn’t be grumpy when the audience isn’t laughing or applauding as much. We shouldn’t just blame it on them for having a bad attitude.” This participant also stated, “I actually was surprised, I thought there would be more chatter and people standing up or talking really loud.”

Enjoyable Performer Experiences

All thirteen participants described participating in the show as an enjoyable experience. Participants talked about how seeing the audience having fun increased their happiness. One participant stated, “There were these little girls sitting over here by the staircase and they were always dancing around at the end and it made me really happy because I was singing to them and they were smiling back at me and it just made me feel really happy.” Another participant stated, “The kids looked like they were more engaged than a regular audience was, especially at the end when everyone was standing up and dancing around with us. That made me feel really happy because I got to actually make a connection with people instead of just singing to them while they’re just sitting back and clapping.” The participants also felt that the audiences’ response to the performance heightened the fun they experienced. One participant stated, “I really loved the kids' energy and their response to us because they were having a lot more fun which led us to have a lot more fun.” Another participant stated, “I think we all enjoyed it and I think the audience enjoyed it, I mean, a lot of them seemed to be reacting like really good, it was just, it was like just a fun show.”

Performing as Different but not Lesser

Participants reported that performing in the sensory friendly performance was not the same as performing in a typical performance. However, they reported that the experience of performing in a sensory friendly performance was just as positive as a non-sensory friendly show, and in some cases, more so. Reflecting on the modifications, one participant stated, “I do a lot of scene changes and I move the bed on and off stage so it was different because I’m used to doing that in complete darkness where I’m not as seen as much but with the house lights on it’s just a different feeling of oh, wow they can actually see me I need to make sure that I am in

character while I'm doing this." Several participants mentioned having to stay in character and the positive impact it had on their performance: "I liked the challenge of having us stay in character a lot of the time because it really helped me actually look back at myself and be like, 'Wow, what can you do different to help you move the show along and make it better than it was last night or than it could be tomorrow?...so, I just really liked the challenge.'" The participants noted that the sensory friendly show presented new challenges for them, but the challenges were enriching experiences rather than barriers. One participant stated, "I noticed [the house lights were on] when we were off stage but I also thought that it was pretty cool 'cause in the scenes where we interact with the audience it was way easier cause we could actually see them."

Performers Encouraged the Expansion of Sensory Friendly Performances

The majority of participants felt sensory friendly performances should be expanded. This included expanding sensory friendly performance to more theatres and expanding the programming to provide performers with more training. One participant stated, "It's a good thing 'cause it's just for people who need to have, I guess 'quote,' a special performance for them and if like every theatre did it then everyone could feel comfortable going to the theatre and watching a performance, no matter what..." Another participant suggested, "spread[ing] the word by actually doing more sensory friendly performances then more people would be able to see them and spread the news." The participants also suggested expanding the existing sensory friendly programming to include training for the performers on the target audience and what to expect during the performance. One participant who did not know what to expect from the audience suggested it would help to "...be told about all the different kinds of... kids... with different abilities that would be coming..." Participants were told the morning of the matinee performance that this show would be the sensory friendly performance, so another participant recommended

that “they could tell us a little more in advance so we know ahead what to expect.” The purpose of the sensory friendly performances aligned with the participants personal beliefs of inclusion. One participant stated, “I have a lot of close friends who struggle a lot with severe ADHD and I know a lot of the time they can’t go to plays or like go to the movies because they can’t...pay attention and like sit still for that long, so I think it’s definitely a great thing and I’d encourage more theatres to do it.”

Discussion

This qualitative study contributes foundational data to the emerging body of literature examining sensory friendly performances. Major themes that emerged from this study were: sensory friendly performances as novel experiences, enjoyable performer experiences, performing was different but not lesser, and performers encouraged the expansion of sensory friendly performances. These themes largely align with findings in the limited existing literature on sensory friendly theatre. Consistent with parent and organizational perspectives currently represented in the literature, performers found the sensory friendly performance to be a positive and enjoyable experience. Performers' enjoyment of the sensory friendly performance seemed linked to their perception of the audience's increased energy and engagement. This is consistent with existing studies in which parents reported their child's enhanced engagement and excitement leading up to, during, and after the show (Ideishi et al., 2010; Umeda, 2017; Silverman & Tyska, 2017). It seems that the performers' enjoyment is, in part, connected to experiencing the audience's enhanced level of engagement and excitement during the show.

The participants in the study reported their own performance experience as different from a typical performance, but not less enjoyable or meaningful. This study found that the environmental modifications such as a smaller crowd and keeping the house lights on occasionally influenced some performers, but most performers did not seem to notice and were comfortable in the environment created. This suggests that the modifications did not largely impact performers during the show. In the existing literature, these environmental modifications made many parents feel at ease and safe while attending the theatre with their children and family members (Silverman & Tyszka, 2017; Umeda, 2017) and are, therefore, valuable components of sensory friendly offerings. The fact that performers in the study reported

modifications as benign and sometimes even beneficial to the performing experiences, suggests that sensory friendly performances may be more feasible to implement than organizations may suspect. The collective data suggests that these modifications are appreciated by theatre parents and performers alike, with minimal impact on performers during the performance.

Performers in this study were overwhelmingly supportive of the expansion of sensory friendly performances, describing beliefs in theatre inclusivity and access for people with disabilities. This finding aligns with organizational leadership and staff's values regarding inclusion and access for individuals with disabilities in the existing literature (Umeda, 2017). Collectively, the findings suggest that performers and theatre organizations value inclusivity within the theatre environment, which may be an important element of successful and sustainable sensory-friendly program implementation within theatre organizations.

Our study provides key data that inform the future development and refinement of sensory friendly programming. The experience of performing in a sensory friendly performance was novel for all study participants, and they recommended that sensory friendly shows should receive more marketing and visibility. Performers recommend more advertising and marketing of the performance to increase attendance. One performer spoke to the need for increased advertisement when they reported that they would have invited their friends who do not attend traditional theatre events due to participation challenges in these settings. Further efforts to increase visibility of this type of access program would be beneficial.

Additionally, with the sensory friendly performance being a novel experience for the youth performers, many performers had misconceptions about the nature of sensory friendly programming. Misconceptions were related to the challenges audience members might face (i.e. physical challenges versus sensory processing/behavioral challenges), expectations of audience

members' behavior, and understanding "sensory friendly" terminology. The lack of previous experience with sensory friendly shows seemed related to these misconceptions, suggesting that more robust training for performers may be a valuable component of future sensory friendly programs. It should be noted that the one performer who self-reported having previous experience with a sensory friendly performance had misconceptions about his involvement in a structured sensory friendly performance versus participation in a performance with wheelchair and hard-of-hearing accessibility (gleaned from open discussion during focus-group interview). A pre-performance training with clarifications to the "sensory friendly" terminology may also be helpful, as the term was not intuitive for performers.

The worthwhileness and potential of sensory friendly performances are other key takeaways from this research study, supporting continued efforts in this realm of accessibility. Performers in this study felt that providing the audience an opportunity to experience theatre without the need to change their behavior was particularly valuable. This personal experience of worthwhileness aligns with perspectives in the existing literature. Theatre administrators and staff expressed that the benefits of putting on a sensory friendly performance outweighed the challenges (Umeda, 2017). This recurring concept of worthwhileness reinforces sensory friendly initiatives as important endeavors seemingly valuable to multiple stakeholder groups

Theatre and occupational therapy (OT) are traditionally disparate fields. However, it is evident in the literature and the findings of this study that collaboration between theatre organizations and occupational therapists can lead to the development and implementation of successful access programs for individuals who face participation challenges. OTs have the potential to bring valuable expertise to interdisciplinary stakeholder teams invested in creating sensory friendly experiences. Occupational therapists are trained to understand and address

challenges that individuals with sensory processing challenges face. They also possess unique skills to collaborate with organizations to develop specialized access programming that fits the goals and resources of each unique theatre organization. Results of this study suggest a need for performer training, and OT expertise in neurodevelopmental disabilities and sensory processing theory and intervention may play a valuable role in meeting this training need. OTs can collaborate with theatres to develop and implement effective training modules for performers and staff on expectations, mission, marketing and definitions of sensory friendly performances and the target population. The existing literature provides evidence that organizations consider OT consultation to be vital in the effectiveness of sensory friendly programming (Umeda, 2017). However, due to the novelty of sensory friendly performance training, additional research could focus on determining the most efficient and effective training method for innovative partnerships between OTs and theatre organizations.

Limitations

The investigators are occupational therapists and OT students involved in the creation and implementation of the sensory friendly programs. This dual involvement may have influenced data analysis including coding and thematic development. However, the impact of bias on study findings was minimized by using predetermined interview questions and involving multiple researchers in developing the codebook, coding transcripts, and finalizing themes.

Conclusion and Future Directions for Research

The findings of this study support the worthwhileness of sensory friendly performances to increase cultural arts access for individuals and their families with sensory processing challenges. This study has successfully contributed the perspectives of youth performers, a key stakeholder group that had previously not been considered. The research base for sensory friendly performances is, however, still in very early stages and in need of expansion. The perspectives of many key stakeholders groups invested in sensory friendly performances is still very limited or absent. Immediate next steps in this line of research should include systematic investigation of the perspectives of individuals with disabilities as audience members, the general public, adult and professional actors, and diverse community and professional theatre organizations.

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Appendix A: Interview Questions

Focus Group Interview Questions

1. What was it like to perform in today's sensory friendly show?
2. Tell me about any preparation you did to get ready for this performance?
3. Was there anything about the sensory friendly show that was different than performing in a regular show?
4. Did anything about performing today surprise you?
5. Do you have any advice for the people who organize sensory friendly shows?
6. Is there any support or training you would like to receive if you perform in another sensory friendly show in the future?
7. Before being part of today's show, what did you know about sensory friendly performances and who they are for?
8. Tell me about your experiences with people with disabilities.

Appendix B: Performer Demographic Form

Actor Questionnaire

1. How old are you (in years)? _____
2. What is your gender?
 - Female
 - Male
 - Other: _____
3. Is Mamma Mia the first show you've acted in?
 - Yes
 - No
4. Before being part of this Mamma Mia case, did you know what a sensory friendly show was?
 - Yes
 - No
 - Somewhat

Appendix C: IRB Approval Letter



April 18, 2019

Dr. Caroline Umeda
50 Acacia Avenue
San Rafael, CA 94901

Dear Dr. Umeda,

On behalf of the Dominican University of California Institutional Review Board for the Protection of Human Participants, I am pleased to inform you that your proposal entitled *Participation Experiences of Young Actors in a Sensory Friendly Theater Performance* (IRBPHP application #10789) has been approved.

In your final report or paper please indicate that your project was approved by the IRBPHP and indicate the identification number.

I wish you well in your very interesting research effort.

Sincerely,



Randall Hall, PhD
Chair, IRBPHP

Institutional Review Board for the Protection of Human Participants
Office of Academic Affairs | 50 Acacia Avenue, San Rafael, California 94901-2298 |
www.dominican.edu