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**The Effects of Theatre-Based Interventions with Older Adults Diagnosed with
Neurodegenerative Diseases**

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Occupational Therapy

Doctoral Capstone Experience

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Abstract

The Doctoral Capstone Experience evaluated theatre and the relation with occupational therapy to observe the potential connection theatre can create to improve shared experiences, emphasize collaboration, and improve quality of life through participation and engagement of theatre-based interventions. In general, theatre allows the foundation of occupational therapy to remain pertinent within the intervention process by remaining flexible, client-centered, and meaningful to aid with participation and engagement by dismissing signs and symptoms of Alzheimer's with a concentration on novel activities. Within the site of the project, there is currently a gap with socializing of consumers, due to the diverse group population, which overall is affecting the sense of collaboration that is hoped to be achieved at the Adult Wellness Program. The objectives throughout the experience were achieved through continued research that explored theatre interventions and working with individuals with neurodegenerative diagnoses to improve engagement, participation, and overall quality of life by utilizing assessments, measuring themes, and interpreting observed behaviors during interventions. Overall, improvement with quality of life in most consumers, as measured by VQ, SF-36, and qualitative observations, was achieved through improved scores and positive change in affect.

Introduction of Capstone Project

The Doctoral Capstone Experience (DCE) started from initial rapport building with the current consumers at the site for two weeks in early January 2023. Next, preparation for interventions took place with preliminary research for effective strategies, activity ideas, while relating the interventions back to theatre with an occupational therapy (OT) scope. Additionally, a program flyer was given to appropriate consumers that were appropriate for further evaluating and to inform caregivers on the occurrence of the program including the weekdays of the

interventions, topic areas of activities, and an overview of the OT student completing the DCE.

The evaluation period last approximately two weeks to gather baseline information for the assessments of the 36-Item Short Form Survey (SF-36), if appropriate, Mini-Mental State Examination (MMSE), Volitional Questionnaire (VQ), a brief Occupational Profile, and creation of long-term goals and a personalized client goal if applicable. Throughout the interventions each week, the VQ was filled out for each evaluated consumer that participated in the theatre intervention and throughout the day at Senior Day Services (SDS). Overall, the VQ gave observed information of the consumers to gather responses to activities within the areas of exploration, competency, and achievement. At the end of the DCE, exit-interviews and re-evaluation of the consumers took place to compare from the baseline information to see changes in the assessments listed previously and to observe if long-term goals were met or not met. Additionally, home activity programs (HAPs) were created and individualized for consumers and caregivers to implement at home at the end of the program including preferred activities and musicals and songs, safety for implementation, and modified activities for completion at home.

The population, or consumers, that participated in the theatre-based intervention program were located at SDS and affiliated with Western Michigan University's Adult Wellness Program (AWP). In general, the focus for the AWP is to offer cognitive, therapeutic, and leisure activities (WMU Adult Wellness Programs, 2020). The population of individuals included adults aged 60 or older with diagnoses that include physical and or cognitive impairments and comorbid chronic health deficits. Overall, the most common diagnosis in the setting included dementia and aided with the desired population to complete the DCE. The consumers that partook in the theatre-based intervention program ranged from a large spectrum of assist level. Many of the consumers lived with families or group homes and require varying level of assist for most activities of daily

living (ADLs) and instrumental activities of daily living (IADLs), while a few of the consumers in the DCE lived more independently and do not require increased assist for daily tasks.

Dawn Robarge was the site mentor throughout the experience is the current Program Coordinator of Adult Wellness Programs at Western Michigan University with a vast expertise in the setting and population that the DCE was completed. The experience of the supervisor includes Faculty Specialist for blindness and low vision studies, WMU Center for Disability Services, and Community Mental Health in the Kalamazoo-area. Not only did Dawn's expertise span a wide array of local community settings, but the experiences and involvement in the workforce gleaned to the DCE project with mentorship and when working with individuals diagnosed with dementia. Additionally, Dawn's experience aided the DCE with appropriate tactics to approach the diagnoses through intervention, rapport with the individuals, and the overall need for community involvement and addressing continued gaps with respite care within the area.

Literature Review

Alzheimer's disease continues to be a neurodegenerative disease and the most prevalent cause of dementia due to the combination of amyloid and tau that causes plaques and tangles to inherently cause further pathological changes with diagnosed individuals (Smallfield & Heckenlaible, 2017). This disease is more common with individuals that are 75 years of age or older, although early onset is possible. Alzheimer's is detected and diagnosed through imaging via MRI and PET scans. Alzheimer's has currently affected more than 5 million American adults with a diagnosis rate of one minute every day a new individual is diagnosed. Not only does memory loss continue to be an area of concern with impairing daily activities and occupations, but a decrease in participation socially and with activity engagement due to changes in mood and

behavior continuous to be impacted. While there is hope for disease cure and even prevention in the future, currently, there is not a cure for symptoms of dementia including memory impairment, executive dysfunction, and the impact of daily life is at the forefront of diagnosis impairments and a continued concern within the diagnosed population (Scheltens et al., 2016). There is additionally not a definitive treatment for the disease. To gain an understanding of the impact of the diagnosis on an individual, quality of life can only be measured through assessments, such as the MMSE, to objectively define participant well-being.

Research presented a gap in literature within the findings of occupational therapy intervention to demonstrate that specific theatre intervention protocols are needed while implementing theatre activity-based occupations. Additionally, a lack of protocols for appropriate assessments, theoretical framework, and overall occupational therapy evidence and standardization continues to be absent. Although, the gap in literature of structured interventions with set protocols allotted for uniqueness and creativity for the DCE. Inversely, a cause for variance with frequency and type of intervention continues to remain. Furthermore, professionals in many settings are lacking training prior to working with individuals that have Alzheimer's disease, and currently a gold standard for appropriate training used for individuals anticipating working with participants with this diagnosis does not exist, especially when incorporating novel activities such as theatre interventions.

Within Kalamazoo County, the area of DCE completion, out of approximately 261,573 individuals, 24.1% of deaths within the county are related to the Alzheimer's diagnosis mortality rate (Michigan.gov). With individuals that have an Alzheimer's diagnosis or other neurodegenerative diagnoses, respite care continues to diminish in Kalamazoo, ultimately creating increased caregiver burden and lack of community resources to create respite for

families (R. Austin, personal communication, 2022). Although, with the use of a theatre-based program within a senior-day setting, the continuation of structured leisure activity would become available within the local community aiding with participation of the individuals and reducing familial burden (Orjasaeter & Ness, 2017).

Overall, the Capstone purpose was to study the possibility of enhancing engagement, participation, and quality of life with older adults diagnosed with neurodegenerative disorder that includes Alzheimer's disease, the umbrella term of dementia. The 14-week study was not necessarily created for the improvement of memory day-to-day, but to focus on participants partaking in novel, and creative activities that essentially impact quality of life while collaborating with the site and providing continued respite care for caregivers. Additionally, the Capstone project addressed, and studied social engagement, motivation, initiation, and perceived quality of life measurement as determined and observed through the VQ, (Ryan, 2020), and the SF-36 (Clinmedjournals.org, n.d). Additionally, cognitive stimulation for individuals diagnosed with neurocognitive disorders has been supported to improve social interaction and overall quality of life as determined by Smallfield & Heckenlaible (2017), to aid with the site need that the DCE was completed.

Occupational therapy plays a large role with cognitive stimulation by incorporating interventions that impact daily routines of individuals to have a positive impact on participation and engagement through skilled, evidence-based intervention (Smallfield & Heckenlaible, 2017). Examples of cognitive stimulating interventions are typical theatre activities such as team bonding, script and monologue reading, modified chair choreography, improvisation, small-scale "set design", and even singing (R. Austin, personal communication, 2022). Theatre not only continues to be an opportunity for participants to engage in novel tasks, but as mentioned by

Filippelli (2021), drama can be used to enhance self-esteem, aid with creative problem-solving skills, and benefit overall cognitive function.

Prior to partaking in the DCE and working with individuals that had neurodegenerative diagnoses, training was completed by the OT student and presented by the Alzheimer's Association to educate specifically health professionals and students within community-based settings current evidence-based, assessments and care planning, impact on ADLs, all while remaining client-centered is provided in the training called EssentiALZ (Alzheimer's Association, 2022). Although, due to there being no gold-standard training in preparation to work with individuals that have a neurodegenerative diagnosis, this training was deemed as a best-fit option by the student prior to completing the DCE.

To truly evaluate the impact of a theatre-based intervention project, with individuals that have a neurodegenerative diagnosis, the question arises:

Will the older adult population diagnosed with a neurodegenerative disease, that partake in a theatre-based intervention program, have an improvement with engagement and or participation and quality of life when measured with assessments of VQ and SF-36?

Steps that were taken to achieve the findings occurred through the theoretical framework with the use of the theoretical model of practice: Model of Human Occupation (MOHO), with emphasis on engagement and participation to aid with daily, occupational functioning and adding meaning to each participant's life (Cole & Tufano, 2019). With the previous research question in mind, evidence has existed to support current intervention and evidence-based practice from other occupational therapy studies that involved theatre-based intervention. The results of the study supported the transformations in the categories of life story, playfulness, and social

engagement was achieved from personal narratives after a post-test was completed for the participants (Keisari et al., 2020).

Since the initial literature review was completed prior to the DCE, new research was discovered during the DCE 14-week process to solidify the need for the intervention and program creation. As presented by Sprague et al. (2019). Currently, there are a plethora of programs that aid with cognition in past research, but a decreased amount involve theatre as a means of intervention. Additionally, acting within theatre has been shown to impede age-related decline within cognitive domains with problem-solving and working memory, as described by Rajesh (et al., 2021), along with active experience that works parallel with theatre. Not only was engagement, participation, and quality of life sought after with interventions, but discussed by Orkibi (2018), the application of arts with psychotherapy was a domain of creative expression that is within the realm of basic human needs. The site allows for programming, such as theatre, to occur and span a large diverse population. Similar to the site in which the DCE took place, Dunkle et al. (2019), explored self-efficacy and motivation through dementia care programming to further discover self-expression, social stimulation, acceptance and validation. The user-friendliness as an intervention related to not mastering the activity, but using intuition, personal narrative, and shared experiences (Orkibi, 2018).

Additionally, research that was discovered throughout the DCE includes the term of creative aging that is not actively being practiced. Creative aging currently aids with fluid intelligence that declines after age 40 (Yamamoto, 2019), and allowed for clients to interpret personal experiences, social participation, and unique narrative through improvisation. Not only does engaging in theatre come with positive benefits, but the act of attending and observing theatre

enhances overall wellbeing and quality of life through continued social engagement, belonging, and in general positive affect as a result (Meeks et al., 2020).

Needs Assessment

A needs assessment was completed to see strengths, weaknesses, and current areas of needs to be addressed by the DCE. With the site being populated by older adults within the community, the entire goal of the site is to provide respite for the caregivers and families and generally, increase socialization and engagement. Similar to the theatre project, the goal of the site garners to increasing novel tasks and activities, providing a safe environment for the families to create stimulation, physical activity, and improve quality of life with the diagnoses that range from Alzheimer's, dementia, stroke, and general cognitive impairment. Overall, the need for the site that works parallel with the DCE includes need for increased participant stimulation, cater to diverse group challenges, and aid with staffing shortages with involvement of new programs that can entertain and engage the consumers at the site.

Strengths of SDS involve the staff and the unique experiences that each student and staff member can bring to the setting including the want to gain experience and work with the population, lively personalities, and an overarching theme of interdisciplinary education made up of the student and staff population. With the staff, training is a large area of strength with adequate administration and general staff support and collaboration is well-rounded.

Weaknesses include the consumers wants and needs for activities to not be deemed as childish, as reported by the staff. Given the diagnoses, individuals that complete activities at the site occasionally modify activities that effects the entire group, instead of certain individuals. Additionally, with comorbidities being a large spectrum and potentially complex, a need for a nurse or professionals trained in the medical model would be beneficial. With staffing at the site,

summer and fall seasons tend to be understaffed as students are home for the summer or new to campus and unaware of the site for gaining hands-on experience. Along with staffing for the site and aid with consumers, the need and want for increasing specialized students into the facility including, OT, physical therapy (PT), and social work is necessary for continued diversified care and inclusion of other disciplines.

Opportunities for increased services to be offered is haircare for the consumers at the site and improving the outdoor space that is safe and functional. Additionally, the staff believe it would be positive and beneficial for children to come in and spend time with the consumers and also build rapport with the population. Even though physical activities are usually involved and on the day-to-day schedule, increased physical activities are wanted and a growing area to include more yoga instruction, boxing, cooking or culinary classes. Due to the nature of the DCE program being novel and not currently at the site, with new grads coming from various programs at WMU, that allows for the opportunity of new research, ideas, and methods to be shared at the site—similar to the DCE.

Although, threats to the site continues to be funding concerns. Funding poses as a large threat to the site due to minimal funding services for the consumers at the site and the caregivers requiring assist paying for services that are needed. In general, the reimbursement for seniors in need is a continued area of concern due to the continuum of decreased support for caregivers and families.

Objectives

Objectives for the DCE were created and determined to be individualized and unique for the project, attainable during the timeframe, and to aid with gathering of evidence and results to demonstrate impact of the DCE at the site. Learning activities were completed in attempts to

meet objectives. Three of the site objectives are discussed to establish the specific steps taken to achieve the objectives throughout the project.

The first objective achieved throughout the DCE was:

By the end of the Doctoral Capstone, an evidence-based program protocol will be designed on theatre-based intervention activities for older adults diagnosed with a neurodegenerative diagnosis to aid with participation and quality of life in senior, community settings.

The learning activities that took place in order to achieve the objective included creating a theatre programming guide to allow for the site of SDS to carryover the activities that were once performed with the help of the DCE OT student. The guide additionally allows the site to gain insight of research, intervention, intervention sequencing and steps, and pictures for accurate carryover. This objective attempted to cater to the diverse group that was present at the site by being easily modifiable, graded depending on level of assist, and improving engagement. See Appendix D for examples of interventions from theatre programming guide.

The second objective achieved throughout the DCE was:

By the end of the Doctoral Capstone, common themes and or trends will be observed qualitatively to note changes in affect and changes in expression.

The learning activity that aided with completion of this objective included completing a common theme matrix of qualitative observations during specific sessions to measure changes in participation and or quality of life with older adults participating in Capstone experience by week 12. The qualitative matrix included general themes, interpretation for participation, engagement, and socializing, changes in behavioral affect and consumer narrative quotes, and impact on interventions. The objective also addressed the need or gap of research with theatre-based

interventions and the impact on quality of life while also stimulating the consumers to increase participation, engagement, and socializing. See Appendix A for qualitative themes matrix.

The third and final objective achieved during the DCE included:

By the end of the Doctoral Capstone, educational handouts will be designed for consumers and caregivers to simulate and increase carryover theater-based techniques and home settings based on specific participant interest.

Learning activities to achieve this objective included HAPs created uniquely and individualized for each consumer for caregivers to implement at home at the end of the program including preferred activities and musicals/songs with YouTube links, safety for implementation such as completing modified tap dancing seated, and modified activities for completion at home such as costume design, puppet creation, and making a puppet stage for at-home performances. The HAPs also achieved the need and gap at the site by remaining client-centered and individualized based on the diverse group. This objective additionally allows for sustainability of the project. See Appendix B for a HAP example.

Interventions

The theatre-based interventions occurred and were pre-planned from ideas of personal experience within the theatre craft, stemmed from research, and therapeutic knowledge of enhancing personal volition through meaningful activities and use of MOHO to aid with volition based on the consumer's environment. Eight interventions took place during the 14-week project during weeks five to week 12. The interventions ranged from approximately 35 to 50 mins and was dependent on time for set up or additional time for crafting depending on level of assist for consumers. Interventions occurred from Tuesday to Thursday during the week, with a new intervention occurring each week during the DCE—with the exception of the final performance

days occurring Monday through Thursday on the final two weeks of intervention. The days of the interventions were decided on the individual's that were evaluated initially and attendance during the week. See Appendix C for theatre intervention schedule and intervention planning notes.

To start the DCE process and familiarize the consumers with theatre with the first intervention that occurred was 'Intro to Theatre and Vision Board'. The participants began by watching an informative slide show introducing theatre. The slide show covered topics such as what a show is, what actors do, who helps create a show, and what is in a show such as props, set design, and costumes. After the brief presentation, participants then went on to create their own show and vision board by crafting, with various magazine pre-cut pictures, a scene that tells a story based on their own personal narrative and perception. The pre-cut magazine pieces included pictures of people to represent actors, props, and scenery to fill the stage and collaborate with the personal story. Participants then went on to share in the small craft group what the show is about and minimally discuss with other participants in hopes to create additional socialization. Moderate verbal cues and fluctuating minimal to maximal physical assist was required during the activity for gluing and placing the pictures on the vision board.

The next and second intervention included an introduction to modified 'Tap Dancing Introduction'. Pre-made "taps" were constructed days before by the OT student and were taped to the bottom of the participant's shoes to represent the traditional taps of a shoe and mimic tap-dancing sounds. The taps were assembled from packing tape cut out in the shape of shoe bottoms. Then, small pennies were placed at the ball of the shoe and the heel, attached to the packaging tape. Then, with the help from staff at the site, the pre-made taps were taped around the consumer's shoes to represent and sound similar to taps on traditional tap shoes. Participants

then remained seated in the chairs and received instruction from the OT student and local, professional guest actress to demonstrate and teach simple tap moves (i.e., shuffle, flap, stomp, and step). After repetition during the activity and minimal practice, the participants then completed short 2-3 step tap routines with music and use of upper body and simultaneous arm movement. The music that was played came from popular musicals such as *42nd Street*, *Oklahoma*, *Carousel*, *Hello Dolly*, and the *Wizard of Oz*, and many of the consumers were familiar with the songs and additionally independently sang during the activity. The activity was graded down by having more one-on-one assist from staff members for increased verbal cues for physical assist by point or moving extremities for increased participation in the intervention. Observed during the activity, many of the participants discussed having tapped during childhood, and muscle memory of the tap moves was evident due to the short timeframe of teaching the tap movements.

The third intervention included ‘Acting it Out and Use of Props’. First, the intervention started by presenting two monologues from popular movies on YouTube including *Lady Bird*, *The Devil Wears Prada*, *Legally Blonde*, and *Dear John*. Due to copyright legalities, it was not possible to provide and show monologue from Broadway shows as an example for the intervention. During the videos, as a group a discussion led by the OT student to demonstrate the use of props within theatre and acting in general and how props are powered by the actor’s ability and creativity. A warmup took place with two games to simulate partner communication and collaboration as well as personal creativity including "Mirror-Mirror", where two partners, either with consumers or with the help of staff, mirrored movements when seated across from each other such as use of their arms, hands, fingers, etc. The second game that took place was, “Yes, Let’s”, where with the set of partners acted out verbs and actions that were called out by

the OT student such as: running, driving a vehicle/horse, going grocery shopping, and working on a garden (Learnimprov.com, n.d). The actions or tasks were random tasks, but familiar so consumers could complete with assistance from the partner or staff. Next, props were handed out to the partners that were provided from a local, professional theatre. These props included items such as a canteen, glass bottle, lantern, plastic wrench, tin can, movie clapboard, camera, fake chicken leg, and bell. Together, the pairs of consumers worked to perform the task and or action with the use of the prop to act out the scenario. Many of the examples with the props included realistic examples such as grocery shopping, gardening, relationships with people, and even sports. The intervention could be modified or graded down by having the consumers stay seated and give as many verbal cues as necessary and pair the consumers with staff, if necessary, based on the level of assist needed.

The fourth intervention, similar to the previous intervention, was 'Acting it Out and Improvisation'. First, the consumers watched a YouTube videos on "theatre mistakes, or theatre gone wrong" and discussed how actors have to improvise or recover when a scene, line, dance, or something on stage goes incorrectly while truly speaking to the phrase "the show must go on". With a partner, warmups were completed similar to the previous week including Mirror-Mirror, Yes Let's, Herd of Animals where the groups of consumers pretended to be an animal when prompted, and Categories such as naming items from a specific category (i.e., household items, cooking items, clothing items), (Learnimprov.com, n.d). Next, the group intervention, included the use of props without written prompts to act out a small scene with the partner. Additionally, if appropriate with the group, a mad lib was created and filled out with the help of staff, and then acted out based on the construction of the mad lib. The mad lib could only occur one of the three

interventions days due to level of cognition based within the group of consumers present on intervention day.

‘Costumes and Design’ was the fifth week of intervention that included trying on costumes and small-scale costume design. The overarching goal was for all consumers to be able to participate and increase engagement. First, the consumers watched varying YouTube videos that included, costume design, theatre quick changes, and how costume creation occurs for various shows such as *Shrek*, *Frozen*, *Cinderella*, *Follies*, and *Anastasia*. Next, in a small group or partners, had the chance to try on costumes the included vests, jackets, scarves, hats, boas, and other miscellaneous costume items. Additionally, for consumers that have vision deficits or anyone that required additional tactile input or exploration, various fabrics were handled that ranged from soft, rough, poking, or smooth textures. The goal for trying on costumes in small groups and or partners was to facilitate socializing at the small tables at SDS. Additionally, the consumers then had the opportunity to craft and design their own costume on a printed-out figure completed on a small-scale. The participants, with the help of staff and the OT student, then pasted fabrics that were pre-cut into small pieces and any other items that the consumers wanted to add to their costume (i.e., buttons, rhinestones, stickers). From there, the participants shared their design and picture with the individuals at the table to continue to enhance socializing. Then, when completed, the pictures were put on display for guests and other consumers to see. Overtime, many of the consumers were able to look at the various costume pictures, revisit the work that was created, and discuss the enjoyment of the activity. Overall, the activity was graded down for participants with increased verbal cuing and increased physical assist of gluing and placing items depending on consumer deficits.

The 'Puppet Creation' intervention, that was the sixth intervention, included exploring and prepping puppets for the following week's first 'Final Performance Week' (See Appendix D in the theatre programming guide examples). As a warmup and to introduce puppets into theatre, watching YouTube videos regarding how puppets were made, handled, and overall incorporated with popular musicals such as: *Avenue Q*, *Frozen*, *Lion King*, *Pooh*, and *Life of Pi*, occurred and interested many of the consumers based on informal observation. Next, the purpose of puppet creation was performed by the OT student with puppets that were previously created with a song from *Les Mis*, *Newsies*, *Sweeney Todd*, and *Wicked*. Demonstrated and explained by the OT student, was the impact that puppets could create for a show such as mimicking the music, the movements and fluidity of the music, and pretending to sing and or dance considering the tone of music (i.e., happy, sad, excited). From there, consumers were grouped into partners or small groups of three, based on who appropriateness of personality to work together. Then, the groups or partners created and crafted the puppets based on the show and or characters that were assigned based on familiarity with the popular show or musical. The puppets were then made to look like the characters from the show with the use of simple craft supplies or even left-over fabric from the previous week's intervention. Next, discussed with the groups or partners as creation took place, familiarity with songs from the show was reviewed so prepping of the materials for the upcoming week such as music lyrics, monologue script, or pictures for references of the show topics and themes could take place. The puppet characters that were created by the consumers included characters from *The Wizard of Oz*, *Grease*, *The Sound of Music*, *Singing' in the Rain*, *Mary Poppins*, *Mamma Mia*, and *Peter Pan*.

The 'Puppet Final Performance' intervention , and seventh intervention, took place by first having the groups and or partners rehearse the chosen song for approximately 10-15 mins

with the help of staff. Each group was given the song name and lyrics printed out, but ultimately, the groups were made based on familiarity with the songs and or shows already, so rehearsal with the songs and music was minimal. Rehearsal additionally included a music video of the song for performance and verbal cues and physical assist demonstrating how to move the puppets based on the music temp, energy, and mirroring the actor in the video. The groups during rehearsal were overall instructed to decide how they want their puppets to move, sing, or dance for the performance. Next, the groups performed with the puppets on a small-scale stage created by the OT student. The song, chosen by the consumer's familiarity, played with the YouTube video in the background and the consumer's then mimic the emotion of the music through movements, lyrics, or dancing while seated with use of the puppets with fluctuating verbal cues for initiation and sequencing of the task. Finally, the consumers as one group sang, danced, and overall performed popular musical songs that were not performed such as "There's No Business Like Show Business" from *Annie Get Your Gun*, "Memory" from *Cats*, "One More Day" from *Les Mis*, "Big Spender" from *Sweet Charity*, "Don't Rain on My Parade" from *Funny Girl*, "Maybe", and "Tomorrow" from *Annie* to name a few examples for an additional opportunity to perform, especially for additional consumers that were not present during the puppet creation week.

The final and eighth intervention that took place was 'Final Performance Tap Dancing'. This intervention took place a second time due to overall enjoyment and request from the staff from the beginning of the DCE. The local, guest actress joined again for the intervention during the week due to knowledge and expertise with dance and instruction. First, the intervention started out with a warmup of the body that included gentle stretching and mobility of the ankle with upper body and lower body stretches and rolling at the ankle. Then, a review and re-

teaching the basic tap movements (stomp, shuffle, flap) took place, with observation of many of the consumers remembering and catching on to the movements very quickly. Next, a pre-set list of songs from musicals were utilized to perform those movements together into a small routine and modify as needed based on the consumers and group abilities. Costume accessories were supplied and worn during the performance such as hat, boas, and tiaras so the consumers could really feel as if performing during a show and dressing up for the occasion took place. Although, during this week's intervention, penny taps were not constructed and used due to time constraints. Similar to last tap intervention, the activity was graded down depending on the need from consumers with increased support, verbal cuing, and physical assist in one-on-one collaboration with staff. See Appendix D for overview of the theatre programming guide and select interventions.

Assessments

The VQ was utilized throughout the DCE starting at evaluation for pre-testing, throughout the interventions, and at re-evaluation for post testing to gather observed motives of the consumers throughout each day and during interventions (De las Heras et al., 2007). The assessment specifically observed improvement in volition from time of evaluation, throughout interventions, and at time of re-evaluation to see if the impact of the theatre program positively improved spontaneity throughout the time of the program. The assessment is not self-reported but observed in the consumer's environment and broken into levels of spontaneity during activities. The measurements of spontaneity were as follows: passive (1), being the lowest rating, hesitant (2), involved (3), and spontaneous (4), being the highest rating. Scoring for spontaneity varied depending on the level of assist physically or verbally during activities and initiation of

task and completion. Meanwhile, the score could fluctuate depending on motivation, encouragement, and overall behavior during activities and interventions observed day-to-day.

When measuring and utilizing the assessment for consumers, observation at the site was completed during the interventions and throughout the day with other staff members. Overall, scoring for the consumer was considered with both the daily theatre intervention and daily involvement with other activities at site. Additionally, when measuring with the VQ, if any of the consumer's values within the domains of Exploration, Competency, and or Achievement were between scoring of a whole number, the consumer's score was then rounded down to the nearest "spontaneity" score. For example, if a consumer scored a 1.8 within the domain of Competency, the score was rounded down to "passive" (1) as opposed to rounded up to "hesitant" (2). After the spontaneity score for each domain and for each intervention was documented for testing results, the mean score was then input into table format to show the trend and change each week within response to the environment dependent on the intervention to ultimately see if the consumer "met" or "did not meet" the long-term goal. If a consumer did not meet the long-term goal, there may be a comment of results being adequate for the end of the DCE regarding adequate performance regardless of meeting the long-term goal. As well as, if a score was not observed (N/O) a score of 0 was then seen on the graphical trend. Critical thinking and judgement was then implemented for consumers than had multiple 0 scores or "N/O" scores for achievement of long-term goals. Trends for all consumers can be seen in the Appendix E highlighting the VQ assessment scores and graphical trends.

The SF-36 was additionally used for select participants during the DCE. This assessment lists generic, coherent, and easily administered quality-of-life measurements that are self-reported by the clients (Rand Corporation, n.d). Due to the assessment being self-reported, this

was completed for minimal consumers due to consumers accuracy of self-reporting assessment information without verbal cueing. Only five out of the nine consumers could accurately partake in the SF-36 assessment scores. The SF-36 scoring changes can be observed in Appendix E.

Along with assessments, to measure qualitative themes and changes in consumer affect, observations during each intervention occurred through the scoring matrix. Qualitative measurements, along with the theory of MOHO, was observed regarding how the environment, activity, and volition affected the observation of participation and engagement of the activities (Salem State University, n.d). After scoring and documentation in the matrix, the qualitative themes were then interpreted into general themes to observe the impact of interventions. Themes that were observed include increased engagement as evidence by increase socialization, asking questions, and body language such as facing the presentation or activity occurring. Additionally, increased creativity during task was then interpreted through decreased verbal cues for initiation of task and even independently thinking or considering topics for activity completion. Increased participation was additionally interpreted in the matrix as evidence by the decreased verbal cueing or physical assist, singing, socializing, physical activity such as mirroring movements, and even teamwork or group collaboration. Additional detrimental themes that were observed and documented in Appendix A, included tired affect or disengaged, confusion, increased questions or feelings of insecurity, and increased physical assist. Additionally, the general affect documented in the matrix, or emotional state, was observed as fluctuating changes depending on the theatre intervention such as happy, joy, confusion, excitement, focused, and even laughter based on observation and change during the activity. Overall, the impact of the qualitative themes were documented in the matrix to note mirroring of task, autonomy, collaboration with

partners, fluctuating level of assist, and consumer feedback on tolerance of activity. See Appendix A for expansion of qualitative themes for each intervention.

Results

Below the VQ goals, client goals, and SF-36 changes can be found in Table 1 for each of the nine evaluated consumers at the site. N/A for the SF-36 section deems client not appropriate for assessment completion.

Table 1:

Table format of each consumer's results from evaluation to re-evaluation.

Consumers	VQ & Goals	SF-36
Consumer 1:	Met 3/3 VQ LTGs	N/A
Consumer 2:	Met 1/1 Ct Goal Met 3/3 VQ LTGs	Improved phys. fx, general health & energy
Consumer 3:	Met 1/1 Ct Goal Met 3/3 VQ LTGs	Improved general health & overall health change
Consumer 4:	Ct Goal: Not gathered Not Met 3/3 VQ LTGs	SF-36: Not gathered
Consumer 5:	Met 2/3 VQ LTGs	N/A
Consumer 6:	Met 3/3 VQ LTGs Not Met 1/1 Ct Goals	Decreased emotional well-being due to personal/life stressors & physical fx. Improved energy, social fx, pain, & general health.
Consumer 7:	MET 2/3 VQ LTGs	N/A
Consumer 8:	Met 1/1 Ct Goals	N/A

	Not Met 3/3 VQ LTGs	
Consumer 9:	Met 1/1 Ct Goals Met 3/3 VQ LTGs	SF-36: Improved physical functioning and energy. Decreased emotional wellbeing.

Discussion

Overall, the research question regarding improvement with quality of life was achieved in most consumers as measured by VQ, SF-36, and qualitative observations. Specifically, as measured by the VQ and through the graphical trends, 8/9 consumers had improvement in VQ scoring from time of evaluation to re-evaluation. Meanwhile, 5/9 consumers met all VQ goals. Additionally, 2/9 consumers met VQ goals partially. Furthermore, only 1/9 consumers did not meet any VQ goals. Graphical trends can be seen for each consumer to represent the change in VQ score from time of initial evaluation to re-evaluation in Appendix E.

Personal client goals were created at the time of evaluation for consumers based on appropriate and attainable goals that and could independently be discussed with the consumers. The goals were subject to areas of concern regarding mobility, fatigue, and decreasing falls in the home environment. At the time of re-evaluation, one client goal was not gathered at time due to absence on re-evaluation day. Overall, 4/6 ct goals were met based on self-report of the client. 1/6 client goals was not met as reported by the client. Although, the client that did not meet the client goal was then educated by the OT student the benefits of attempting to work towards and progress with the client goal for specific improvement in stroke recovery and left side neglect.

When looking at results for the SF-36 for specific clients that were appropriate at time of evaluation and re-evaluation, 3/5 had improved health in the areas of physical functioning, energy, and general health. 2/5 had declined health with emotional wellbeing due to personal life stressors. 1 client, again, was not gathered at time of re-evaluation. Additionally, two of the

consumers that partook in the DCE had a general decline in health and functioning observed during daily tasks but did not affect the results or participation of the interventions.

Implications of Capstone

The outcomes of the DCE was intended to impact the Capstone site and the consumers by bringing novel activities to enhance quality of life through participation and engagement. As gathered through assessments, qualitatively, and informally through observations, improvement in participation, socialization and quality of life was achieved. To attempt sustainability at the site and carryover of the DCE with the help of the mentor and the staff at SDS, at the end of the program, a supplemental presentation took place to educate the staff the results and the importance of continuing the program due to the positive results. The presentation included an overview of qualitative results and themes, achievement of long-term goals, graphical trends of assessment quantitative results, and discussing the programming guide. The staff, when educated, were able to gather and understanding with improvement in scores and or decrease in scores with certain consumers. From there, with a decrease in select participant's scores, the staff was then educated and made aware to address decline in SF-36 scores and observed VQ scores at the end of the DCE. Additionally, during the final presentation, discussions of how to access the information gained on select consumers took place. A solution was made to securely upload the consumers folders and information throughout the project to site OneDrive, if needed, for protected accessibility of evaluations, assessments, and home activity programs.

Generally, success of the DCE was attributed to building rapport with the consumers at the site to learn each consumers unique interests prior to evaluation and learn who would be most appropriate to complete evaluations for gathering evidence and data during the DCE. Secondly, out of the eight interventions completed, tap dancing was the most successful form of theatre-based intervention. During that intervention in particular, the most engagement from all

consumers took place as well as mirroring the dancing movements and decreased verbal and physical assistance with the longest timeframe of participation compared to any other intervention. Throughout all eight of the interventions, many consumers were independently extremely creative and required less verbal cueing to create scenarios during acting and use of the props, costume design, and during the puppet final performance compared to the initial perception of consumers at the start of DCE. If the DCE was to be completed again, what would be completed differently would be involving more theatre-based interventions that were unable to be completed due to time constraints such as singing, other various form of theatre dance (i.e., jazz), script writing through pictures, and performance of small scenes with supplemental and increased time for rehearsing.

Limitations of the findings and when measuring the consumer participation and engagement with the VQ includes personal factors such as stress, change in weather, caregiver stressors, and even the time change ,that occurred during the DCE, affected VQ scoring and emotional behavior qualitatively with interventions. Additionally, one participant could not formally be evaluated at the start of the program due to time constraints and scheduling impacting the final re-evaluation assessment scores, and one participant could not be re-evaluated at the end of the DCE due to being absent.

Conclusion

In general, lessons learned and gained throughout this experience included acquirement of experience working with a population diagnosed with neurodegenerative diseases. Throughout the occupational therapy program, exclusively working with individuals diagnosed with Alzheimer's and or dementia did not occur based on specific populations of other fieldwork

sites, so the DCE allowed opportunities to work, communicate, and motivate the individuals in the population.

Recommendations for the future with the DCE at the site, would be to continue with novel activities to facilitate quality of life enhancement. Many of the consumers during the exit-interview and re-evaluation stated that many of the activities completed during the theatre-interventions were activities that were novel but could recall from childhood memories of dance and or interacting with peers to aid with participation and engagement. If continuing with novel, theatre activities at the site continues, aid with quality of life could occur simultaneously entertaining diverse client populations, speaking to client narrative, and increasing social engagement to work parallel with the needs of the site. Additionally, based on the SF-36, a recommendation of following up with the clients that had a decrease in emotional wellbeing should occur with the client, caregiver(s), and resources for therapy would instill safety and interest of the consumers.

Sustainability of the DCE will occur if the site chooses to do so by referring to the theatre programming guide that discusses the research, sequencing for interventions, and pictures of mimicking of the activities for carryover through access of the secure OneDrive folder for future use. Furthermore, future and professional collaboration at the site to implement and create modified tap videos for accessibility is a potential professional endeavor due to the overarching enjoyment of the tap-dancing intervention. Moreover, it was anticipated, based on the enjoyment of the DCE from SDS, that the DCE may not cease at the site or at the end of the OT program, but the program could continue as a traveling program to assisted living, nursing homes, and continued at adult day programs to continue to improve quality of life, engagement, and participation within the Kalamazoo-area.

Appendices

Appendix A: Intervention Qualitative Themes

Qualitative Themes:
Theatre Intervention

	General Themes Observed	Interpretation (Participation, engagement, socialization)	General Affect Observed/Consumer Quotes	Impact on Intervention & Notes
Week 5: 2/6-2/10 Theatre Intro, Show Craft	Engaged Tired/disengaged Dancing Asking questions Singing Participating w/out additional or min VCs	Increased & decreased participation/engagement depending on behavior during presentation	"I like to dance" "I like singing" "I enjoy Chicago" Answering questions when prompted during presentation Affect: Happy during task	Engaged in craft after presentation for each day ranging x4-6 participants Expression: Other tired individuals did not participate in craft x-6-7
Week 6: 2/13-2/17 Tap Dancing	Alert Engaged Physically active Attentive Dancing Socializing/conversing Mirroring/following steps	Increased activity participation/Engagement *Consumers participating that do not normally partake/withdrawn affect during previous activities.	Increased affected, volition during activity. "This is a fun day" "I have never tapped before" "I have tapped before" "I was a dance instructor; I owned a studio" Affect: sustained joy/happiness	Engaged in activity. Individuals with more severe dx of Alz, able to mirror and follow activity w/ min VCs/assistance. High pitch tapping compared to low sound of drumming Rhythm, music, beats, relate to natural habits/habituation/autonomy

		*Muscle memory		Participant demonstrated tap knowledge by completing tap time step. Affect/expression: happy, joy, smiling
Week 7: 2/20-2/24 Acting it Out	Socializing w/ partners Working together/teamwork with partners Increased energy Attention Volition/initiation of tasks Teamwork	Increased activity Group dynamics: socializing Creativity	Increased positive affect Ind. & creatively thinking about prompts/props. Affect/expression: confusion, joy, laughing	Engaged in activity. Individuals with more severe dx of Alz, able to mirror and follow activity w/ min VCs/assistance. Partners paired based on ability/assist required from staff. Engagement to prompts when appropriate. Min VCs.
Week 8: 2/27-3/3 Acting it Out Cont. & Improv.	Socializing w/ partners Working together/teamwork with partners Increased energy Attention Volition/initiation of tasks Teamwork: increased from previous interventions. Best	Group dynamics: increased socializing, participation, engagement	"I don't know what to do" "I need help" *Conversing with partner* "I'm going to use the prop this way" "Let's pretend to be this animal" Affect: surprise, joy/happy, excitement	Engaged in activity. Individuals with more severe dx of Alz, able to mirror and follow activity w/ min VCs/assistance. Select participants able to read mad lib prompts/lines and act out appropriately w/ min A/VCs Wed: Mod VCs for warm up activities Participants able to listen to staff suggestions for acting out w/ a prop. Min-mod VCs w/

	when split into groups of 2-3			difficultly remembering "lines" or how to use the prop. Affect/expression: confusion, joy, laughing *Did not complete mad lib on Wed. --not appropriate w/ group, no time to complete on Thurs.*
Week 9: 3/6-3/10 Costumes	Increased communication with peers Increased energy Attention Increased creativity when wearing costumes/describing feel of fabric Teamwork for multiple group people: communication, singing, working together	Increased activity /Group dynamics: socializing & creativity	"I remember I use to do historical reenactments and dress up in a trapper costume" -sharing with peers/interaction experiences/narrative "I'm going to pretend I'm an angel" "I'm a cowboy that's selling apples" -Consumers stating they've never completed an activity like this before "This fabric feels softer... this fabric feels rougher" Affect/expression: joy, excited, happy, laughing	Certain consumers connected with YouTube videos. -Consumers discussing how they enjoyed the activity -Consumers stating they've never completed an activity like this before -increased socializing while trying on costumes, min socializing during craft -Min VCs/A for cutting, sequencing, initiation

Week 10: 3/13-3/17 Puppetry Prep	Communication with staff Increased attention to videos/task	Increased creativity Increased activity Participation/Engagement	"I want to do this * show/character/song" "I'm making *" Affect/expression: focused, excited, agreeable	Independent initiation when choosing show/song/character Independence coloring/drawing/cutting fabric or paper. Initiation/volition observed participation w/ craft task *Slight observed increased socialization w/ peers x1 consumer* *Most observed participation in craft throughout interventions*
Week 11: 3/20-3/24 Puppetry Perform	Increased attention to videos/task Group/partner collaboration Spontaneous dancing during group singing	Participation in task, engagement to VCs, directions, and music QoL, w/ novel tasks	"I'll move my puppet like this" "I know this song" *Singing along to songs* "I'm excited to perform my puppet today" "I don't know what I'm doing" prior to performing. Succeeded during activity	Affect/expression: excited, happy, eager, engaged *Scheduling differences: 1:1 or 1:2 rehearsal on Tuesday in preparation for Wed./Thurs. performance. Completed 3-4 groups/intervention 1-2 group songs w/ additional consumer participation. Thursday: most participation. Overall engagement from

			Affect: joy, happy, slight confusion, focused	majority of consumers during activity.
Week 12: 3/27-3/31 Tap Perform	Alert Engaged Physically active Attentive Dancing Socializing/conversing Mirroring/following steps	Increased activity participation/ Engagement with min VCs/ no PA	"I used to tap when I was younger" "I've never tapped before, but I had fun" Affect/expression: Happy, improved from being tired/after lunch	Participants able to mirror/follow steps/beat with min repetition/increased time. w/ min VCs participants able to recall tap moves Min VCs using feather fans/props Able to remember after moderate amount of time small tap-dancing routine w/ 2-3 steps/moves

*Appendix B: Home Activity Program Example***Theatre Home Activity**

Activities of Interest: Puppets, singing, tap dancing

Implementation & Resources:Modified tap dancing at home:

<https://www.youtube.com/watch?v=-2I4CvLvGkE&t=141s>.

Make your own taps:

https://www.youtube.com/watch?v=s_O-TXTkIbA.

Make your own puppet stage:

<https://www.whatdowedoallday.com/easy-diy-table-top-puppet-theater-for-tiny-apartments/>.

Make your own puppets: A few brown paper bags were provided to the consumer if they choose to make additional puppets at home. Additional paper bags are available at SDS or can be purchased at any grocery store/dollar

store. <https://www.wikihow.com/Make-a-Paper-Bag-Puppet>.



Puppet performance: This consumer prefers “Summer Nights” and other songs from Grease. The videos for performance can be found at:

https://www.youtube.com/watch?v=A_J2bcNx3Gw.

Appendix C: Theatre Intervention Schedule and Plan

Theatre Program Intervention Planning:		
Date:	Intervention Idea:	Plan/Rationale:
Week 5: 2/6-2/10 Intro to Theatre/Vision Board	<p>Warm up: Watching a performance on YouTube, discussing thoughts/feelings/what happened.</p> <p>Show creation vision board/personal narratives Design your own show</p> <p>http://www.gary.com/design/DAFZY7u6KQ8hwad2DckafR6G45Cw3vaw7am_comer-DAFZY7u6KQ8w... compag-4imgsherekim_nodan-tak.kam_sarc-4emppag_drap_nam</p>	<p>Rationale: "In psychodrama, clients typically use role-play to enact themselves or significant others in their real lives, and hence work more directly on their issues. In contrast, drama therapy primarily works through metaphors and is more fantasy-based. Clients typically use role-play to enact fictional and symbolic roles, engage in story making and storytelling, puppetry, masks, miniature objects, and rituals to work more indirectly and with a greater dramatic distance from their issues" (User-friendliness of drama).</p> <p>The results here clearly show that the drama therapy group process allowed the participants to express healthy, creative roles such as "creators," "contributors," "explorers," "directors," "actors," and "playwrights," rather than "dependent-related" roles. These roles stimulated a sense of competence, purposefulness and productivity, while enhancing self-expression and pleasure (Sandel and Johnson, 2014).</p>

		<p>Supplies needed: Stage print out Magazine/clip art cut outs (precut) Markers Glue</p> <p>Intervention Videos: Happy: https://www.youtube.com/watch?v=YKNVPBlpR4 (2:09)</p> <p>Mad: https://www.youtube.com/watch?v=LH6MstVxehQ (3:41)</p> <p>Exciting/Energetic: https://www.youtube.com/watch?v=jx6RgnJioAk (2:38)</p>
Week 6: 2/13-2/17 Tap Dancing	<p>Warm up Video: -Nicholas bros https://www.youtube.com/watch?v=LHQ06R75vY</p> <p>Anything Goes (start at 1:17) https://www.youtube.com/watch?v=j3b5XRdJ5KM</p> <p>-stretching</p> <p>Dancing: tap dance. Taps created w/ pennies/tape Modified in chair.</p>	<p>Prep: https://www.youtube.com/watch?v=wjnzXqayvov https://www.youtube.com/watch?v=FyqfswPCKGQ</p> <p>Rationale: "Visual arts, music, dance-movement, drama and theater provide additional means of self-exploration and expression within a therapeutic relationship [17]. In addition, engagement with the arts has been identified as a promising means of improving older adults' well-being and health" (playback theatre in adult day centers).</p>

Week 7: 2/20-2/24 Acting w/ Props	<p>Acting it out: Lady Bird: https://www.youtube.com/watch?v=BY2E3UM... -M444ar-PI.D0TJgKUCac-NB6UdRtP7u5u5x7V5gkindex-2</p> <p>Shel's Warm Truck http://www.youtube.com/watch?v=3c79mYTCu4k&list=PLD0TJgKUCac-NB6UdRtP7u5u5x7V5gkindex-29</p> <p>The Notebook: http://www.youtube.com/watch?v=80RGGHGFJg</p> <p>Dear John: http://www.youtube.com/watch?v=8l8e9tpe13</p> <p>Legally Blonde: http://www.youtube.com/watch?v=3u0f87K6404</p> <p>Sit with a partner/staff member Warm up: mirror mirror Yes, Legs (actions/tasks) Joint play charades with peers & props: Pick prompt out of a hat and act it out with partner and group guesses what they're doing. (MIDTERM)</p>	<p>Rationale: "Another powerful component of community-based theater is the sharing of common experiences. Theater groups focused on examining social issues through their works often share common experiences in their day-to-day lives that relate to these issues. Theatrical endeavors may address the participants' common experiences in regard to such issues as stigma, hospitalization, and navigating mental health services" (the power of theatre).</p> <p>"In psychodrama, clients typically use role-play to enact themselves or significant others in their real lives, and hence work more directly on their issues. In contrast, drama therapy primarily works through metaphors and is more fantasy-based. Clients typically use role-play to enact fictional and symbolic roles, engage in story making and storytelling, puppetry, masks, miniature objects, and rituals to work more indirectly and with a greater dramatic distance from their issues" (User-friendliness of drama).</p> <p>Supplies needed: Box of props Mad libs worksheet</p>
Week 8: 2/27-3/3	<p>CONTINUE ACTING IT OUT & Improv: Improv videos: https://youtu.be/CkrD1xfmjIA</p>	<p>Rationale: "Interestingly, attending the music and theater workshop was experienced as liberating, despite being emotionally and creatively challenging and requiring participants to handle uncertainty and changes in the music and theater production" (Acting out: meaningful participation).</p>


Acting & Improv w/ Props	<p>Improv warm ups: -Mirror mirror -Yes let's -Five things: five things that you would find in a category or five things you like. -e- herd of squirrels/animals -Use of props, no prompt given, then switch props -Create mad lib as a group, consumers act it out</p>	
Week 9: 3/6-3/10 Costumes & Design	<p>Costume design Warm up: YouTube videos Costume design: https://www.youtube.com/watch?v=cl.W45veCoNA https://www.youtube.com/watch?v=HMBSTcu-6WM (Anastasia, stop at 2:20) https://www.youtube.com/watch?v=aLR0mAKAUyo (national theatre) https://www.youtube.com/watch?v=vnjF_eRAsxc (opera) https://www.youtube.com/watch?v=BFX5acpxFhg (Mary Poppins)</p> <p>Shrek transformation: https://www.youtube.com/watch?v=-0jFZAmewXg (makeup timelapse) Shrek: https://www.youtube.com/watch?v=JKY160Vx6bM (nitricate costumes)</p> <p>Draw/create your own costume craft: choices/options, cut out fabric pieces & paste</p>	<p>Rationale: "Community-based theater involves a sense of group cohesion and affiliation, and it can offer opportunities for actors living with psychiatric disabilities to feel that they are valued members of a group. Group work in theater involves various socially cohesive forces, including trust, risk taking, safety, and teamwork (14). As the group works together creatively, individual members may feel growth in their identity as a creative person and discover that they are capable of helping other members succeed" (The power of theatre).</p> <p>Supplies needed: Costume outline Craft supplies</p>

	*bring in costumes from the barn: Dressing costumes, different fabrics	
Week 10: 3/13-3/17 Puppet construction	Warm up: Puppet creation/construction *Video warm up, discuss use of puppets in musicals/Broadway: Frozen https://www.youtube.com/watch?v=XZGid1WbN3E Frozen: https://www.youtube.com/watch?v=eLFPv8TmuZ4 Lion King: https://www.youtube.com/watch?v=uo0MJaRFv_0 Posh: https://www.youtube.com/watch?v=ehjJB4v6TA Life of Pi: https://www.youtube.com/watch?v=lq2H1W8ykj0c	Rationale: "In psychodrama, clients typically use role-play to enact themselves or significant others in their real lives, and hence work more directly on their issues. In contrast, drama therapy primarily works through metaphors and is more fantasy-based. Clients typically use role-play to enact fictional and symbolic roles, engage in story making and storytelling, propoerty, masks, miniature objects, and rituals to work more indirectly and with a greater dramatic distance from their issues" (Over-readiness of drama). Supplies needed: Brown paper bags Craft supplies Printed out monologue sheets



Week 11 3/2
Puppet perform

Intervention #1:
Intro to Theatre & Vision Board

Research: "The drama therapy group process allowed the participants to express healthy, creative roles such as creators, contributors, explorers, directors, actors, and playwrights, rather than dependent-related roles. The roles stimulated a sense of competence, purposefulness, and productivity, while enhancing self-expressing and pleasure" (Sandel & Johnson, 2014).



Intervention: To start the DCE process and introduce theatre, the participants in this setting began by watching an informative slide show introducing theatre. The slide show covered topics such as what a show is and consists of what actors do, who helps create a show, and what is in a show. Participants then went on to create their own show/vision board by crafting, with various magazine cut out pictures, a scene that tells a story based on their own personal narrative. Participants then went on to share in the small craft group what the show is about and minimally discuss with other participants in hopes to create additional socialization.





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	Charity: "Don't Rain on My Parade" from Funny Girl, or "Maybe" or "Tomorrow" from Annie	
	Final performance (tap dancing, 45mins): Monday-Thursday	
Week 12: 3/27-3/31 Tap dancing final performance	Warm up: stretches, ankle rolls, UE/LE stretches Hand out costume pieces: hats, boas, accessories Activity: review tap moves, put to music Music choices: Good morning: Gene Kelly Shuffle off to buffalo: 42nd street We're in the money: 42nd street Puttin' on the ritz: young frank. Stuff upper lip: crazy for you Gold feet: drowsy chapoone A lovely night: Cinderella Hard knock life: Annie You can't stop the beat: hairspray Razzle dazzle: Chicago We go together: grease & start Post testing	Supplies needed: N/A
Week 13: 4/3-4/7	*Staff Training Cont. of prog.	*Follow-Up Interviews & w/ caregivers

Intervention #2:
Tap Dancing Introduction

Research: "Visual arts, music, dance-movement, drama and theater provide additional means of self-exploration and expression within a therapeutic relationship. In addition, engagement with the arts has been identified as a promising means of improving older adults' well-being and health" (Keisari, et al., 2020).

Intervention: With the help from staff, the pre-made "taps" created by the OTS, were taped to the bottom of the participant's shoes. Participants then remained seated in their chairs and received instruction from the OT student and local guest actress to demonstrate and teach simple tap moves (i.e shuffle, flap, stomp, and step). After repetition during the activity and practice, the participants then completed short 2-3 tap routines with music and use of upper body and simultaneous arm movement.

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Intervention #3

Acting it Out & Use of Props

Research: "Another powerful component of community-based theater is the sharing of common experiences. Theater groups focused on examining social issues through their works often share common experiences in their day-to-day lives that relate to these issues. Theatrical endeavors may address the participants' common experiences in regard to such issues as stigma, hospitalization, and navigating mental health services" (Faigin & Stein, 2010). "In psychodrama, clients typically use role-play to enact themselves or significant others in their real lives, and hence work more directly on their issues. In contrast, drama therapy primarily works through metaphors and is more fantasy-based. Clients typically use role-play to enact fictional and symbolic roles, engage in story making and storytelling, puppetry, masks, miniature objects, and rituals to work more indirectly and with a greater dramatic distance from their issues" (Orkibi, 2018).

Intervention: Acting and incorporating group work took place by first introducing and showing two monologues from popular movie scenes on YouTube and discussed the use of props within theatre and acting in general. A warmup took place with two games: "Mirror-Mirror", where two partners either with consumers or with the help of staff will be mirror movements when seated across from each other such as use of their arms, hands, fingers, etc. The second game, "Yes, Let's", where with the set of partners would act out verbs and actions that are called out by staff or me. The pairs acted out the task together such as: running, driving a vehicle, riding a horse, working on a garden, etc. The actions or tasks were random tasks, but familiar so that consumers could complete with assistance from their partner or staff. Next, props were handed

out to the partners that were provided from the theatre and a prompt was given to the set of partners at random. Together, the pair worked to perform the task and or action with the use of the prop to act out the scenario. The intervention could be modified or graded down by having the consumers stay seated and give as many verbal cues as necessary and pair the consumers with staff, if necessary, based on the level of assist needed.



Intervention #7

Final Performance—Puppetry

Research: The literature discusses the healing potential of older adult's involvement and participation in theatre and drama. In the study, a randomized control trial indicated that short programs, which included dramatic exercises, rehearsing, and performing to lead to the enhancement of self-esteem, confidence, and happiness amongst older adults. Additionally, the participation of theatre intervention also was found to increase cognitive functioning the includes memory and overall problem-solving (Keisari et al., 2020).

Intervention: First, the groups and or partners rehearsed the chosen song(s) based on their favorite musical for approximately 10-15 mins with the help of staff with each group. Each group was given the song name and lyrics printed out, but ultimately, the groups were made based on familiarity with the songs and or shows already, so familiarity with the songs and music was already achieved. Next, the groups performed their song with a YouTube video playing in the background and were instructed to mimic the emotion of the music through movements, lyrics, or dancing while seated with use of the puppets. The groups during rehearsal were overall instructed to decide how they want their puppets to move, sing, or dance for the performance. Staff and I were present for additional verbal cueing for prompts to aid the consumers for creativity and participation. Finally, the consumers together sang, danced, and overall performed as a group to popular musical songs that were not performed such as "There's No Business Like Show Business" from *Annie Get Your Gun*, "Memory" from *Cats*, "One More Day" from *Les Mis*, "Big Spender" from *Sweet Charity*, "Don't Rain On My Parade" from *Funny Girl*, or

"Maybe" or "Tomorrow" from *Annie* to name a few examples just for one more opportunity to perform.



Intervention #8

Final Performance- Tap Dancing

Research: Performing in general relates to self-revelatory performing, in which drama therapy aids with problem-solving, creativity intersecting emotional affect all while communicating personal narrative, collaboration, and emotional experiences (Burns et al., 2019).

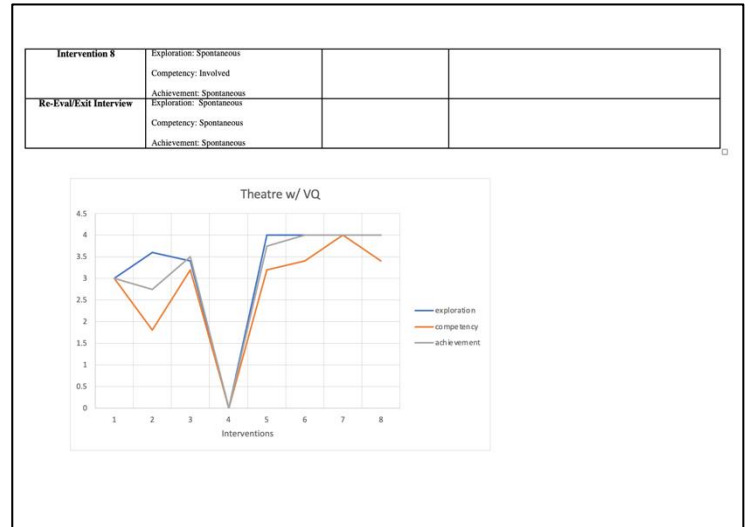
Intervention: The final intervention the DCE will include the final performance within tap dancing. A local guest actress joined again for the intervention during the week. First, the intervention started out with a warmup of the body that included gentle stretching and mobility of the ankle with UB/LB stretches and rolling at the ankle. Then, a review and re-teaching the basic tap movements (stomp, shuffle, flap) took place. Next, a pre-set list of music/songs from musicals were utilized to perform those movements together into a small routine and modify as needed based on the consumers and group abilities. Costume accessories were brought in such as hats, feather fans, and flower leis so the consumers could really feel as if they were performing during a show and dressing up for the occasion. This week, penny taps were not constructed and used due to time constraints.



Appendix E: Results and Trends

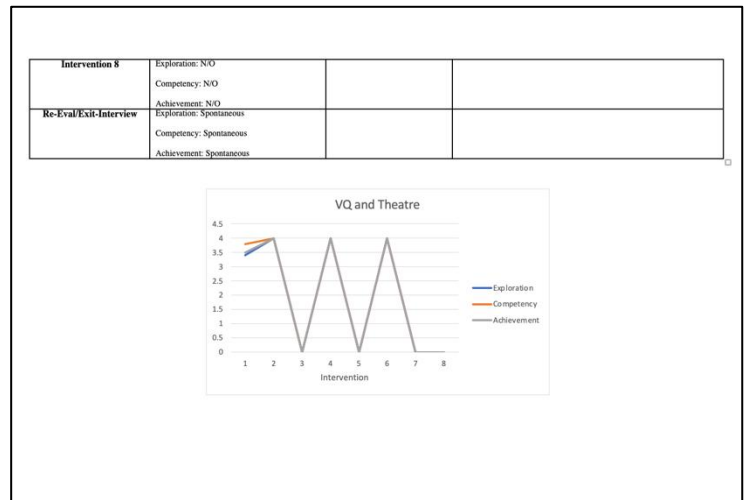
Consumer 1:

Client: Consumer 1	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation	Exploration: Hesitant Competency: Passive Achievement: Passive	Increase of scores in all domains from initial eval.	LTG 1: Ct will consistently score 3. Involved on VQ for exploration at end of the project. (Met)
Intervention 1	Exploration: Involved Competency: Involved Achievement: Hesitant	Able to achieve beyond LTGs. Upwards trend on graph.	LTG 2: Ct will consistently score 2. Hesitant on VQ for competency at end of the project. (Met)
Intervention 2	Exploration: Involved Competency: Passive Achievement: Hesitant		LTG 3: Ct will consistently score 3. Involved on VQ for achievement at end of the project. (Met)
Intervention 3	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 4	Exploration: N/O Competency: N/O Achievement: N/O		
Intervention 5	Exploration: Spontaneous Competency: Involved Achievement: Involved		
Intervention 6	Exploration: Spontaneous Competency: Involved Achievement: Spontaneous		
Intervention 7	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		



Consumer 2:

Client: Consumer 2	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation	Exploration: Involved Competency: Involved Achievement: Hesitant	Intermittent involvement due to absences resulting in score of "0" or N/O.	Ct will decrease falls to 0 falls each week by scanning environment and floor during fx mobility 50% of the time by end of the project. (Met)
Intervention 1	Exploration: Involved Competency: Involved Achievement: Involved	Improved VQ since eval when present.	LTG 1: Ct will consistently score 4. Spontaneous on VQ for exploration at end of the project. (Met)
Intervention 2	Exploration: Involved Competency: Spontaneous Achievement: Spontaneous	Last observed intervention #6 prior to re-eval. Improved on SF: 36: phys. fx, general health & energy	LTG 2: Ct will consistently score 4. Spontaneous on VQ for competency at end of the project. (Met)
Intervention 3	Exploration: N/O Competency: N/O Achievement: N/O		LTG 3: Ct will consistently score 3. Involved on VQ for achievement at end of the project. (Met)
Intervention 4	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		
Intervention 5	Exploration: N/O Competency: N/O Achievement: N/O		
Intervention 6	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		
Intervention 7	Exploration: N/O Competency: N/O Achievement: N/O		



Consumer 3:

Client: Consumer 3	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation	Exploration: Involved Competency: Hesitant Achievement: Hesitant	Consumer out of town for final two interventions. Improved VQ from eval when participating/present for interventions. SF-36: Improved general health & health change	Ct Goal: Ct will organize around the house without fatigue as reported by the ct at end of the project. (Met) LTG 1: Ct will consistently score 4, Spontaneous on VQ for exploration at end of the project. (Met) per pt report LTG 2: Ct will consistently score 3, Involved on VQ for competency at end of the project. (Met) Adequate for end of DCE) LTG 3: Ct will consistently score 3, Involved on VQ for achievement at end of the project. (Met) Adequate for end of DCE)
Intervention 1	Exploration: Involved Competency: Involved Achievement: Hesitant		
Intervention 2	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 3	Exploration: N/O Competency: N/O Achievement: N/O		
Intervention 4	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		
Intervention 5	Exploration: Spontaneous Competency: Involved Achievement: Involved		
Intervention 6	Exploration: Spontaneous Competency: Spontaneous Achievement: Involved		
Intervention 7	Exploration: N/O Competency: N/O Achievement: N/O		

Intervention 8	Exploration: N/O Competency: N/O Achievement: N/O		
Re-Eval/Exit-Interview	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		

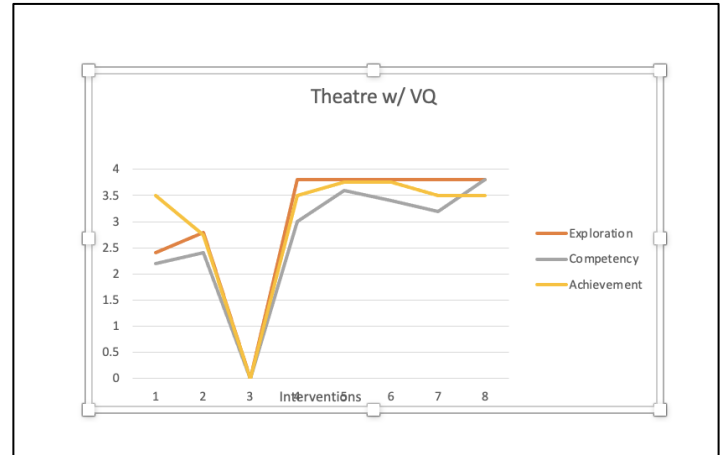
Consumer 4:

Client: Consumer 4	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation	Exploration: Involved Competency: Involved Achievement: Involved	Consumer did not participate in intervention #6 but was present at site during that week. Observed decline in volition from eval to end of DCE. SF-36 Not gathered due to absence.	Participant will consistently engage in playing with trains 3x/wk for 1 hour each day by end of the project. (Not gathered at time of end of DCE) LTG 1: Ct will consistently score 4, Spontaneous on VQ for exploration at end of the project. (Not Met) LTG 2: Ct will consistently score 4, Spontaneous on VQ for competency at end of the project. (Not Met) LTG 3: Ct will consistently score 4, Spontaneous on VQ for achievement at end of the project. (Not Met)
Intervention 1	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant		
Intervention 2	Exploration: Involved Competency: Involved Achievement: Hesitant		
Intervention 3	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		
Intervention 4	Exploration: Involved Competency: Hesitant Achievement: Hesitant		
Intervention 5	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		
Intervention 6	Exploration: N/O Competency: N/O Achievement: N/O		
Intervention 7	Exploration: Involved Competency: Hesitant Achievement: Hesitant		

Intervention 8	Exploration: Involved Competency: Hesitant Achievement: Hesitant		
Re-Eval/Exit-Interview	Exploration: N/O Competency: N/O Achievement: N/O		

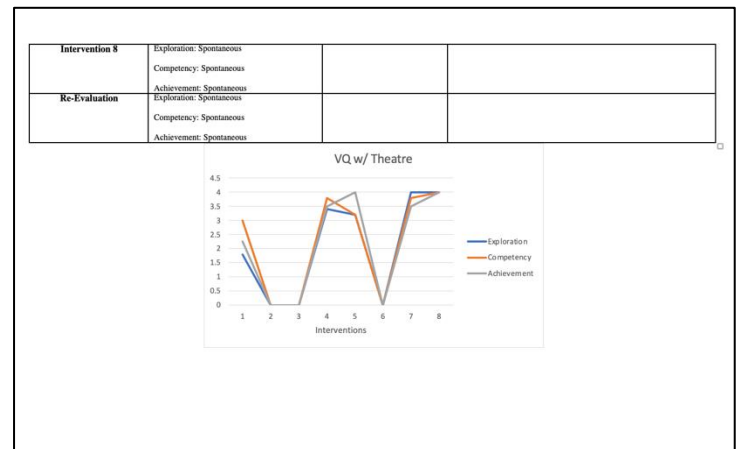
Consumer 5:

Client: Consumer 5	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation/Intervention 1	Exploration: Hesitant Competency: Hesitant Achievement: Involved	Consistency and improvement from eval/first intervention. Did not meet LTG 3 but had consistent volition within environment during interventions.	LTG 1: Ct will consistently score 3, Involved on VQ for exploration at end of the project. (Met)
Intervention 2	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant	Initial eval questionnaire not completed, re-evaluation completed.	LTG 2: Ct will consistently score 3, Involved on VQ for competency at end of the project. (Met)
Intervention 3	Exploration: NO Competency: NO Achievement: NO		LTG 3: Ct will consistently score 4, Spontaneous on VQ for achievement at end of the project. (Not Met, but Adequate for end of DCE)
Intervention 4	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 5	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 6	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 7	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 8	Exploration: Involved Competency: Involved Achievement: Involved		
Re-Evaluation/Exit Interview	Exploration: Involved Competency: Involved Achievement: Involved		



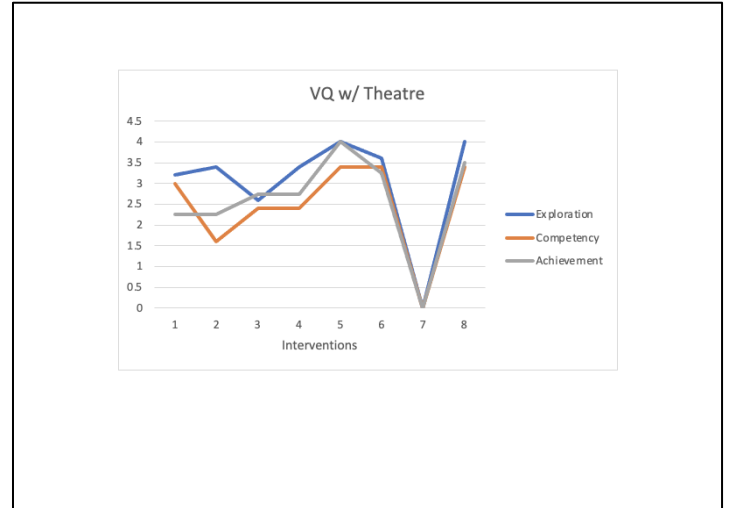
Consumer 6:

Client: Consumer 6	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant	Improvement in VQ since evaluation. Absences or choosing not to participate impeding progression w/ VQ and consistency w/ LTGs.	Ct will set hemiparetic L arm on the table and increase lifting during the day for strengthening w/ 2-3 VCs by end of project. (Not Met, progressing) —observed ct putting L arm on chair arm/table surface w/ min VCs and occ. No VCs, but not consistently completing.
Intervention 1	Exploration: Passive Competency: Involved Achievement: Hesitant	SF: 36; decreased emotional well-being due to personal/life stressors & physical fx. Improved energy, social fx, pain, & general health.	LTG 1: Ct will consistently score 3, Involved on VQ for exploration at end of the project. (Met)
Intervention 2	Exploration: NO Competency: NO Achievement: NO		LTG 2: Ct will consistently score 3, Involved on VQ for competency at end of the project. (Met)
Intervention 3	Exploration: NO Competency: NO Achievement: NO		LTG 3: Ct will consistently score 3, Involved on VQ for achievement at end of the project. (Met)
Intervention 4	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 5	Exploration: Involved Competency: Involved Achievement: Involved		
Intervention 6	Exploration: Spontaneous Competency: NO Achievement: NO		
Intervention 7	Exploration: Spontaneous Competency: Involved Achievement: Involved		



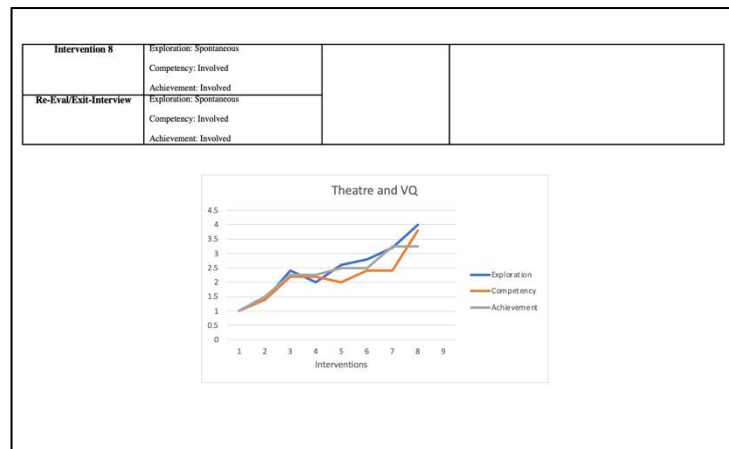
Consumer 7:

Client: Consumer 7	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)	
Evaluation	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant	0 or N/O due to not being observed during intervention. Personal stressors/environment at home impeding increased progress w/ VQ during interventions. Improvement in VQ scores since evaluation to end of project.	LTG 1: Ct will consistently score 4 on Spontaneous on VQ for exploration at end of the project. (Not Met) LTG 2: Ct will consistently score 3 on Involved on VQ for competency at end of the project. (Met) LTG 3: Ct will consistently score 3 on Involved on VQ for achievement at end of the project. (Met)	
Intervention 1	Exploration: Involved Competency: Involved Achievement: Hesitant			
Intervention 2	Exploration: Involved Competency: Passive Achievement: Hesitant			
Intervention 3	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant			
Intervention 4	Exploration: Involved Competency: Hesitant Achievement: Hesitant			
Intervention 5	Exploration: Spontaneous Competency: Involved Achievement: Involved			
Intervention 6	Exploration: Involved Competency: Involved Achievement: Involved			
Intervention 7	Exploration: N/O Competency: N/O Achievement: N/O			
Intervention 8	Exploration: Spontaneous Competency: Involved Achievement: Involved			
Re-Evaluation	Exploration: Spontaneous Competency: Involved Achievement: Involved			



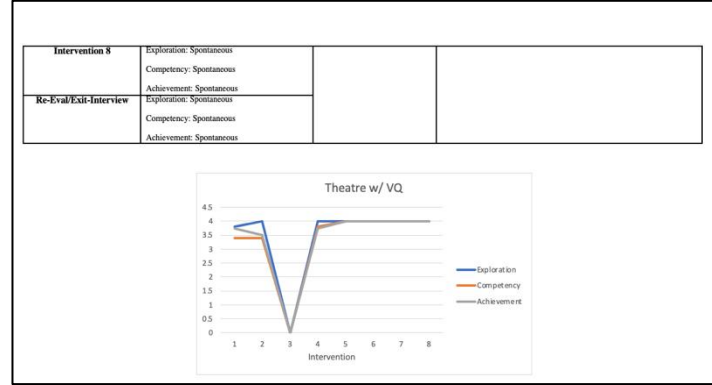
Consumer 8:

Client: Consumer 8	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant	Improvement in VQ score since Eval. Slow progression of scores. Decreased MMSE scores from evaluation → re-evaluation.	LTG 1: Ct will socialize more as measured by engagement of group activities 2x/wk for 30 mins by end of the project. (Met) LTG 2: Ct will consistently score 3, Involved on VQ for exploration at end of the project. (Not Met) , improved throughout interventions) LTG 3: Ct will consistently score 3, Involved on VQ for achievement at end of the project. (Not Met) , improved throughout interventions)
Intervention 1	Exploration: Passive Competency: Passive Achievement: Passive		
Intervention 2	Exploration: Passive Competency: Passive Achievement: Passive		
Intervention 3	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant		
Intervention 4	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant		
Intervention 5	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant		
Intervention 6	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant		
Intervention 7	Exploration: Involved Competency: Hesitant Achievement: Involved		



Consumer 9:

Client: Consumer 9	Assessment: VQ	Interpretation (@ end of DCE)	LTGs: (@ end of DCE)
Evaluation	Exploration: Hesitant Competency: Hesitant Achievement: Hesitant	Improved consistently since evaluation/ Interv. #1 Improved phys fx, energy. Decreased emotional wellbeing due to grieving husband loss and familial stressors. Discussed options for seeking therapy/counseling from GP.	Ct Goal: Ct will not have a LOB during community mobility by the end of the project as reported by ct. (Met)
Intervention 1	Exploration: Involved Competency: Involved Achievement: Involved		LTG 1: Ct will consistently score 4, Spontaneous on VQ for exploration at end of the project. (Met)
Intervention 2	Exploration: Spontaneous Competency: Involved Achievement: Involved		LTG 2: Ct will consistently score 4, Spontaneous on VQ for competency at end of the project. (Met)
Intervention 3	Exploration: N/O Competency: N/O Achievement: N/O		LTG 3: Ct will consistently score 4, Spontaneous on VQ for achievement at end of the project. (Met)
Intervention 4	Exploration: Spontaneous Competency: Involved Achievement: Involved		
Intervention 5	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		
Intervention 6	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		
Intervention 7	Exploration: Spontaneous Competency: Spontaneous Achievement: Spontaneous		



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