Eastern Kentucky University Encompass

Online Theses and Dissertations

Student Scholarship

2014

Improving Occupational Performance using Therapeutic Activities on a Geropsychiatric Unit

Brenda L. Cain Eastern Kentucky University

Follow this and additional works at: https://encompass.eku.edu/etd



Part of the Occupational Therapy Commons

Recommended Citation

Cain, Brenda L., "Improving Occupational Performance using Therapeutic Activities on a Geropsychiatric Unit" (2014). Online Theses and Dissertations. 123.

https://encompass.eku.edu/etd/123

This Open Access Thesis is brought to you for free and open access by the Student Scholarship at Encompass. It has been accepted for inclusion in Online Theses and Dissertations by an authorized administrator of Encompass. For more information, please contact Linda. Sizemore@eku.edu.

Improving Occupational Performance using Therapeutic Activities on a Geropsychiatric Unit

Ву

Brenda L. Cain

Thesis Approved:

Inu/Marshall

Member, Advisory Committee

Member, Advisory Committee

Dean, Graduate School

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a Masters degree at Eastern Kentucky University, I agree that the Library shall make it available to borrowers under rules of the Library. Brief quotations from this thesis are allowable without special permission, provided that accurate acknowledgment of the source is made. Permission for extensive quotation from or reproduction of this thesis may be granted by my major professor, or in [his/her] absence, by the Head of Interlibrary Services when, in the opinion of either, the proposed use of the material is for scholarly purposes. Any copying or use of the material in this thesis for financial gain shall not be allowed without my written permission.

Signature _	Bronda L. Cain
Date	11.27.12

Improving Occupational Performance using Therapeutic Activities on a Geropsychiatric Unit

Ву

Brenda L. Cain

Bachelor of Science
Eastern Kentucky University
Richmond, Kentucky
1993

Submitted to the Faculty of the Graduate School of
Eastern Kentucky University
in partial fulfillment of the requirements
for the degree of
MASTER OF SCIENCE
December, 2014

Copyright © Brenda L. Cain, 2013 All rights reserved

DEDICATION

I would like to dedicate this thesis to my loving parents, Joseph A. Reinhart, Lorine K. Haddix, Forrest E. Haddix and Shirley F. Anderson. In addition, I would like to dedicate this thesis to my cherished husband, Michael L. Cain, and my treasured children, Brandie L. Cain and Logan L. Cain, for their unwavering love and support.

ACKNOWLEDGMENTS

I would like to sincerely thank my professor and advisor, Dr. Lynnda Emery, Ed.D., OTR/L, FAOTA for her direction, patience and guidance throughout this process. Her expertise and instruction were both greatly valued and humbly appreciated. Additionally, I would like to thank the other thesis committee members, Dr. Christine Privott, PhD., OTR/L and Amy Marshall, MS, OTR/L for their feedback and assistance throughout the thesis development.

ABSTRACT

The following study was conducted on a Senior Behavioral Health Unit at Mercy Hospital Western Hills. The unit specialized in psychiatric services structured to meet the needs of patients 65 years of age and older. The purpose of the study was to measure the self-perceived improvement in occupational performance in five patients on a geropsychiactric unit who participated in therapeutic activities.

The literature review includes information related to various diagnoses most often seen on the behavioral unit. Additionally, literature about the assessment and screening tools utilized in the study was reviewed. Literature pertaining to therapeutic activities provided on the unit and a highlighted table on literature related to progressive muscle relaxation is presented.

This study is quantitative and pre-experimental. The Canadian Occupational Performance Measure (COPM) was administered as a pretest-posttest. Following participation in therapeutic activities, the differences among COPM scores was explored. Three of the five participants increased their performance score ratings on the COPM by two or more points. Four of the five participants increased their satisfaction score ratings on the COPM by two or more points. Discussion and clinical implications of the results noted will conclude the thesis.

TABLE OF CONTENTS

CHA	APTER PA	AGE
l.	Introduction	
	Research Description	1
	Evaluative Process	1
	Intervention Strategies	3
	Objectives	4
	Rationale	5
	Purpose	6
II.	Review of Literature	
	Overview of Review of Literature	8
	Review of Diagnoses	8
	Assessment and Screening Tools	11
	Therapeutic Activities	16
III.	Research Methods	
	Study Design	24
	Study Participants	24
	Study Recruitment Methods and Informed Consent	25
	Research Procedure	26
	Potential Risks and Safety Precautions	27
	Records and Confidentiality	28
	Incentives and Research Related Costs	28
	Institutional Review Board Approval	29
	Inclusion Criteria Instrumentation	30
	Pre-test/Post-test Occupational Performance Measure	32
	Therapeutic Activity Procedures	34
	Research Methods Summary	41
IV.	Results	
	Overview of Results	42
	Participant Number One	42
	Participant Number Two	46
	Participant Number Three	50

TABLE OF CONTENTS

CHA	PTER P/	AGE
	Participant Number Four	54
	Participant Number Five	57
	Summary of Results	61
	Noted Comparisons	62
	Results Summary Tables	64
V.	Discussion	
	Overview of Study	70
	Limitations of Study	72
	Implications for Improved Practice	73
	Conclusion	76
List o	of References	77
	Appendices	
	A. Occupational Therapy Evaluation	86
	B. Therapy Intake Information Sheet	90
	C. Group Progress Notes	93
	D. Consent to Participate	96
	F Individualized Summary of Data	104

LIST OF TABLES

TABLE	P.A.	AGE
2-1	Matsumoto & Smith, 2001	21
2-2	Ghonchech & Smith, 2004	22
2-3	Carlson & Hoyle, 1993	23
4-1	COPM Identified Problem Areas and Scores for Patient 1	45
4-2	COPM Identified Problem Areas and Scores for Patient 2	49
4-3	COPM Identified Problem Areas and Scores for Patient 3	52
4-4	COPM Identified Problem Areas and Scores for Patient 4	56
4-5	COPM Identified Problem Areas and Scores for Patient 5	60
4-6	Change in Performance and Satisfaction Rating Scores	65
4-7	Total Minutes of Therapeutic Treatment Activities	66
4-8	Approximate % of Time Spent in Therapeutic Activities	68
4-9	Summary of Results	69

CHAPTER I

INTRODUCTION

Research Description

The field of Occupational Therapy has grown significantly since the early 1900's. As the profession progresses and develops, there becomes a demonstrated need for evidenced-based Occupational Therapy treatment to ensure effective patient progress and performance outcomes.

The following study was conducted on a Senior Behavioral Health Unit at Mercy Hospital Western Hills during employment there. The unit specialized in psychiatric services structured to meet the needs of patients 65 years of age and older. The patients admitted to the unit most commonly had one of the following psychiatric diagnoses: Major Depression, Anxiety, Schizophrenia, Bipolar Disorder, Dementia or Dementia with Behavioral Disturbance. The patients included in this study were noted to have the following psychiatric admitting diagnoses: major depression, depression and anxiety.

Evaluative Process

As an Occupational Therapist, following physician's orders to evaluate and treat, evaluations were performed which identified the patient's current

functional performance in the areas of activities of daily living (ADL), instrumental activities of daily living (IADL), work, social participation and leisure. For the purpose of this study, the Canadian Occupational Performance Measure (COPM) was utilized. The COPM is theoretically based on the Canadian Model of Occupational Performance (CMOP). This client-centered assessment can be used by Occupational Therapists as part of the evaluative process to assist in the identification of problems in occupational performance (Law, Baum & Dunn, 2005). The COPM was used for the assessment (pre-test/post-test) portion of this research study.

As part of the initial evaluation process, the Large Allen Cognitive Level Screen-5 (LACLS-5) was completed to provide the therapist with an initial indication of the patient's ability to follow directions and concentrate. The score obtained from this screening process, in addition to the observations of the patient's functional ability during task completion were noted. This score assisted in the initial determination of which treatment group sessions and approaches would be potentially most beneficial for the patient during his/her hospitalization. Additionally this score helped to determine if participants met the inclusion criteria established for active participation in the study.

Intervention Strategies

Following the evaluative process, the patient was then provided with therapeutic activities, which included occupational therapy treatment sessions. These sessions potentially included gross motor activities, various processing groups, tasks groups and one-to-one treatment as needed.

Exercise and physical activity are important to both the physical and mental health of older adults (National Institute on Aging, 2011). Recognizing the importance of exercise and daily activity, a gross motor therapeutic activity group was offered daily on the behavioral unit. This group often incorporated a designated time within the session to establish a daily goal to aid in individualizing the patient's progress.

Goal and gross motor skills activities were not the only treatment sessions offered by the Occupational Therapy department on the unit. Additionally, Life Skills Activities, Leisure Skills Activities, Social Skills Activities, Coping Skills Activities, Task Activities, Stress Management Activities including Progressive Muscle Relaxation were provided based on patient need and functional ability.

Art therapy was also a part of the therapeutic interventions offered on the behavioral unit. This session was also conducted by an Art therapist and was offered to patients with various levels of cognitive functioning ability. Therapeutic activities were designed to actively assist the patient in obtaining his/her individually established goals to maximize occupational performance. Following active participation in the therapeutic programming, recommendations were made to maximize his/her function and safety following discharge.

The evaluative process described to identify patient's occupational performance, followed by the establishment of individualized patient goals and therapeutic treatment, was standard practice in Occupational Therapy on the Senior Behavioral Health Unit. Utilizing tools, procedures and treatments which were common practice for Occupational Therapists on the Senior Behavioral Health Unit, permission was requested from the EKU Institutional Review Board to collect and analyze data in group, aggregate format only for research purposes. The following will describe in greater detail the specifics of the research study.

Objectives

The research study entitled: Improving Occupational Performance using Therapeutic Activities on a Geropsychiatric Unit was conducted in 2012. The research was completed to meet the following established objectives:

- 1) To advance evidence-based Occupational Therapy treatment
- 2) To maximize patient satisfaction of his/her functional performance

abilities following occupational therapy treatment

 To ensure the effectiveness of current occupational therapy programming on an in-patient geropsychiatric unit

Rationale

As the Occupational Therapy profession strives to progress and continue to provide effective and quality patient care, the need for evidence-based treatment has become apparent (Caldwell, Whitehead, Fleming, & Moes, 2008). As professionals, we must keep apprised of the most recent research presented in clinical literature and be aware of the innovative practices in treatment (Law, Baum, & Dunn, 2005).

There are several strategies for a therapist to ensure that they are providing evidence-based practice. Reviewing literature published in professional publications, reviewing library databases, actively participating in journal clubs and collaborating with other professionals are a few noted ways to keep abreast regarding the best practices and effective treatment options (Law, Baum, & Dunn, 2005).

This study was developed to directly assist practicing Occupational Therapists in the advancement of their knowledge and awareness concerning the effectiveness of various therapeutic activities to enhance occupational performance. However, providing sound research information

to help clinicians in their choice of evidenced-based treatment interventions was not the only purpose of this study.

Over the past twenty years, Occupational Therapists have emphasized the need for treatment practice based on a client-centered approach (Law, Baum, & Dunn, 2005). Ensuring client-centered Occupational Therapy services is an essential component when providing quality, effective patient treatment. During the evaluative process, the client should take an active part in the establishment of his/her treatment goals. Additionally, practicing clinicians should consider his/her clients' perspectives about the occupational therapy services they experience (McKinnon, 2000).

In order to measure patient satisfaction of his/her functional performance abilities following participation in therapeutic activities, the Canadian Occupational Performance Measure, was utilized in the study. Based on the explicit model that guides OT practice in Canada, the Canadian Model of Occupational Performance (CMOP), this measure of occupational performance is a client-centered approach to practice (Law, Baum, & Dunn, 2005).

Purpose

The purpose of the study was to measure the improvement in occupational performance in five patients on a geropsychiatric unit who participated in therapeutic activities. Permission was requested and

received by the EKU Institutional Review Board to collect and analyze data. Pre-test and post-test occupational performance scores were compared in patients receiving occupational therapy while admitted to the in-patient behavioral health unit. The findings of this study potentially could impact the occupational therapy programming utilized on similar treatment settings.

On the Senior Behavioral Health Unit at Mercy Western Hills Hospital, the programming and therapeutic interventions implemented were provided to effectively assist the patient population in obtaining his/her established occupational therapy goals. The outcome of this study, in combination with review of related research literature, can assist in the determination of best treatment practices and/or the revision of established practices to maximize patient outcomes and satisfaction with occupational therapy treatment.

CHAPTER II

REVIEW OF LITERATURE

Overview of Review of Literature

This chapter is organized into three sections to review related literature. First, the review of diagnoses that pertain to the behavioral unit setting is included. Second, literature about the assessment and screening tools used in the study is reviewed. Third, literature pertaining to therapeutic activities provided on the unit is presented. This section also includes a highlight table on literature related to progressive muscle relaxation, one of the therapeutic activities offered.

Review of Diagnoses

Major Depression. Depression is a prevalent diagnosis seen on geriatric psychiatric units, accounting for over 60% of the admissions in such settings (Okimoto, Barnes, & Veith, 1982). It is characterized by changes in goal-directed use of time, energy, interest and attention (Devereaux & Carlson, 1992). Major Depression is noted to be the most serious presentation of mood disorder in the elderly, as it is defined in the Diagnostic and Statistical Manual of Mental Disorders by the American Psychiatric Association (Spar & La Rue, 2002). The American Psychiatric Association provides well-defined

criteria for the diagnosis of depression and its many forms (American Psychiatric Association, 2000).

Anxiety. When a patient experiences significant symptoms of anxiety, as seen in patients diagnosed with Generalized Anxiety Disorder, impairments can be seen in the patient's psychological well-being and overall physical functioning (Revicki, Brandenburg, Matza, Hornbrook, & Feeny, 2008). "People with generalized anxiety disorder (GAD) go through the day filled with exaggerated worry and tension, even though there is little or nothing to provoke it. They anticipate disaster and are overly concerned about health issues, money, family problems, or difficulties at work. Sometimes just the thought of getting through the day produces anxiety" (National Institute of Mental Health, 2009, p.12).

Schizophrenia. Schizophrenia is a chronic, severe, and disabling brain disorder (National Institute of Mental Health, 2009). Although the exact pathophysiology of this psychological disorder is not known, literature suggests that schizophrenia does have a biological basis (Lehmann, 1985). Due to the disorders of thought, emotions and psychomotor behavior associated with the schizophrenic diagnosis, all areas of occupational performance have the potential to be affected (Laliberte-Rudman, Yu, Scott & Pajouhandeh, 1999).

Bipolar Disorder. Bipolar disorder is a brain disorder. This disorder causes unusual shifts in mood, energy and activity levels, which can be severe. It has the ability to impact a person's ability to complete daily tasks (National Institute of Mental Health, 2009). It is typically, initially diagnosed in young adulthood however it is not rare to have an individual diagnosed with bipolar disorder after the age of 50 (Spar & Rue, 2002). The exact cause of bipolar disorder is unknown but literature suggests that there is a genetic predisposition (National Institute of Mental Health, 2009).

Dementia. There are said to be 4.5 million Americans with the diagnosis of dementia, and this number is anticipated to increase exponentially in the future (Brookmeyer, Gray and Kraus, 1998). "For some etiologies, dementia is chronic, progressive, and irreversible by currently available approaches, whereas for other causes of dementia, symptoms may be arrested or reversed to varying degrees with specific treatments" (Spar & Rue, 2002, p. 166). The clinical presentation of those with dementing illnesses significantly depends on the stage of their illness and may be complicated by other symptoms related to concomitant physical and psychiatric illness (Spar & Rue, 2002). One of the main characteristics associated with this diagnosis is a significant decline in cognitive function (Early, 2009).

Dementia with Behavioral Disturbance. Agitation, wandering and aggression are noted to be some of the nonpsychotic behaviors associated

with the dementia process (Rayner, O'Brien & Schoenbachler, 2006). In fact, nearly all of those individuals with a dementia diagnosis, in the later part of their illness, will develop changes in behavior and personality (Holtzer et al., 2003).

Assessment and Screening Tools

Canadian occupational performance measure. The COPM is an evaluative tool, used to measure changes in self-perception of occupational performance. The tool can be utilized for a wide range of populations, across all developmental levels and can be used with all disability groups (Law et al., 2005).

Several studies have been conducted to examine the utility of the COPM and "In all instances, the COPM was found to offer significant benefits in a wide variety of clinical settings, with different populations, and even in different languages and cultures" (Law et al., 2005, p.27). In fact, this tool has been officially translated into 22 different languages and is utilized in over 35 countries (Law, Baum & Dunn, 2005).

"Reliability was shown to be well above the acceptable range (exceeded .80)" (Law et al., 2005, p.24). "There appears to be considerable consensus that the COPM can be repeated to produce stable results over varying intervals" (Law et al., 2005, p.24). Several studies have also been

conducted which generally supports the validity of the COPM as a measure of Occupational Performance (Law et al., 2005).

There are limited weaknesses associated with the COPM. Some may consider the 30 – 40 minute administration time to be too lengthy for an initial evaluation process. The only other weakness, noted by Law, Baum & Dunn, 2005, is the fact that the semi-structured interview process utilized to obtain the client information requires good interviewing skills to administer.

There are, however, several positive features noted in the literature about the COPM assessment tool: it is based on the explicit model of Occupational Therapy, the Canadian Model of Occupational Performance (CMOP), it is a client-centered approach to assessing occupational performance; it incorporates re-assessment of identified problem areas; it increases the client involvement with the therapeutic process; it permits the client and therapist to identify and effectively manage lifespan issues (Law et al., 2005).

To better understand the client-centered approach to assessing occupational performance, recognizing the assumptions of this approach may be beneficial. There are three assumptions outlined in Law, Baum & Dunn, 2005:

 The client knows what they want in terms of occupational performance

- 2) The only relevant frame of reference for therapy is that of the client and the more open-ended the assessment is, the greater opportunity the therapist will have to obtain the client's perspective
- 3) The therapist cannot promote change only create an environment to facilitate change. The therapist, in establishing his/her relationship with the client, offers knowledge and experience while supporting the client in overcoming their identified problems.

The COPM is a semi-structured interview process and is administered in three sections: self-care, productivity and leisure. The interview process focuses on client problem identification, client rating of task performance, client rating of satisfaction of task performance and reassessment (Law, Baum & Dunn, 2005).

During the interview process, the client identifies his/her performance areas of concern. Then, he or she identifies which of these areas of concern are most important by utilizing a scale from 1-10 (Law et al., 2005).

Once the most important occupational performance areas of concern have been identified, the client then rates his/her ability to perform the activity on a scale of 1-10. The total ratings for performance are added and then divided by the number of problem areas rated to determine the client's Performance Score 1 (Law et al., 2005).

Lastly, the client rates his/her satisfaction regarding his/her ability to complete the tasks on a scale from 1-10. The ratings for satisfaction with task completion are added and then divided by the number of problem areas rated to determine the client's Satisfaction Score 1 (Law et al., 2005).

Upon reassessment, the client is then again asked to rate his/her identified problem areas on a scale of 1-10 regarding performance and satisfaction. The performance ratings and the satisfaction ratings are totaled and then divided by the number of problem areas identified to determine reassessment Performance Score 2 and Satisfaction Score 2 (Law et al., 2005).

To determine the client's change in performance from initial evaluation to reassessment, the Performance Score 1 is subtracted from Performance Score 2. To determine the client's change in satisfaction from initial evaluation to reassessment, the Satisfaction Score 1 is subtracted from Satisfaction Score 2. It is of clinical importance if there is a change of two or more points in the performance or satisfaction scores from initial to reassessment (Law et al., 2005)

Larger allen cognitive level screen. The Large Allen Cognitive Level Screen – 5 (LACLS-5) is an evaluative screening tool that "provides a quick estimate of a person's current capacity to learn" (Allen, Earhart & Blue, 1992, p.32). Functional cognition, which refers to "both functional performance and the

global cognitive processing capabilities of the brain", is the central construct evaluated by this visuomotor lacing task (Allen et al., 2007).

As the name implies, the Large Allen Cognitive Level Screen-5 is bigger than the standard Allen Cognitive Level Screen-5 (ACLS-5) and is specifically designed to be utilized with those individuals who have visual deficits and/or impairments in hand function (Allen et al., 2007). The screen "is recommended for use with populations whose patterns of functional behavior appear to reflect disruptions in global cognitive processing capacities as described by the cognitive disabilities model" (Allen et al., 2007, p.11).

The leather lacing tool consists of three stitches: the running stitch, the whipstitch and the single cordovan stitch. When administering the cognitive screen, both verbal directions and demonstration are provided. In addition, specified cues are given to encourage the person being assessed to continue completing the lacing task, attend to the information needed to correct possible errors and to complete the various stitches correctly (Allen et al., 2007).

Several studies have been completed in the professional literature providing evidence related to the reliability of the LACLS (Allen et al., 2007).

A study was completed in 1995, reporting a high correlation utilizing the LACLS for inter-rater reliability (Velligan, True, Lefton, Moore & Flores,

1995). Other studies noted in the professional literature, reported significant correlations supporting test-retest reliability of the LACLS (McAnanama, Rogosin-Rose, Scott, Joffe & Kelner, 1999; Roitman & Katz, 1996).

The validity of the LACLS has also been supported. "Multiple research studies using various versions of the ACLS and the LACLS support the relationship between cognitive levels as described in the cognitive disabilities model and occupational performance" (Allen et al., 2007, p.44).

Therapeutic Activities

Goal and gross motor activities. Establishment of a personal goal and active participation in gross motor activities happened daily on the behavioral unit. Body functions support engagement, participation, health and well-being (AOTA, 2008). During the Goal and Gross Motor treatment session, both specific and global mental functions can be addressed, such as attention, memory and orientation (AOTA, 2008).

Movement-related functions such as range of motion exercises can be completed during this type of group treatment session (AOTA, 2008). Exercise and physical activity are important to both the physical and mental health of older adults (National Institute on Aging, 2011). This type of treatment group can help encourage participants in the establishment of

healthy habits and routines, which can be utilized to positively support performance patterns in areas of occupation (AOTA, 2008).

Life skills activities. Life skills sessions are designed to meet the needs of those individuals having difficulties with various areas of occupation. As Occupational Therapists, according to the Occupational Therapy Practice Framework: Domain and Process (2008), the broad range of activities that would likely be addressed in such groups are skills associated with Activities of Daily Living, Instrumental Activities of Daily Living, Rest and Sleep, Education, Work, Play, Leisure and Social Participation.

Leisure skills activities. Leisure skills group is designed to meet the specific need of the client in the areas of leisure exploration and/or leisure participation. According to the Occupational Therapy Practice Framework: Domain and Process (2008), leisure exploration includes "identifying interests, skills, opportunities, and appropriate leisure activities" (AOTA, 2008, p.632). Additionally, the Occupational Therapy Practice Framework: Domain and Process identifies leisure participation to include "planning and participating in appropriate leisure activities; maintaining a balance of leisure activities with other areas of occupation; and obtaining, using, and maintaining equipment and supplies as appropriate" (AOTA, 2008, p.632).

Social skills activities. Social Skills sessions specifically address skill development associated with the occupational area of social participation.

In Occupational Therapy, this type of treatment group would utilize activities to emphasize the development of successful interactions within the community, within the family, and/or within a peer, friend exchanges (AOTA, 2008). Specific communication and social skills would be addressed, for example taking turns during a verbal exchange with a peer group member, maintaining appropriate physical space during communications or acknowledging another group member's perspective while actively participating in the session (AOTA, 2008).

Coping skills activities. The Occupational Therapist conducting a coping skills group would provide opportunities for the participants to address emotional regulation skills. Emotional regulation skills are defined as "actions or behaviors a client uses to identify, manage, and express feelings while engaging in activities or interacting with others" (AOTA, 2008). Selected activities allow the participants to develop skills which can assist them in the management of such emotions as frustration, anger, aggression, hurt, disappointment and stress, thus positively impacting overall health and well-being (AOTA, 2008).

Task activities. Task group provides the Occupational Therapist with a great deal of knowledge regarding the participant's performance skills associated with a craft completion. Performance skills are defined as "the abilities clients demonstrate in the actions they perform" (AOTA, 2008).

Craft tasks provide opportunity for the processing of new information and allow opportunity to problem solve during task completion (Allen et al., 2007).

The therapist may choose to pick a task from the Allen Diagnostic Module (ADM) for the group to complete. The ADM contains twenty-four craft tasks with standardized materials and specific administration protocols (Earhart, Allen & Blue, 1993). Completion of an ADM craft during a task group could provide a reliable, lengthier assessment of performance skills and verify the screening score obtained by the LACLS-5 (Allen et al., 2007).

Stress management activities. A stress management group is a specific type of coping skills group, in which the therapist selects activities which allow the participants to utilize relaxation strategies to manage stress, helping to improve emotional regulation skills (AOTA, 2008). Progressive Muscle Relaxation (PMR), in which muscles groups are first tightened and then relaxed in succession, is one type of stress management technique which can be utilized to evoke physical relaxation (Matsumoto & Smith, 2001). PMR was a treatment session which was often well attended by those admitted to the behavioral unit. Because it was often used and well attended, additional literature was reviewed on this topic and highlighted.

Based on the research reviewed, when PMR was compared to breathing relaxation exercises, PMR appeared to evoke physical relaxation and

disengagement, whereas breathing relaxation evoked feelings of strength and awareness (Matsumoto & Smith, 2001). Table 2-1 highlights the study conducted by Matsumoto and Smith, 2001.

In another study comparing the psychological effects of PMR and yoga stretching exercises, it was noted that positive effects of PMR may not be immediate, as participants in PMR displayed higher levels of mental quiet and joy as an aftereffect in the final sessions of treatment (Ghoncheh & Smith, 2004). Table 2-2 provides an overview of the study conducted by Ghoncheh and Smith, 2004.

Carlson and Hoyle, 1993, completed a meta-analysis to examine the effectiveness of abbreviated PMR training. They concluded that it is an effective treatment for a range of disorders and in general, if more effective when individual training is completed. Table 2-3 summarizes this meta-analysis.

Art therapy activities. According to the American Art Therapy Association (2008), "art therapy is the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma, or challenges in living and by people who seek personal development". Through creating, reflecting and processing art projects, people can positively impact his/her health and personal awareness.

Table 2 - 1 Matsumoto & Smith, 2001

Study Objectives	Level/Design/Subjects	Intervention and Outcome Measures	Results	Study Limitations
To compare the psychological effects of PMR and breathing exercises	Level II – Two Groups	Instructions read from standardized scripts	Generally, breathing relaxation and PMR do not have differential effects on cognitive or physical stress	The presenter was not blind to the hypotheses
	Randomly assigned to one of 2 groups	Each exercise sequence lasted approximately 30 minutes in length	PMR appears to evoke physical relaxation and disengagement	
	Breathing relaxation: 5 males; 16 females average age was 19.55; sd=0.57	Each group met for 5 consecutive weekly sessions	PMR evokes mental quiet and joy as a delayed aftereffect	
	PMR 9males; 12 females average age was 19.79; sd=61	Participants did not practice at home	Breathing relaxation evokes feelings of strength and awareness	
		Questionnaires utilized 3 times throughout sessions (pre- test, post-test, after-test)		

Table 2-2 Ghonchech & Smith, 2004

Study Objectives	Level/Design/Subjects	Intervention and Outcome Measures	Results	Study Limitations
Compared the psychological effects of PMR and yoga stretching exercises	Level II – Two groups	All participants took the Smith Relaxation Inventory (self- report)	PMR resulted in higher levels of relaxation and disengagement at week 4	The presenter was not blind to the hypotheses
	40 participants 15 male 25 females	Each group met for 5 consecutive weeks – 1 day a week	PMR resulted in higher levels of mental quiet and joy as a post- training aftereffect at week 5	
	PMR -mean age=34.5 -SD=8.98	Participants were instructed directly from parallel scripts	Groups did not display different levels of relaxation states energized or aware	
	Yoga Stretching -mean age=33.45 -SD=8.60	First week was live by author with the instructor modeling each exercise	Yoga stretching scored higher on relaxation states physical relaxation at week 1 post-test	
	Participants randomly assigned to one of two groups	Week 2- 5 audiotaped instructions were presented by both the instructor and participants practiced	Positive effects of PMR may not be immediate	
		Questionnaires given 3 times: pre-test, post- test and after- test		

Note. PMR = Progressive muscle relaxation

Table 2-3 *Carlson & Hoyle, 1993*

Study Objectives	Level/Design/Subjects	Intervention and Outcome Measures	Results	Study Limitations
To examine the effectiveness of APRT in a quantitative manner	Level 1 – Meta- analysis	Strength of association between APRT and outcome measures calculated	APRT is effective treatment for a range of disorders	To minimize Type II errors in clinical situations in which there is a small <i>n.</i> , researchers should consider the use of prospective and within- subject designs
	29 experiments published after 1980	Determined the average effect size for training in progressive muscle relaxation	Generally, the procedures led to reliable change in signs and symptoms	Researchers would benefit from identification of psychological dependent measures to evaluate outcomes in future studies
	The study had to provide APRT according to procedures described by Berstein and Borkovec (1993)	Accounting for differences in the strength of the effect across studies	APRT produced dramatic decrease in symptoms associated with tension headaches	
	The study had to have one group receive relaxation training and another group that did not	Coded various characteristics of the studies that might moderate the effect of relaxation training	Clearly supports use of audiotapes for use in home practice	
	The study had to be such that one could extract an effect size for relaxation training		Generally, individual training was more effective than group training	
	6		Clinical effectiveness of APRT improves with the number of clinical sessions and number of weeks over which sessions were scheduled	

Note. APRT = Abbreviated progressive muscle relaxation training

CHAPTER III

RESEARCH METHODS

Study Design

This study is quantitative and pre-experimental. A pretest-posttest (standard Occupational Therapy evaluation/reevaluation) was administered. This was conducted in order to detect self-perceived change in occupational performance using the COPM. Following participation in occupational therapy, the differences among COPM scores were explored.

As noted, this evaluative process is a standard practice for Occupational Therapy and is conducted following a physician's order for Occupational Therapy evaluation and treatment. For the purpose of this study, the Canadian Occupational Therapy Performance Measure will be the evaluative tool utilized for both the pretest and posttest.

Study Participants

The participants of the study were patients admitted to the Mercy Hospital Senior Behavioral Health Unit that met the established inclusion criteria. Both male and female patients were considered for the study. Forty patients were expected to actively participate in the study. However, due to the unit closing, data on five participants was collected after IRB

approval and before the unit closed. The five patients were asked to voluntarily participate in the study based on the following inclusion criteria:

- 1) The patient is 65 years of age or older
- 2) The patient does not have a legal guardian
- 3) The patient has not been declared incompetent
- 4) The patient is a voluntary admission to the treatment unit
- 5) The patient has been admitted to the Senior Behavioral Health Unit with occupational therapy orders to evaluate and treat, per plan of care
- 6) The patient has an LACLS-5 score of at least a 4.0/6.0 and a MMSE score of 20/30, indicating cognitive status to be a participant
- 7) The patient has a primary psychiatric diagnosis that will be documented
- 8) The patient agreed to participate and signed a written informed consent form

The patient was asked to voluntarily and actively participate with the study for the duration of their hospitalization on the behavioral health unit. The general length of stay on the unit is 7-10 days.

Study Recruitment Methods and Informed Consent

As indicated, based on the inclusion criteria, patients were recruited for the study following admission to the behavioral unit. They were educated regarding the study and provided with an informed consent letter. The voluntary nature of participation was emphasized in addition to maintenance of his/her confidentiality.

Research Procedure

The data for this study was collected at the Mercy Hospital Western Hills Senior Behavioral Health Unit. A letter of approval was obtained from both the Director and the Medical Director of the behavioral unit. The Institutional Review Board approval from Eastern Kentucky University was obtained prior to data collection.

Three instruments were used during this study. Two were utilized to meet the established inclusion criteria: LACLS-5 and the MMSE. The LACLS-5 is a screen used to assist in determining a patient's functional cognitive performance level. It was administered prior to potential inclusion in the study. The MMSE is a screen for the determination of cognitive impairment. It too was administered prior to the potential inclusion in the study.

In addition to the above noted tools, the COPM was utilized. The COPM was not utilized to assist with the establishment of inclusion criteria. This instrument was used to measure the difference between the baseline and discharge measures. The COPM is an individualized measure that was utilized by the Occupational Therapist as an initial evaluation (pre-test) and again as a reassessment (post-test). The scores obtained upon admission

and discharge was then noted to detect self-perceived change in occupational performance following participation in therapeutic activities.

As noted, the researcher administered and recorded the LACLS-5 and recorded the MMSE scores prior to the inclusion of the study. Additionally, the researcher made certain all other inclusion criteria were met prior to voluntary participation. The researcher administered the Canadian Occupational Performance Measure assessment upon initial evaluation (pretest) and again prior to discharge as a reassessment (post-test).

Data was also extracted and transcribed from the Occupational Therapy evaluation currently utilized on the Senior Behavioral Health Unit (See Appendix A). As indicated, data was incorporated and utilized from the therapy intake information sheet (See Appendix B). Additionally, the senior behavioral health group progress notes were used to record the interventions provided to each participant (See Appendix C).

The data was then collected and analyzed. Pre-test and Post-test COPM scores were examined. Differences in perceived occupational performance improvement were explored.

Potential Risks and Safety Precautions

There were no known or anticipated risks associated with this study. The consent letter was signed prior to patient participation, if the inclusion criteria established was obtained.

Records and Confidentiality

Privacy was ensured and maintained throughout the study. Names were coded with numbers and the data collected was kept under lock and key in the Occupational Therapy office on the Senior Behavioral Health Unit at Mercy Hospital Western Hills. For research purposes, the data collection forms omitted patient's name, onset date, DOB, hospital name, and provider name (See Appendix A, B, and C).

After the behavioral unit closed, the written informed consent forms and data collection sheets were moved to the home office of the researcher. The signed informed consent letters were separated and placed in a sealed envelope and kept in a locked home office cabinet. Currently, the same security measures are in place. The IRB was notified of this.

This coded participant information is scheduled to be maintained at least three years following dissemination of results. The hospital's professional shredding procedure for patient information will be used to shred data collection materials.

Incentives and Research Related Costs

There were no incentives offered to the participants to engage in the described study. There were no additional costs that would have been the responsibility of the subjects as a consequence of participation in the study.

Institutional Review Board Approval

In preparation for the initiation of the research study entitled Improving Occupational Performance using Therapeutic Activities on a Geropsychiatric Unit, the Institutional Review Board (IRB) Eastern Kentucky University (IRB00002836, DHHS FWA00003332) was presented with a proposal for review.

This proposal included the following information:

- The Institutional Review Board Application for Expedited/Full Review
- 2) The Expedited Review Certification Form
- 3) The Research Description
- A copy of the Consent to Participate in the Research Study (See Appendix D)
- 5) A brief description of the instrumentation to be utilized for the study completion: LACLS-5 and MMSE (utilized to meet the established inclusion criteria) and the COPM (used to measure changes in self-perception of occupational performance).

The IRB provided the following Protocol Number to be used in association with the study approval: 12-081. The expiration date for data collection is 3-01-13. The E.K.U. Institutional Review Board (part of Sponsored Programs) maintains IRB proposals and can respond to questions.

Inclusion Criteria Instrumentation

Large allen cognitive level screen (LACLS-5). The Large Allen Cognitive Level Screen is a standardized screening tool utilized on the Senior Behavioral Health Unit at Mercy Hospital in Western Hills. The leather lacing tool consists of three stitches: the running stitch, the whipstitch and the single cordovan stitch. The screen starts with the easiest stitch, the running stitch, and then the tasks increase in complexity as the screen progresses (Allen et al., 2007).

When utilizing this screening tool, the administrator first provides verbal instruction in combination with a demonstration of the stitch completion. Then the administrator instructs the patient to make the same demonstrated stitch. The administrator notes the patient's behaviors, their problem solving skills and notes their ability to follow directions while completing the task.

Through careful observation of the patient's performance of the task, the administrator can then use those observations to establish a score. This score will provide the administrator with a snap-shot picture of the patient's functioning that correlates the identified cognitive functioning level (Allen et al., 2007).

The LACLS-5 is "designed to be used as a screen of functional cognition with persons whose cognitive abilities appear to be in the range of 3.0 to 5.8

on the Allen scale of cognitive levels and modes of performance" (Allen et al., 2007, p. 10). For the purposes of this research proposal, as part of the inclusion criteria, the participant must actively complete the LACLS-5 screening and score at least a 4.0.

Mini mental state exam. The mini-mental state exam (MMSE) is a commonly used test to address complaints of memory problems or when a diagnosis of dementia is being considered and further collaborative information is needed (Clarke, 2008). This screening tool is utilized regularly on the Senior Behavioral Health Unit at Mercy Hospital Western Hills. The MMSE was given to every patient admitted on the unit, by interdisciplinary staff on the unit. For the purpose of this study, the MMSE score was transcribed to the study data collection form. To be considered for participation in this study, the patient had to obtain a score of 20 or higher.

The mini-mental state exam consists of a series of questions or tasks. If the patient answered the question correctly, then they receive a point. At the end of the examination, the administrator added up the correct answers obtained by the patient and totaled the final score. That total score, obtained following the completion of the MMSE, can range from a 0 to 30. Scores of 25 or higher are traditionally considered normal. However, those receiving scores less than 10 generally indicate severe impairment, while scores between 10 and 19 indicate moderate dementia. Scores of 19 - 24

are often obtained by those with mild Alzheimer's disease (Rosenzweig, 2010).

One of the benefits of this screening tool is that it does not take long to administer. Generally, it took the patients on the Senior Behavioral Health Unit approximately 20 minutes to complete the entire examination. It should be emphasized, however, that this is simply a screening tool and not a diagnostic tool. It gave the researcher a snap-shot type picture of the extent of cognitive decline. When utilized in conjunction with other professional screening tools, such as the LACLS-5 as well as further clinical evaluations, one can get an even clearer picture of the patient's cognitive functioning ability.

<u>Pre-test/Post-test Occupational Performance Measure</u>

Canadian occupational performance measure (COPM). This evaluative tool particularly assessed occupational performance in three performance areas: self-care, productivity and leisure. The assessment took approximately 30 – 40 minutes to administer and was conducted through a semi-structured interview process (Law, Baum, & Dunn, 2005).

During the interview process, the client would identify his/her performance areas that they feel are of concern. The client would then identify which of these areas of concern were most important to them, utilizing a scale from 1-10 (Law et al., 2005).

Once the most important occupational performance areas of concern were identified, the client then rated his/her ability to perform the activity on a scale of 1-10. The total ratings for their performance were added and then divided by the number of problem areas rated to determine the client's Performance Score 1 (Law et al., 2005).

Lastly, the client rated his/her satisfaction regarding his/her ability to complete the identified tasks on a scale from 1-10. The ratings for his/her satisfaction with task completion was added and then divided by the number of problem areas rated to determine the client's Satisfaction Score 1 (Law et al., 2005).

Upon reassessment, following active participation in therapeutic activities, the client was then again asked to rate his/her identified problem area on a scale of 1-10 regarding performance and satisfaction. Those ratings were again added together and then divided by the number of problem areas identified to determine reassessment Performance Score 2 and Satisfaction Score 2 (Law et al., 2005).

To determine the client's change in performance from initial evaluation to reassessment, the Performance Score 1 was subtracted from Performance Score 2. To determine the patient's change in satisfaction from initial evaluation to reassessment, the Satisfaction Score 1 was subtracted from Satisfaction Score 2 (Law et al., 2005).

The COPM was used to reassess the patient's self-perceived change in both performance and satisfaction of his/her occupational performance following active participation in therapeutic activities. The following were the procedures utilized for the various therapeutic activity groups implemented during the research study.

Therapeutic Activity Procedures

Goal and gross motor. The participants often started the day off with this gross motor exercise group and goal setting group. This therapeutic activity often incorporated reflexive motor tasks, parachute activities, stretching, breathing activities and repetitive gross motor movement tasks. Many times, the facilitator incorporated music to enhance the exercise programming and establish an environment which was conducive for the activity at hand.

In addition to the daily exercise, the participants were encouraged to establish a daily goal to individualize their treatment process. This also provided the therapist with valuable information related to the patient's processing and desired personal expectations for therapeutic progression.

This therapeutic activity was generally facilitated by the Occupational Therapist and/or Certified Occupational Therapy Assistant. The duration of the activity most commonly was held for 45 – 60 minutes.

An orientation board was regularly referred to within this session, reviewing the day, date, year and current place/situation. Additionally, a dry-erase board was often used to provide a visual display of the group structure. The dry-erase board was also used to provide a schedule for the remaining daily programming.

This type of group allowed the patients to begin their day with daily exercises and goals which were encouraged to be continued upon discharge to maintain optimal health and function. Discussion and education regarding orientation and the structure of the day aimed to help the participants feel more secure and aware.

Life skills. Life skills activities involved a specific activity associated with one of the following: Activities of Daily Living, Rest and Sleep, Communication Skills, Habits, Routines, or Instrumental Activities of Daily Living.

This therapeutic activity was generally facilitated by the Occupational Therapist and/or Certified Occupational Therapy Assistant. The duration of the activity most commonly was held for 45 – 60 minutes.

This type of group allowed the patient to engage in specific tasks which were selected to help develop skills and maximize performance with daily life tasks. Frequently, it was a pen and paper type activity that was utilized. The patient would actively participate in both the task and the processing

discussion that would follow. The therapist would impart knowledge and facilitate group discussion throughout the life-skills session.

Leisure skills. A leisure skills activity generally involved leisure exploration. If leisure exploration was not the focus of the activity, then leisure participation in a structured group process occurred.

This therapeutic activity was generally facilitated by the Occupational Therapist and/or Certified Occupational Therapy Assistant. The duration of the activity most commonly was held for 45 – 60 minutes.

This type of group allowed the patient to engage in specific tasks which were selected to help develop skills and maximize performance with leisure tasks and leisure pursuits. The patient would actively participate in both the leisure activity and the processing discussion that would follow. The therapist would impart knowledge and facilitate group discussion throughout the leisure skills session.

Social skills. Social skills activities were another type of therapeutic group that occurred on the Senior Behavioral Health Unit. The social skills activity generally engaged the participants in a task which encouraged social interactions on a peer level. Occasionally, the therapist would facilitate an activity in which the group would focus more closely on community or family social participation.

This therapeutic activity was generally facilitated by the Occupational Therapist and/or Certified Occupational Therapy Assistant. The duration of the activity most commonly was held for 45 – 60 minutes.

This type of group allowed the participant to engage in specific tasks which were selected to help develop skills and maximize performance with social skills and communication. The participant would actively engage in both the social skills activity and the processing discussion that would follow. The therapist would impart knowledge and facilitate group discussion throughout the social skills group.

Coping skills. Coping skills activities were commonly attended by those admitted to the behavioral unit. The participants would be encouraged to actively participate in group discussion and activity regarding stressors and coping mechanisms to manage stressors.

This therapeutic activity was generally facilitated by the Occupational Therapist and/or Certified Occupational Therapy Assistant. The duration of the activity most commonly was held for 45 – 60 minutes.

This type of therapeutic activity encouraged assertive behaviors and the expression of feelings. The primary goal of this group was to increase emotional awareness and to identify and participate in positive ways to effectively manage current life stressors.

Task. Task groups were regularly held throughout the week on the behavioral unit. Craft activities were utilized to facilitate and observe the participant's organizational skills, decision making skill and problem solving skills. The task was structured based upon the demonstrated cognitive ability of the participant.

This therapeutic activity was facilitated by the Occupational Therapist and/or Certified Occupational Therapy Assistant. The duration of the activity most commonly was held for 45 – 60 minutes.

Throughout this type of session, the therapist would observe the patient's ability to follow directions and his/her ability to concentrate on the task at hand. The patient's organizational skills, sequencing skills, problem solving skills and decision-making skills utilized to complete the task would be observed and facilitated.

A verbal processing of the task followed, with feedback provided regarding demonstrated behaviors during task completion. The therapist noted environmental adaptations during task completion which maximized participant performance.

Stress management. This specific type of coping skills group served to educate participants on the effects of stress and its impact on both physical and mental health. Participants shared within the group process how stress and anxiety had impacted his/her ability to effectively complete daily tasks.

This therapeutic activity was facilitated by the Occupational Therapist and/or Certified Occupational Therapy Assistant. The duration of the activity most commonly was held for 45 – 60 minutes.

The goal of the session would be to increase the participants understanding of how stress can affect both his/her physical and emotional well-being, assist in the identification of personal supports and community resources, to identify current stressors, to recognize signs and symptoms of anxiety, to recognize events that precipitate anxious feelings and to identify positive coping alternatives to manage these feelings.

Progressive muscle relaxation. Progressive muscle relaxation (PMR) is a specific type of stress management technique in which progressive tightening of a muscle group would be followed by relaxation of the muscle group. The therapist reinforced that the PMR technique could be utilized as a positive coping alternative to managing stress and anxiety upon discharge.

Participants were educated regarding PMR during stress management groups. During progressive muscle relaxation sessions, the participants were provided with the opportunity to implement the technique and determine whether or not he/she felt it was affective for him/her.

The treatment environment was set up to be conducive for relaxation.

Lights were dimmed and participants were comfortably seated within the lavender scented treatment room. With the participants eyes closed, the

therapist verbally guided him/her through a series of muscle tightening followed by muscle relaxation.

The therapist encouraged the participants to focus on the feeling of muscle tension, often associated with stress and anxiety, while the participant tightened a specific muscle group for approximately 10 seconds. The therapist then encouraged the participants to focus on the feeling of self-controlled, muscle relaxation for approximately 20 seconds.

This therapeutic activity was facilitated by the Occupational Therapist.

The duration of the activity most commonly was held for 45 – 60 minutes. It was generally implemented in a group treatment process however it was provided one-to-one as indicated.

Art therapy. Art therapy was provided on the unit by art therapists. Participants actively completed various art and craft activities with the goal to increasing awareness, increasing self and creative expression and selfworth.

Various art modalities were utilized and explored during hospitalization.

Processing and discussion followed each art activity with the therapist encouraging verbal awareness of insights obtained during the creative expression process.

Research Methods Summary

This chapter provided details of the research methods for the study. This included: study design, study participants, study recruitment methods and informed consent, research procedure, potential risks and safety precautions, records and confidentiality, incentives and research related costs, institutional review board approval, inclusion criteria instrumentation, pre-test/post-test occupational performance measure, and therapeutic activity procedures. The following chapter will include the results of the described study.

CHAPTER IV

RESULTS

Overview of Results

The purpose of the study was to measure the improvement in occupational performance in five patients on the geropsychiatric unit who participated in therapeutic activities. This chapter presents the findings on each of the five participants. The chapter concludes with a summary of the results of the five participants.

Participant Number One

E.N. was a 65 year old male admitted to the Senior Behavioral Health Unit with the diagnosis of Major Depression. He demonstrated decreased functional ability with daily task completion and noted feeling both helpless and hopeless. Prior to admission to the facility, E. N. had attempted suicide by taking an overdose of medications.

E.N. had a psychiatric history of depression and had attempted suicide once before. The following was noted to be his medical history: Coronary Artery Disease (stent x 2), Renal Stenosis Stenting, Peripheral Vascular Disease, Hypertension, and Chronic Kidney Disease.

He stated that he used to work as a window-cleaner and used to enjoy such activities as painting, fishing, and visiting with family members. He noted at time of admission that he wasn't interested in many activities or interests now and didn't do much besides watch television and lay in bed.

He was married and had children, grandchildren and great-grandchildren.

However, he said he had limited socialization with both family and peers.

He reported that he used to regularly attend church activities, but at time of admission was now no longer attending.

E.N. said that he required some assistance with basic activities of daily living (ADL's) and with instrumental activities of daily living (IADL's), prior to admission. During initial assessment, he demonstrated the need for minimal assistance to supervision with bathing, dressing and grooming tasks. He utilized a walker for mobility.

Upon initial assessment, E.N. was noted to be alert and oriented x 4 (person, place, time and situation). He was able to follow one-step verbal direction with good consistency. His safety/judgment, short term memory, long term memory, attention to task and problem solving were noted to be impaired. He completed the Mini Mental State Exam (MMSE) and scored a 24/30 per nursing report. He completed the LACLS-5 and scored a 4.2/6.0.

During the evaluative process, he noted that he had a hard time dealing with his feelings. He also expressed having a difficult time telling other

people how he feels. He was aware that he had a hard time solving problems and a hard time dealing with stress.

E.N. expressed concerns related to occupational performance areas of self-care, productivity and leisure. Table 4-1 provides the occupational performance problems he identified as most important to him. It also includes his ratings for the identified problem areas, on a scale of 1-10, with regards to both performance and satisfaction (pre-test) and then again at discharge (post-test).

After the initial evaluation was completed, the treatment team identified the following problem areas for E.N.: depressive thoughts/hopelessness; agitation/disruptive behavior/impulse control; health maintenance deficit; anxiety; cognitive impairment; potential for harm and impaired mobility/fall risk. He was then scheduled to participate in therapeutic activities appropriate for addressing the problem areas both he and the treatment team identified.

The patient actively participated in the majority of the therapeutic activity sessions offered during his 24 day admission .Occupational therapy group treatment sessions included: Goal/Gross Motor, Leisure Skills, Life Skills, Social Skills, Coping Skills, Stress Management Skills, Task, and Reminiscing. One-to-one treatment sessions were completed as needed. He

Table 4-1 *COPM Identified Problem Areas and Scores for Patient 1*

Occupational Performance Problems	Performance One Rating (pre-test)	Satisfaction One Rating (pre-test)	Performance Two Rating (post-test)	Satisfaction Two Rating (post-test)
Maintaining personal hygiene	1	1	7	10
Indoor mobility	5	1	9	10
Motivation to complete simple cooking	2	5	2	5
Completing quiet leisure	2	5	5	9
Socializing with others	1	1	8	10
Total score	11/5 = 2.2	13/5 = 2.6	31/5 = 6.2	44/5 = 8.8

Note. Total score = Total performance or satisfaction score / # of problems

received a total of 2,795 minutes to therapeutic treatment activities during his admission.

When E.N. was ready for discharge, he expressed that he was feeling anxious. However, he was overall satisfied with his progress on the behavioral health unit.

Participant Number Two

M.D. was an 82 year old female admitted to the Senior Behavioral Health Unit with the diagnosis of Anxiety. She demonstrated decreased functional ability with daily task completion and noted feelings of nervousness and panic. During the initial evaluation process, the patient appeared upset and was tearful as she noted a need to get help for her feelings of anxiety.

M.D. had a psychiatric history of both anxiety and depression. The following was noted to be her medical history: Jaundice, Nausea and Anorexia, Crohn's Disease, C2-C3 Pedicle Fracture, and Osteoporosis.

She stated that she used to work at a local bank, however has long since retired from her position there. She noted that she additionally worked diligently as a homemaker, caring for her children and spouse. M.D. noted she used to be very active, enjoying swimming and walking on a regular basis. Lately, however, she walked only very short distances and her primary form of daily entertainment was watching the television.

M.D. was a widow and she noted having very few friends whom had not passed away. Socialization primarily took place among family members. She reported she was not only a mother and grandmother, but a great-grandmother as well. And although many of her siblings had passed away, she did have one sister that she kept in touch with on a regular basis.

She said she required some assistance with her basic ADL's and also needed help with IADL tasks, prior to admission. She was assisted with these tasks by the staff at the Assisted Living Facility where she resided. Upon initial assessment, she demonstrated the need for Moderate to Minimal assistance with basic ADL tasks. She utilized a rolling walker for mobility, but benefitted from stand-by-assist and contact guard assistance as needed due to decreased safety awareness and a history of falls.

Upon initial evaluation, M.D. was noted to be alert and oriented x 4 (person, place, time and situation). She was able to follow one-step verbal direction with good consistency. Her safety/judgment, short term memory, long term memory, attention to task and problem solving were noted to be impaired. She completed the Mini Mental State Exam and scored a 28/30 per nursing report. She completed the LACLS-5 and scored a 4.8/6.0.

During the evaluative process, she noted that she had a hard time dealing with her feeling and telling other how she felt. She noted feeling

uncomfortable around people and stated that she didn't like herself. She recognized that she had difficulty solving problems and managing stress.

M.D. expressed concern related to occupational performance areas of self-care, productivity and leisure. Table 4-2 provides the occupational performance problems she identified as most important to her. It also includes her ratings for the identified problem areas, on a scale of 1-10, with regards to both performance and satisfaction (pre-test) and then again at discharge (post-test). Although not noted on her initial evaluation, she later expressed that she had neck and back pain which occasionally impacted her daily task performance.

After the initial evaluation was completed, the treatment team identified the following problem areas for M.D.: depressive thoughts/hopelessness; health maintenance deficit; anxiety; pain and impaired mobility/fall risk. She was then scheduled to participate in therapeutic activities appropriate for addressing the problem areas both she and the treatment team identified.

The patient actively participated in the majority of the therapeutic activity sessions offered during his 12 day admission. Occupational therapy treatment sessions included: Goal/Gross Motor, Leisure Skills, Life Skills, Social Skills, Coping Skills, Stress Management Skills, Task, and Reminiscing.

Table 4-2 *COPM Identified Problem Areas and Scores for Patient 2*

Occupational Performance Problems	Performance One Rating (pre-test)	Satisfaction One Rating (pre-test)	Performance Two Rating (post-test)	Satisfaction Two Rating (post-test)
Decreased Motivation for completion of self-tare tasks	7	5	9	10
Decreased activity participation	5	4	8	8
Decreased community involvement during bus rides	5	4	5	4
Decreased social dining activities	5	4	5	4
Decline in phone calls	7	7	10	10
Total score	29/5 = 5.8	24/5 = 4.8	37/5 = 7.4	35/5 = 7.2

Note. Total score = Total performance or satisfaction score / # of problems

One-to-one sessions were completed as needed. She received a total of 1,185 minutes to the rapeutic treatment activities during her admission.

When M.D. was ready for discharge, she noted feeling less anxious and more motivated. She was appreciative of the therapy services she received and was hopeful about her return home.

Participant Number Three

E. S. was a 70 year old divorced, male admitted to the Senior Behavioral Health Unit with the diagnosis of Major Depression. He demonstrated decreased functional ability daily task completion and noted feelings of depression and fearfulness.

He had a history of having depressive symptoms, but noted that his feelings and thoughts of self-harm had recently gotten worse. He was noted to have the following medical history: Syncopal Episodes, Musculoskeletal Pain (overuse and arthritis), Hypertension, Hyperlipidemia, Coronary Artery Disease, Left Occipital Stroke, and Gastric Ulcers.

E.S. noted he was a retired construction worker. He said he used to enjoy such things as drag racing, socializing and fishing. Lately, however, he expressed socializing had become more difficult and he lacked motivation to even complete his basic ADL's. He spent most of his time watching television and "living".

He was a divorced father who additionally had both grandchildren and great-grandchildren. He lived in his own home, but his son assisted him on a regular basis with any activities that he could not manage independently.

Upon the initial evaluation, patient was able to complete his basic ADL tasks independently. However, because E.S. noted he had thoughts of self-harm, we provided him with supervision during ADL task completion to ensure his safety on the unit. He ambulated independently and was not a significant fall risk, due to his steady gait.

E.S. was noted to be alert and oriented x 4 (person, place, time and situation). He was able to follow one step verbal direction with good consistency and both his long and short term memory were intact. He did demonstrate some impairment with his ability to attend to task and problem solve. Additionally, impairment was noted with his safety and judgment.

During the initial evaluation, E.S. noted that sometimes had difficulty dealing with his feelings, but did not have difficulty expressing to others how he felt. Additionally, he acknowledged he had difficulties managing his level of stress. He shared that he usually tried to manage stress by staying busy and trying to avoid thinking about it.

E.S. expressed concerns related to occupational performance areas of self-care, productivity and leisure. Table 4-3 provides the occupational

Table 4-3 *COPM Identified Problem Areas and Scores for Patient 3*

Occupational Performance Problems	Performance One Rating (pre-test)	Satisfaction One Rating (pre-test)	Performance Two Rating (post-test)	Satisfaction Two Rating (post-test)
Decreased motivation to walk at the mall	5	5	5	5
Decreased socialization	4	5	6	6
Decreased motivation to volunteer	2	1	3	2
Not going up and down stairs	2	2	2	2
Decreased motivation to complete laundry/light cleaning	2	2	2	2
Total score	15/5 = 3.0	15/5 = 3.0	18/5 = 3.6	17/5 = 3.4

Note. Total score = Total performance or satisfaction score / # of problems

performance problems he identified as most important to him. It also includes his ratings for the identified problem areas, on a scale of 1-10, with regards to both performance and satisfaction (pre-test) and then again at discharge (post-test).

After the initial evaluation was completed, the treatment team identified the following problem areas for E.S.: depressive thoughts/hopelessness; potential for harm; health maintenance deficit and pain. She was then scheduled to participate in therapeutic activities appropriate for addressing the problem areas both he and the treatment team identified.

The patient actively participated in the majority of the therapeutic activity sessions offered during his 2 day admission. Group treatment included: Goal/Gross Motor, Leisure Skills, Life Skills, Social Skills, Coping Skills, Stress Management Skills, Task, and Reminiscing. One-to-one sessions were completed as needed. He received a total of 330 minutes to therapeutic treatment activities during his admission.

E.S. refused to participate in several of the therapeutic treatment sessions offered. He did note however, at the time of discharge, that he "gained knowledge" during his admission and he had new tools to help him "do better" once he returned to his home.

Participant Number Four

D.G. was a 73 year old married, male admitted to the Senior Behavioral Health Unit with the diagnosis of Major Depression. He expressed that he was having difficulty managing recent stressors. In addition, he had expressed having trouble sleeping at night and was bothered by the chronic tinnitus.

The patient noted that he had been seeing a counselor secondary to his depression, prior to his admission on the unit. He also attended anger management classes due to his history of aggressive behavior in the past. His medical history included: Hypertension, Pneumonia, Hyperlipidemia, Gastroesophageal Reflux Disease, and Rotator Cuff Injury.

D.G. was a retired engineer who regularly taught an archery class in the community. He used to enjoy dirt-bike riding, motorcycle riding and traveling around the states. His current interests centered on his archery class and restoring antique furniture. However lately, he noted a decreased ability to concentrate on the interests he enjoys.

The patient was married and lived at home with his spouse. He had children, grandchildren and friends that played an active role in his life. In addition to his supportive family, he expressed having the support of his church community. He of the Christian faith and attended his local church on a regular basis

D.G. was completely independent with his ADL tasks and IADL tasks, but did note that recently some of those tasks seemed more challenging to complete. His gait was steady and he was independent with ambulation, but we monitored him for falls due to new environment and medication adjustments.

He was noted to be alert and oriented x 4 (person, place, time and situation). He was able to follow one-step direction with good consistency. His long-term and short-term memory appeared to be intact. He did however demonstrate difficulty attending to task, problem solving and impaired safety and judgment. He completed the MMSE and scored a 22/30 per nursing report. He completed the LACLS-5 and scored a 4.2/6.0.

D.G. noted that he had difficulty dealing with his feelings and sometimes had a hard time expressing his feelings to others. He noted sometimes having a hard time dealing with stress and regularly had trouble dealing his feelings of anger

D. G. expressed concerns related to occupational performance areas of self-care, productivity and leisure. Table 4-4 provides the occupational performance problems he identified as most important to him. It also includes his ratings for the identified problem areas, on a scale of 1-10, with regards to both performance and satisfaction (pre-test) and then again at discharge (post-test).

Table 4-4 *COPM Identified Problem Areas and Scores for Patient 4*

Occupational Performance Problems	Performance One Rating (pre-test)	Satisfaction One Rating (pre-test)	Performance Two Rating (post-test)	Satisfaction Two Rating (post-test)
Decreased motivation to volunteer	4	4	5	4
Decreased motivation to read	2	5	6	5
Increased stress therefore less leisure	2	2	6	7
Difficulty concentrating on tasks/activities	2	2	7	7
Worry impacting daily tasks	2	2	7	7
Total score	12/5 = 2.4	15/5 = 3.0	31/5 = 6.2	30/5 = 6.0

Note. Total score = Total performance or satisfaction score / # of problems

After the initial evaluation was completed, the treatment team identified the following problem areas for D.G.: depressive thoughts/hopelessness; potential for harm; health maintenance deficit; anxiety and impaired mobility/fall risk. He was then scheduled to participate in therapeutic activities appropriate for addressing the problem areas both he and the treatment team identified.

D. G. refused to participate in the majority of the therapeutic activities offered. The following treatment groups where provided during his 6 day admission: Goal/Gross Motor, Leisure Skills, Life Skills, Social Skills, Coping Skills, Stress Management Skills, Task, and Reminiscing. One-to-one sessions were completed as needed. He received a total of 315 minutes to therapeutic treatment activities during his admission.

D.G.'s length of stay on the behavioral unit was not long in duration. Even though he did not spend a significant amount of time on unit, prior to discharge he did express a feeling of hopefulness. He planned to return to his community volunteer work. Upon discharge he acknowledged feeling less depressed and seemed to have an increased ability to concentrate.

Participant Number Five

C.H. is a 78 year old widowed, female who was admitted to the Senior Behavioral Health unit with the diagnosis of Depression. She demonstrated

decreased functional ability with daily task completion and noted suicidal ideation during her initial evaluation.

C.H. had a psychiatric history of anxiety and depression, but she noted the depressive feelings had been getting worse. She was having difficulty sleeping and was very tearful during the assessment process. The following was noted as her medical history: Hypertension, Hysterectomy, Right Mastectomy, Cancer, Carotid Stenosis, Gastroesophageal Reflux Disease, Ulcers and Arthritis.

She stated that she never worked outside the home. She actively took care of her home through the years and was both a mother and a step-grandmother. She used to enjoy such activities as bingo, taking care of her home, shopping and traveling. C.H. expressed that she was not a social type of person and stayed at home a great deal where she liked to read and watch television. She regularly would get out of the house to attend church on Sundays.

C.H. was a widow and noted that she had limited support in the local area. She expressed that she often felt lonely and was frequently bored. With her spouse deceased, her children out of state and all of her siblings deceased, she often felt depressed and anxious.

She lived alone at home and was able to independently completed both ADL and IADL tasks. She did however note that motivation to complete daily

tasks had decreased. The patient's gait was steady and she did not present to be a significant fall risk. Because of the new environment and medication adjustments, we continued to monitor this to ensure her safety.

Upon initial assessment, C.H. was noted to be alert and oriented x 4 (person, place, time and situation). She was able to follow one-step verbal direction with good consistency. Her memory was intact. Impaired safety/judgment was noted in addition to decreased ability to attend to tasks and problem solve. She completed the MMSE and scored a 26/30, per nursing report. She scored a 5.0/6.0 on the ACLS-5.

C.H. noted that she was having a hard time dealing with her feelings and had difficulty expressing how she feels. When she was around other people, she felt uncomfortable. She stated that she had a hard time solving problems, dealing with stress and managing her anger.

C.H. expressed concerns related to occupational performance areas of self-care, productivity and leisure. Table 4-5 provides the occupational performance problems she identified as most important to her. It also includes her ratings for the identified problem areas, on a scale of 1-10, with regards to both performance and satisfaction (pre-test) and then again at discharge (post-test).

After the initial evaluation was completed, the treatment team identified the following problem areas for C.H.: depressive thoughts/hopelessness;

Table 4-5 *COPM Identified Problem Areas and Scores for Patient 5*

Occupational Performance Problems	Performance One Rating (pre-test)	Satisfaction One Rating (pre-test)	Performance Two Rating (post-test)	Satisfaction Two Rating (post-test)
Difficulty managing stress	1	1	7	8
Decreased sleep	4	3	8	8
Decreased motivation for self-care completion	6	1	9	9
Decreased sense of purpose/self- worth	1	1	8	6
Decreased motivation for home management	4	1	8	7
Total score	16/5 = 3.2	7/5 = 1.4	40/5 = 8.0	38/5 = 7.6

Note. Total score = Total performance or satisfaction score / # of problems

health maintenance deficit; anxiety and impaired mobility/fall risk. She was then scheduled to participate in therapeutic activities appropriate for addressing the problem areas both she and the treatment team identified.

The patient had a short, two day admission. However, she did attend most of the therapeutic sessions offered. The therapeutic groups offered included: Goal/Gross Motor, Life Skills, Coping Skills and Stress Management Skills. One-to-one sessions were completed as needed. She received a total of 205 minutes to therapeutic treatment activities during her admission.

As noted, C.H. actively participated in the majority of treatment sessions offered. When she was ready for discharge, she expressed feelings of hopefulness. She felt that she was going to be better able to manage her stress but still had some concerns. She stated that she felt more motivated to take control of both her personal health and her current situation.

Summary of Results

The purpose of the study was to measure the improvement in occupational performance in five patients on a geropsychiatric unit who participated in therapeutic activities. The therapeutic activities, including Occupational Therapy treatment groups, were generally well attended.

Prior to the active participation in therapeutic activities, the patient participated in an initial evaluation. During the initial evaluation (pre-test), the participants rated their performance regarding occupational tasks of

concern (performance 1 rating). Prior to discharge and following participation with therapeutic activities, the participants again rated their performance regarding the same occupational tasks of concern (performance 2 rating). Three of the five participants increased their performance score ratings by two or more points.

The performance rating score was not the only rating that occurred during the initial evaluation. Additionally, the participants rated their satisfaction with their current functioning regarding the identified occupational areas of concern. The rating score that was first obtained during the initial evaluation (satisfaction 1 rating) was compared to the satisfaction rating provided upon discharge, following participation in therapeutic activities (satisfaction 2 rating).

Noting the differences in performance and satisfaction scores allowed the researcher to compare clinically significant changes in occupational performance. Based on noted research, Law et al., 2005, states that it is clinically significant when the COPM rating scores change by two or more points. Four of the five participants increased their satisfaction score ratings by two or more points.

Noted Comparisons

During hospitalization, therapeutic activities were offered throughout the day. The therapeutic activities were provided to the participants to

maximize their functioning upon discharge and obtain established treatment goals. Participants were encouraged to actively participate with the therapeutic activities offered, but participation was always voluntary. In review of the minutes of participation, E.N. (patient number 1) participated in the most minutes of therapeutic activities. C.H. (patient number 5) attended the least amount of minutes.

When comparing the data regarding minutes of therapeutic activity participation, it is also important to take into consideration the length of the individual hospitalization. A patient admitted for 20 days is more likely to have participated in more minutes of therapeutic activities than a patient admitted for less than a week. E.N., as noted above, participated in the most minutes of therapeutic activities and additionally had the longest length of stay on the behavioral unit. C.H. attended the least amount of minutes in therapeutic activities and had one of the shortest lengths of stay.

Upon taking into consideration the patient's length of stay, one can compare the percentage of the admission time which was spent in therapeutic group activities or 1:1 sessions facilitated by the Occupational Therapist, Certified Occupational Therapy Assistant, Art Therapist or Social Worker. Even though E.S. (patient number 3) had one of the shortest lengths of stays on the unit, he spent the highest approximate percentage of time in therapeutic treatment activities as compared to the other

participants. D.G. (patient number 4) had the lowest approximate percentage of time spent in therapeutic treatment sessions during his admission.

Even though a participant had a comparatively higher approximate percentage of time spent in therapeutic activities, it did not consistently correlate with a significant clinical change in occupational performance and satisfaction. E.S. spent approximately 11% of his admission time participating in therapeutic treatment activities but his rating scores did not change by more than 2 points. M.D. spent a near average amount of time in participation in therapeutic activities, as compared to the other study participants. Although her change in satisfaction score did increase by least 2 points, her change in performance score did not. All three of the remaining participants noted a clinically significant change in performance and satisfaction from pre-test to post-test ratings.

Results Summary Tables

Tables have been developed to summarize the results of the data collected on all five of the participants. Table 4-6 summarizes the change for all five patient's performance and satisfaction rating scores from pre-test to post-test.

Table 4-7 summarizes the total amount of minutes each patient participated in therapeutic activities. Participation in these therapeutic

Table 4-6 *Change in Performance and Satisfaction Rating Scores*

Participants	Performance 1	Performance 2	Change in
	Rating	Rating	Performance
E.N. patient 1	2.2	6.2	4.0
M.D. patient 2	5.8	7.4	1.6
E. S. patient 3	3.0	3.6	0.6
D.G. patient 4	2.4	6.2	3.8
C.H. patient 5	3.2	8.0	4.8
Participants	Satisfaction 1	Satisfaction 2	Change in
	Rating	Rating	Satisfaction
E.N. patient 1	2.6	8.8	6.2
M.D. patient 2	4.8	7.2	2.4
M.D. patient 2 E. S. patient 3	4.8 3.0	7.2 3.4	2.4 0.4
·			

Note. Change in performance = performance score 2 – performance score 1
Change in satisfaction = satisfaction score 2 – satisfaction score 2
Mean change in performance = 2.96; SD = 3.15
Mean change in satisfaction = 3.64; SD = 6.38

Table 4-7 *Total Minutes of Therapeutic Treatment Activities*

Therapeutic					
Activity	E.N # 1	M.D # 2	E.S # 3	D.G # 4	C.H #5
Life skills	255	165	45	95	45
Leisure skills	390	75	0	45	0
Social skills	120	75	0	45	0
Reminiscing	255	60	45	0	0
Task	285	60	60	0	0
Art therapy	360	300	0	40	45
Goal and gross motor	755	330	90	0	60
Coping skills	270	75	45	60	25
Stress management	105	45	45	30	30
Total number of treatment minutes	2,795	1,185	330	315	205

activities took place following the pre-test scores and prior to the post-test noted above.

By comparing the total amount of minutes each patient participated in treatment to the total approximate amount of minutes each were on the unit, one can determine the approximate percentage of time each patient spent in participation of therapeutic activities. This comparison can be found in Table 4-8.

But did the approximate percentage of time spent in therapeutic activities consistently correlate with a significant clinical change in occupational performance and satisfaction? Table 4-9 provides an overall summary of all five patient's participation and noted change in occupational performance.

Table 4-8Approximate % of Time Spent in Therapeutic Activities

Participants	E.N.	M. D.	E. S.	D. G.	С. Н.
	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5
Number of					
days on unit	24	12	2	6	2
Approximate					
minutes spent					
on unit	34,560	17,280	2,880	8,640	2,880
Number of					
minutes spent					
in therapeutic					
Activities	2,795	1,185	330	315	205
Approximate					
percentage of					
time spent in					
therapeutic					
activities					
during					
hospitalization	8%	7%	11%	4%	7%

Note. Mean percentage of time in therapeutic activities = 7.4%; SD=6.3

Table 4-9Summary of Results

Patient	Days on	Pre-test	Min. of	Post-	Change	Clinically
	Unit	Score	T.A./	test	in Score	Significant
		P/S	% of	Score	P/S	P/S
			time in	P/S		
			T.A.			
Patient						
1	24	2.2/2.6	2795/8%	6.2/8.8	4.0/6.2	YES/YES
.						
Patient						
2	12	5.8/4.8	1185/7%	7.4/7.2	1.6/2.4	NO/YES
Patient						
3	2	3.0/3.0	330/11%	3.6/3.4	0.6/0.4	NO/NO
Patient						
4	6	2.4/3.0	315/4%	6.2/6.0	3.8/3.0	YES/YES
Patient						
5	2	3.2/1.4	205/7%	8.0/7.6	4.8/6.2	YES/YES

Note. P = performance; S = satisfaction; T.A. = Therapeutic Activities;

Min. = minutes

CHAPTER V

DISCUSSION

Overview of Study

The purpose of the study was to measure the improvement in occupational performance in five patients on a geropsychiatric unit who participated in therapeutic activities. The researcher was interested in noting if a clinically significant change in occupational performance was indicated following active participation in therapeutic treatment sessions during hospitalization.

The COPM was utilized as a measure of self-perceived change in occupational performance during the study. The five participants rated their performance and satisfaction with regards to occupational tasks of concern during initial evaluation (pre-test) and then again following active participation in therapeutic activities (post-test). The results provided by the participants were then calculated and compared. An individualized summary of the data collected while the patient was on the behavioral unit has been provided (See Appendix E).

Every patient actively participated in therapeutic activities while admitted to the unit. The minutes of participation ranged from 2,795 minutes to 205

minutes. When the minutes of participation were compared to the approximate minutes of total time spent on the unit, the mean percentage of time the participants were in therapeutic activities was determined to be 7.4%.

Upon completion of the post-test, the majority of the participants noted a clinically significant change in occupational performance and satisfaction. The question then becomes, was this improvement noted in occupational performance solely dependent upon the therapeutic activity intervention? Based on the data gathered from this research study, this cannot be positively concluded.

Due to the small *n* and due to the fact that variables other than therapeutic activity participation potentially could have impacted the patient's rating of occupational performance and satisfaction, generalized conclusions cannot be determined.

Three of the five participants noted a clinically significant change in occupational performance following active participation in therapeutic activities. Four of the five participants noted a clinically significant change in satisfaction of occupational performance following participation in the therapeutic sessions. However, due to the limitations of the study, results cannot be generalized.

Limitations of Study

When this study was initially begun, the researcher anticipated data collection for 6 months to a year. Within that original time frame, the n was hoped to be approximately 40 - 50 participants. Unfortunately, during the first few months of data collection, very few patients on the behavioral unit met all of the inclusion criteria necessary to actively participate in the research study.

Not meeting the inclusion criteria was only one of the limiting factors regarding patient participation. Shortly after the data collection process had begun, a corporate decision to close the behavioral unit was announced. Initially, the closing of the unit was not to take place until 2013. However, hospital administration changed the initially expressed closing date of 2013 and it was publically announced that the unit would close in May, 2012. The ultimate closing of the behavioral unit additionally impacted the number of qualifying participants included in the research. With the limited number of participants, external validity would be significantly impacted. Generalizing data collected would not be sound.

Another limitation of the study involves the number of possible variables that potentially could impact a patient's self-perception of occupational performance while on a behavioral unit. The provision of therapeutic activities is not the only therapeutic intervention offered to the patient

during his/her hospitalization. During the hospitalization, there are several other variables that potentially could impact the patient's self-perception of occupational performance:

- 1) Patient's receive psychological medications
- 2) Patient's participate in 1:1 interventions as indicated
- 3) Patient's attend family meetings as scheduled
- 4) Patient's read individualized educational materials
- Patient's engage in personal interactions with various staff and peers during admission
- 6) Patient's may experience a medical change in status

 Because of the multiple variables which could potentially impact occupational performance, one cannot conclude cause and effect based on data gathered.

Implications for Improved Practice

Although the behavioral unit on which this study was conducted is no longer in existence, the researcher has noted some important changes which could potentially be implemented on similar settings. Following the review of the related literature, the implementation of the study and the comparison of the resulting data, a couple of implications for improving existing programming emerged.

Over the past twenty years, Occupational Therapists have emphasized the need for treatment practice based on a client-centered approach (Law, Baum, & Dunn, 2005). The COPM offers a measure of occupational performance which is client-centered, recognizing that the client is well aware of what they want in terms of occupational performance. Utilizing the semi-structured interview process, the client is the one who determines his/her occupational performance areas of concern and reports his/her self-perceived rating regarding his/her performance and satisfaction related to these areas.

Although the COPM was utilized in this study to provide a measure of self-perceived occupational performance, it quickly became obvious to the researcher that this evaluative tool could be beneficial beyond the realm of this study. This assessment tool was based on the Canadian Model of Occupational Performance (Law et al., 2005) and focuses areas of occupation specific to Occupational Therapy's domain of practice (AOTA, 2008).

In addition to the modification of the evaluative process, some modification would be made with regards to the therapeutic programming. Progressive muscle relaxation was a technique utilized on the behavioral unit as a therapeutic means by which the patients could decrease stress and promote relaxation. It was utilized on the behavioral unit to increase the

patient's awareness regarding stress management options available to promote relaxation upon discharge. Based on the literature reviewed, this type of relaxation technique is effective for physical relaxation (Carlson & Hoyle, 1993; Matsumoto & Smith, 2001; Ghoncheh & Smith, 2004). Follow-up and extensive training regarding continued utilization of this technique was completed by the psychiatrist on our Senior Behavioral Health Unit.

Based on the related literature, other types of relaxation techniques were also addressed. Ghoncheh & Smith, 2004, note that yoga stretching exercises are also a beneficial relaxation technique. Breathing exercises are also noted as an effective way to evoke a relaxed response (Matsumoto & Smith, 2001).

Relaxation techniques do differ and the participant's responses to the techniques vary. Providing a variety of potentially effective relaxation options is beneficial for patients to maximize their opportunity for success.

Yoga stretching exercises were not incorporated into the programming on the behavioral health unit. Following continued education regarding the utilization of such techniques with the geriatric population, this clinician would consider introducing this option for stress reduction and physical relaxation.

Conclusion

Occupational Therapists play an active role in the therapeutic process for those admitted to a geropsychiatric unit. Through the evaluative process, using a client-centered approach, the patient establishes the areas of concern he/she is having related to his/her occupational performance. The Occupational Therapist facilitates therapeutic activities, based on the patient's demonstrated cognitive ability and patient need. The treatment sessions aim to maximize the patient's function and assist them in the obtainment of the established occupational performance goals.

The majority of the participants in this study noted clinically significant improvement in occupational performance following participation in therapeutic activities on the geropsychiatric unit. Due to the study limitations, generalization of this correlation cannot be concluded. Additionally, due to other variables not measured, it cannot be concluded that the participation in the therapeutic activities independently caused the increased rating in occupational performance.

Continued research would be beneficial related to specific therapeutic interventions and their demonstrated effectiveness with a group treatment setting. Additionally, further research regarding the effectiveness of group verses one-to-one intervention with regards to specific treatment interventions would be beneficial.

References

- Allen, C. K., Austin, S. L., David, S. K., Earhart, C. A., McCraith, D. B., & Riska-Williams, L. (2007). *Manual for the Allen Cognitive Level Screen-5*(ACL-5) and Large Allen Cognitive Level Screen-5 (LACLS-5).

 Camarrillo, CA: ACLS and LACLS Committee.
- Allen, C. K., Earhart, C. A., & Blue, T. (1992). Occupational therapy treatment goals for the physically and cognitively disabled. Bethesda, MD:

 American Occupational Therapy Association.
- American Art Therapy Association. (2012). Art Therapy: Enhancing the lives of patients. Retrieved from American Art Therapy Association:

 http://www.americanarttherapyassociation.org/upload/toolkitmedic al settings/medicalsettingstoolkit.pdf.
- American Occupational Therapy Association. (2008). Occupational therapy practice framework: Domain and process (2nd ed.). *American Journal of Occupational Therapy*, 62(6), 625-683.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). Washington, DC: Author.
- Ayers, C. R., Sorrell, J. T., Thorp, S. R., & Loebach Wetherell, J. (2007).

 Evidence-based psychological treatments for late-life anxiety.

 Psychology and Aging, 22, 8-17. doi: 10.1037/0882-7974.22.1.8

- Brookmeyer, R., Gray, S., & Kraus, C. (1998). Projections of Alzheimer's disease in the United States and the public health impact of delaying disease onset. *American Journal of Public Health*, 88(9), 1337-1342.
- Caldwell, E., Whitehead, M., Fleming, J., & Moes, L. (2008). Evidence-based practice in everyday clinical practice: strategies for change in a tertiary occupational therapy department. *Australian Occupational Therapy Journal*, 55, 79-84. doi:10.1111/j.1440-1630.2007.00669.x
- Canadian Occupational Performance Measure (COPM). (2011).

 http://blogs.elon.edu/ptkids/2011/03/19/canadian-occupational-performance-measure-copm/
- Carlson, C. R., & Hoyle, R. H. (1993). Efficacy of abbreviated progressive muscle relaxation training: a quantitative review of behavioral medicine research. *Journal of Consulting and Clinical Psychology*, 61, 1059-1067.
- Clarke, J. (2008). The mini-mental state examination (MMSE). Retrieved from http://www.alzheimers.org.uk/site/scripts/documents_info.php?
- Cresswell, M. K., & Rugg, S. A. (2003). The canadian occupational performance measure: its use with clients with schizophrenia.

 International Journal of Therapy and Rehabilitation, 10, 544-553.

- Cup, E., Scholte op Reimer, W., Thijssen, M., & Kuyk-Minis, M. V. (2003).

 Reliability and validity of the canadian occupational performance measure in stroke patients. *Clinical Rehabilitation*, *17*, 402-409.

 doi:10.1191/0269215503cr6350a
- Dedding, C., Cardol, M., Eyssen, I. C., Dekker, J., & Beelen, A. (2004). Validity of the canadian occupational performance measure: a client-centred outcome measurement. *Clinical Rehabilitation*, *18*, 660-667. doi:10.1191/0269215504cr746oa
- Devereaux, E., & Carlson, M. (1992). The role of occupational therapy in the management of depression. *The American Journal of Occupational Therapy*, 46(2), 175-180.
- Dugas, M. J., Francis, K., & Bouchard, S. (2009). Cognitive behavioural therapy and applied relaxation for generalized anxiety disorder: A time series analysis of change in worry and somatic anxiety.

 *Cognitive Behaviour Therapy, 38, 29-41. doi: 10.1080/16506070802473221
- Earhart, C. A., Allen, C. K., & Blue, T. (1993). *Allen Diagnostic Module: Manual*. Colchester, CT: S&S Worldwide.
- Early, M. (2009). *Mental health concepts and techniques for the*occupational therapy assistant (4th ed.). Baltimore, MD: Lippincott

 Williams & Wilkins.

- Esnouf, J. E., Taylor, P. N., Mann, G. E., & Barrett, C. L. (2010). Impact on activities of daily living using a functional electrical stimulation device to improve dropped foot in people with multiple sclerosis, measured by the canadian occupational performance measure. *Multiple Sclerosis*, 19, 1141-1147. doi:10.1177/1352458510366013
- Eyssen, I., Beelen, A., Dedding, C., Cardol, M., & Dekker, J. (2005). The reproducibility of the canadian occupational performance measure.

 Clinical Rehabilitation, 19, 888-894. doi:10.1191/0269215505cr883oa
- Ghoncheh, S., & Smith, J. C. (2004). Progressive muscle relaxation, yoga stretching, and abc relaxation theory. *Journal of Clinical Psychology*, 60, 131-136. doi: 10.1002/jclp.10194
- Harris, G. E. (2003). Progressive muscle relaxation: highly effective but often neglected. *Guidance and Couseling*, *18*(4), 142-148. Retrieved fromhttp://web.ebscohost.com.libproxy.eku.edu/ehost/delivery?sid =54e973af-e012-4c17-8467
- Holtzer, R., Tang, M. X., Devanand, D. P., Albert, S., Wegesin, D. J., Marder,
 K., Stern, Y. (2003). Psychopathologic features in Alzheimer's disease:
 Course and relation to cognitive status. *Journal of American Geriatric Society*, *51*(7), 953-960.

- Jenkinson, N., Ownsworth, T., & Shum, D. (2007). Utility of the canadian occupational performance measure in community-based brain injury rehabilitation. *Brain Injury*, *21*(12), 1283-1294. doi:10.1080/02699050701739531
- Kirsh, B., & Cockburn, L. (2009). The canadian occupational performance measure: a tool for recovery-based practice. *Psychiatric***Rehabilitation Journal, 32, 171-176. doi:10.2975/32.3.2009.171.176
- Kitchiner, N. J., Edwards, D., Wood, S., Sainsbury, S., Hewin, P., Burnard, P., & Bisson, J. I. (2009). A randomized controlled trial comparing an adult education class using cognitive behavioural therapy ("stress control"), anxiety management group treatment and a waiting list for anxiety disorders. *Journal of Mental Health*, 18, 307-315. doi: 10.1080/09638230802052153
- Laliberte-Rudman, D., Yu, B., Scott, E., & Pajouhandeh, P. (2000). Exploration of the perspectives of persons with schizophrenia regarding quality of life. *American Journal of Occupational Therapy*, *54*(2), 137-147.
- Law, M., Baum, C., & Dunn, W. (Eds.). (2005). Measuring occupational performance using a client-centered perspective. *Measuring*Occupational Performance (2nd ed., pp. 81-91). Thorofare, NJ: SLACK Incorporated.

- Law, M., Baum, C., & Dunn, W. (Eds.). (2005). *Measuring Occupational*Performance Supporting Best Practice in Occupational Therapy (2nd ed.). Thorofare, NJ: SLACK Incorporated.
- Lehmann, H. (1985). Current perspectives on the biology of schizophrenia. In M. Menuck & M. Seeman (Eds.) *New perspectives in schizophrenia* (pp. 3-29). New York: Macmillan.
- Loebach Wetherell, J., Ayers, C. R., Nuevo, R., Stein, M. B., Ramsdell, J., & Patterson, T. L. (2010). Medical conditions and depressive, anxiety, and somatic symptoms in older adults with and without generalized anxiety disorder. *Aging and Mental Health*, *14*, 764-768.
- Matsumoto, M., & Smith, J. C. (2001). Progressive muscle relaxation, breathing exercises, and ABC relaxation theory. *Journal of Clinical Psychology*, *57*, 1551-1557.
- McAnanama, E. P., Rogosin-Rose, M. L., Scott, E. A., Joffe, R. T., & Kelner, M. (1999). Discharge planning in mental health: The relevance of cognition to community living. *American Journal of Occupational Therapy*, 53(2), 129-137.
- McKinnon, A. (2000). Client values and satisfaction with occupational therapy. *Scandinavian Journal of Occupational Therapy*, *7*, 99-106. doi:10.1080/110381200300006041

- National Institute of Mental Health. (2009). Bipolar disorder. Retrieved from http://www.nimh.nih.gov/health/publications/bipolr-adults.pdf
- National Institute of Mental Health. (2009). *Generalized Anxiety Disorder*(GAD). Retrieved from National Institute of Mental Health:

 http://www.nimh.nih.gov/health/publications/anxietydisorders/generalized-anxiety-disorder-gad.shtml
- National Institute of Mental Health. (2009). *Treatment of Anxiety Disorders*.

 Retrieved from National Institute of Mental Health:

 http://www.nimh.nih.gov/health/publications/anxietydisorders/nimhanxiety.pdf
- National Institute of Mental Health. (2011). *Anxiety Disorders*. Retrieved from National Institute of Mental Health: http://www.nimh.nih.gov
- National Institute on Aging. (2011). Exercise and Physical Activity: Your

 Everyday Guide from the National Institute on Aging. Retrieved from

 National Institute of Health:
 - http://www.nia.nih.gov/HealthInformation/Publications/Exercise
 Guide
- Okimoto, J., Barnes, R., & Veith, R. (1982). Screening for depression in geriatric medical patients. *American Journal of Psychiatry*, *139*, 799-802.

- Rayner, A. V., O'Brien, J. G., & Schoenbachler, B. (2006). Behavior disorders of dementia:Recognition and treatment. *American Family Physician*, 73(4), 647-652
- Revicki, D. A., Brandenburg, N., Matza, L., Hornbrook, M. C., & Feeny, D. (2008). Health-related quality of life and utilities in primary-care patients with generalized anxiety disorder. *Qual Life Res*, *17*, 1285-1294. doi: 10.1007/s11136-008-9406-6
- Roitman, D. M., & Katz, N. (1996). Predictive validity of the Large Allen

 Cognitive Levels Test (LACL) using the Allen Diagnostic Module (ADM)

 in an aged, non-disabled population. *Physical and Occupational Therapy in Geriatrics*, 14(4), 43-59.
- Rosenzweig, A. (2010). The mini-mental state exam and its use as an Alzheimer's screening test. Retrieved from http://alzheimers.about.com/od/testsandprocedures/a/The-Mini-Mental-State-Exam-And-Its-Use-As-An-Alzheimers-Screening-Test.htm
- Spar, J. E., & La Rue, A. (2002). *Concise Guide to geriatric psychiatry* (3rd ed.). Arlington, VA: American Psychiatric Publishing.

- Stanley, M. A., Beck, J. G., Novy, D. M., Averill, P. M., Swann, A. C.,

 Diefenbach, G. J., & Hopko, D. R. (2003). Cognitive-behavioral

 treatment of late-life generalized anxiety disorder. *Journal of Consulting and Clinical Psychology*, 71, 309-317. doi: 10.1037/0022-006X.71.2.309
- Verkerk, G. J., Wolf, M. J., Louwers, A. M., Meester-Delver, A., & Nollet, F. (2006). The reproducibility and validity of the canadian occupational performance measure in parents of children with disabilities. *Clinical Rehabilitation*, 20, 980-988. doi:10.1177/0269215506070703
- Velligan, D. I., True, J. E., Lefton, R. S., Moore, T. C., & Flores, C. V. (1995).

 Validity of the Allen Cognitive Levels Assessment: A tri-ethnic comparison. *Psychiatry Research*, 56(2), 101-109.
- Watterson, J., Lowrie, D., Vockins, H., Ewer-Smith, C., & Cooper, J. (2004).

 Rehabilitation goals identified by inpatients with cancer using the copm. *International Journal of Therapy and Rehabilitation*, 11, 219-225.

APPENDIX A:

Occupational Therapy Evaluation

Occupational Therapy Evaluation

Patient Nam	ne:				D.O.	В		
Psychiatric A	Admitting Di	agnosis:						
Psychiatric H								
-		Situation:						
Performance Prior Level c		Function:						
Current Status	Dependent	Maximum	Mode	rate	Minimum	Supe	ervision	Independent
Dressing								
Bathing								
Grooming								
Toileting								
Self-								
feeding								
Ability to								
Drive								
Communica	tion:							
	: indic	catingcc level of sup						
Cognitive								
Component		Impaired		Inta	ct		Comme	ents
Safety/Judg								
Short-term								
Long-term N	Viemory							
Orientation								
Attention to								
Problem Sol	ving							

Occupational Therapy Evaluation (Continued)

Performance Patterns
Habits/Routines/Roles:
Interests/Leisure/ (current):
Interests/Leisure/ (past):
Socialization/Interaction:
Context
Cultural/Spiritual Beliefs/Values:
Personal Context:
Physical Context:
Client Factors/Personal Needs:
Behavioral and Emotional Functioning
Patient's behavior at time of admit:
Patient's behavior during evaluation:
Patient's educational needs:
Patient's limitations/impairments/addictions:
Affect: Mood: Self-expression:
Self-Awareness/Coping Mechanisms (per patient report)
I have a hard time dealing with my feelings
I have a hard time telling others how I feel
I feel uncomfortable when I am around other people
I have trouble dealing with my anger
I like myself
I have a hard time solving problems I am often bored
I have a hard time dealing with stress
I frequently have problems/arguments with my family and/or friends
I cope with my problems by:
Assessment/Plan:
Patient/Family Goals:

Occupational Therapy Evaluation

(Continued)

Strengths and Identified Problem Areas

Please refer to interdisciplinary treatment plan for established strengths and noted problem areas.

Prognosis for Goal Obtainment Fair Good Excellent Poor Interventions 1:1 as Needed **Gross Motor** Home Maintenance Plan **Sensory Stimulation** Reflection/Reminiscing **Problem Solving** Socialization Life and Leisure Skills Stress/Anger Management Expressive Task **Behavior Modification**

Benefits of Occupational Therapy Treatment/Intervention

Assist in providing a safe/structured environment Review of short term goals (STG) Establish therapeutic relationship Encourage establishment of daily STG Facilitate spirituality group participation Redirection/reorientation Facilitate improvement of coping skills Establish clear, simple limits as needed Monitor for hallucinations/delusions Promote socialization with staff/peers Identify purposeful activities/calming activities Utilize fall precautions Report signs and symptoms regarding medication Assess need for PT/OT in rehab Assist with positioning needs as needed for pain Facilitate calm/acceptable behavior Promote spiritual growth through group treatment Safe environment on locked unit Facilitate identification of leisure pursuits Groups to improve coping and hope Provide positive feedback for control/behavior Teach stress reduction skills Increase attention/concentration to task Assist patient in resolving conflicts Facilitate coping skills/anger management Encourage appropriate interactions Provide sensory/cognitive stimulation Other:_ Other:_ Monitor for signs/symptoms of withdrawal Please refer to interdisciplinary treatment plan for established goals

Occupational Therapist:	
License Number:	
Evaluation Date:	
Time of Evaluation:	

APPENDIX B:

Therapy Intake Information Sheet

Therapeutic Intake Information Sheet

Precautions: Code Status: Payer Source: Date of Onset: Referral Date: Primary Medical Diagnosis: Treatment Diagnosis: Past Medical History: Prior Therapy for this Condition:							
Prior Living Situati	on						
Lives Alone	Lives with	Private home	Apartment or condo				
Supported Living	Assisted Living	Skilled Nursing Facility	Long Term Nursing Facility				
Information not Available	Number of steps to enter:	Steps with rail: Yes or No	Ramp Entrance				
Bedroom onfloor	Bathroom on floor	Other:	Other:				
Equipment/Device	es Prior to Admissio	n					
Wheelchair	Standard walker	Rolling walker	Quad cane				
Straight cane	BSC	Raised commode	Toilet safety rails				
Tub seat	Tub bench	Grab bars	Other:				

Therapeutic Intake Information Sheet

(continued)

Functional status prior to hospitalization

Mobility:	Independent	Assistance	Walker	Wheelchair
			Cane	Non-
				ambulatory
Eating/	Independent	Assistance	Dentures	Safety Risk
Swallowing:			Yes or No	Choking
Bathing/	Independent	Assistance	Sponge	Tub bath
Showering:			Bath	Shower
Dressing:	Independent	Assistance		
Ноте	Independent	Assistance		
Management:				
Cognition/	Intact	Impaired	Safety Risk	Driving
Orientation:			Fall	Yes or No
Communication:	Intact	Impaired		
Vision:	Glasses	Hearing:	Hearing Aid	
	Yes or No		Yes or No	
Anticipated Disch	arge Destination	n:		
APPLICABLE TO V	VESTERN HILLS	AND MT AIRY	ONLY:	
Patient admitted		•		ther:
Patient admitted		SAU/SNU		NF on
All above informa	tion reviewed a	ind current wit	h the following	changes:
Prior therapy rece	= '	us unit: PT	OT ST	
Therapist signatu	re/date/time:_			

APPENDIX C:

Group Progress Notes

Senior Behavioral Health Group Progress Note

Group Title:				Date:			
Time In:		Time Out:					
Attendance: Refused to partice Passively partice Pt. sick/unable Off unit at time Not appropriate Pt. with MD or Initially partice Best served 1: Other:	rticipate ipated cipated e to attend e of group te for group · Nurse pated – later left	Assessment/Progress Towards Goals: Progress towards goals Able to attend to task forminutes Appeared to be responding to internal stimuli Better able to express feelings/thoughts Better able to receive feedback Disorganized/Confused Poor attention to task/topic — easily distracted More interactive with staff/peersprompting Appeared drowsy/required re-alerting to task/topic Expressed delusional thinking Other:					
Affect/Mood/	Behavior:						
Flat	Blunted	Appropriate	Labile	Brightens			
Angry	Depressed	Guarded	Calm	Anxious			
Pleasant	Irritable	Drowsy	Non-compliant	Compliant			
Restless	Cooperative	Agitated	Withdrawn	Resistive			
Other:	Other:	Other:	Other:	Other:			
Pt. Response t	o Facilitator's Inter	rvention/Maximize	Functioning By:				
Benefits from	1 step verbal direct positive feedback/v	e/hand-over-hand cu ion verbal encouragement cion/seeing speaker octured activity slower processing ls					

Senior Behavioral Health Group Progress Note

(Continued)

Problem Areas Identified by the Team:

Altered perceptions/delusional thoughts

Anxiety

Depressive thoughts/hopelessness

Manic symptoms

Potential for harm

Response to medication

Fall Risk

Agitation/disruptive behavior/impulsivity

Co-morbid substance abuse issues

Cognitive impairment

Spiritual needs

Health maintenance deficit

Impaired mobility

Other:____

Facilitator's Interventions/Goals:

Assist in providing a safe/structured environment Establish therapeutic relationship Facilitate spirituality group participation Facilitate improvement of coping skills Monitor for hallucinations/delusions Identify purposeful activities/calming activities Report signs and symptoms regarding medication Assist with positioning needs as needed for pain Promote spiritual growth through group treatment Facilitate identification of leisure pursuits Provide positive feedback for control/behavior Increase attention/concentration to task Facilitate coping skills/anger management Provide sensory/cognitive stimulation Monitor for signs/symptoms of withdrawal Assessed group barriers to ensure safety

Review of short term goals (STG)
Encourage establishment of daily STG
Redirection/reorientation
Establish clear, simple limits as needed
Promote socialization with staff/peers
Utilize fall precautions
Assess need for PT/OT in rehab
Facilitate calm/acceptable behavior
Safe environment on locked unit
Groups to improve coping and hope
Teach stress reduction skills
Assist patient in resolving conflicts
Encourage appropriate interactions
Other:
______Other:_______Otheredirections

Patient Comment/Goal (15 minutes):									
Plan: Continue with Plan of Care	Oth	ner:							
Discipline Conducting Group: OT	SW	RN	LPN	PCA	PRIEST	PASTOR	МТ	АТ	
Therapist/Facilitator's Signature:									
herapist/Facilitator's Co-Signature:									

APPENDIX D:

Consent to Participate

CONSENT TO PARTICIPATE IN RESEARCH STUDY

<u>Improving Occupational Performance</u>

using Therapeutic Activities on a Geropsychiatric Unit.

Why am I being asked to participate in this research study?

You are being invited to take part in a research study about the best way to help those who have been admitted to the unit. You are being invited to be in this study because you have documented psychiatric diagnosis, you are 65 years of age or older, and you have been admitted voluntarily to an inpatient Senior Behavioral Health Unit to address your current health concerns.

Who is doing the study?

The person in charge of this study is Brenda L. Cain OTR/L, a Post-Professional Masters Student at Eastern Kentucky University. She is a member of the care team on the Senior Behavioral Health Unit here to help you. She is being guided in this research by Dr. Lynnda Emery, Ed.D., OTR/L, FAOTA. There may also be other people on the research team assisting at different times during this study.

What is the purpose of the study?

By doing this study, we hope to learn if patients admitted to our unit perceive a beneficial change in their identified problem areas following active participation in our therapeutic treatment programming. We always want to provide the best treatment possible on the Senior Behavioral Health Unit and this study will help us continue to do so!

Where is the study going to take place and how long will it last?

The research procedures will take place right here at Mercy Hospital Western Hills on the Senior Behavioral Health Unit. You will need to attend the Occupational Therapy sessions provided throughout the admission. These sessions will take place 2-3 times a day while you are on the unit, in the Day Treatment Room or in the Activity Room, and will take about one hour to complete each session. Once you leave the hospital, you will no longer be participating in the study. The average length of stay on the Senior Behavioral Health Unit is 7-10 days.

What will I be asked to do?

You will be asked to answer some questions regarding specific areas of performance before we start the treatment sessions. Then, you will be encouraged to attend the scheduled therapeutic treatment groups that

occur throughout the day. Before you are discharged from the hospital, you will be asked some additional questions regarding your perceptions of your performance and satisfaction.

Are there any reasons why I should not take part in the study?

The researcher is unaware of any reason(s) why you should not take place in the study.

What are the possible risks and discomforts?

Initially, answering the questions related to your performance problems might feel odd or uncomfortable. It is also possible that the therapeutic group treatment sessions may seem uncomfortable for you to actively participate in at first. Although we have made every effort to minimize this, you may find some questions we ask you, or some portions of the treatment techniques, to be upsetting or stressful initially. If so, let the researcher know and hopefully, we can help you with these feelings.

Will I benefit from taking part in this study?

There is no guarantee that you will get any benefit from taking part in this study. However, some people have experienced a decrease in their level of anxiety, an increase in overall life satisfaction and an increase in their

functional performance when they use this techniques and tools addressed during the group treatment sessions. We cannot and do not guarantee that you will receive any benefits from this study.

Do I have to take place in this study?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

If I don't take part in this study, are their other choices?

If you do not want to be in the study, there are no other choices except to not take part in the study.

Will it cost me to participate?

There are no costs associated with taking part in this study.

Will I receive any payment or rewards for taking part in the study?

You will not receive any payment or reward for taking part in this study.

Who will see the information I give?

Your information will be combined with information from other people taking part in the study. When we write up the study to share it with other researchers, we will write about this combined information. You will not be identified in these written materials.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, your name will be kept separate from the information you give. Your consent form and data for participating will be stored in different places under lock and key.

However, there are some circumstances in which we may have to show our information to other people. We may be required to show information that identifies you to people who need to be sure we have done the research correctly; this would be people from such organizations as Eastern Kentucky University Institutional Review Board as needed.

Can my taking part in the study end early?

If you decide to take part in the study, you still have the right to decide at any time that you no longer want to participate. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to end your participation in the study. They may do this if you are not able to follow the directions they give you or if they find that your being in the study is more risk than benefit to you.

What happens if I get hurt or sick during the study?

If you believe you are hurt or if you get sick because of something that is done during the study, you should let Brenda L. Cain OTR/L, (the therapist conducting both the study and the occupational therapy sessions) know immediately. You can also call Brenda L. Cain OTR/L at 513-389-5499. It is important for you to understand that Eastern Kentucky University will not pay for the cost of any care or treatment that might be necessary because you get hurt or sick while taking part in this study. That cost will be your responsibility. Also, Eastern Kentucky University will not pay for any wages you may lose if you are harmed by this study.

What if I have questions?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Brenda L. Cain OTR/L in the Occupational Therapy department or phone 513-389-

5499. If you have any questions about your rights as a research volunteer, contact the staff in the Division of Sponsored Programs at Eastern Kentucky University at 859-622-3636. We will give you a copy of this consent from to take with you.

What else do I need to know?

You will be told if any new information is learned which may affect your condition or influence your willingness to continue taking part in this study.

I have thoroughly read this document, understand its contents, have been given an opportunity to have my questions answered, and agree to participate in this research project:

SIGNATURE OF PERSON AGREEING TO TAKE PART IN THE STUDY and DATE

PRINTED NAME OF PERSON TAKING PART IN THE STUDY

NAME OF PERSON PROVIDING INFORMATION TO SUBJECT

APPENDIX E:

Individualized Summary of Data

THERAPEUTIC SUMMARY: PATIENT NUMBER ONE (E.N.)

Demographic Data	
Patient Number: One Diagnosis: Major Depression	
Age: 65	Gender: Male
Marital Status: Married	Initials: E.N.

COPM: PATIENT ONE'S IDENTIFIED PROBLEMS/RATINGS/SCORES				
	Performance	Satisfaction	Performance	Satisfaction
Occupational	1	1	2	2
Performance	Rating	Rating	Rating	Rating
Problems	(pre-test)	(pre-test)	(post-test)	(post-test)
Maintaining				
personal				
hygiene	1	1	7	10
Indoor				
mobility	5	1	9	10
Motivation to				
complete				
simple cooking	2	5	2	5
Completing				
quiet leisure	2	5	5	9
Socializing with				
others	1	1	8	10
Total Score =	Total performa	nce or satisfact	tion score / # of	problems
Performance Sco	ore 1		11/5 = 2.2	
Satisfaction Scor	Score 1 13/5 = 2.6			
Performance Sco	ore 2	2 31/5 = 6.2		
Satisfaction Scor	ion Score 2 44/5 = 8.8			
Change in pre-test/post-test patient rated scores				
Change in Perfor	mance		6.2 - 2.2 = 4.0	
Change in Satisfa	action		8.8 - 2.6 = 6.2	

PROBLEM AREAS IDENTIFIED BY TREATMENT TEAM: PATIENT ONE (E.N.)		
Depressive Thoughts /	Agitation / Disruptive Behavior /	
Hopelessness	Impulse Control	
Health Maintenance Deficit	Anxiety	
Cognitive Impairment	Potential for Harm	
Impaired Mobility	Fall Risk	

THERAPEUTIC INTERVENTION SUMMARY: PATIENT ONE (E.N.)	
Number of days on the behavioral unit	24 days
Total number of treatment sessions offered	76 sessions
Total number of treatment sessions with active participation 56 sess	
Total number of treatment sessions refused 18 session	
Total number of treatment sessions excused 2 session	

MINUTES OF THERAPEUTIC ACTIVITIES: PATIENT ONE (E.N.)		
Life Skills	255 minutes	
Leisure Skills	390 minutes	
Social Skills	120 minutes	
Reminiscing	255 minutes	
Task	285 minutes	
Art Therapy	360 minutes	
Goal and Gross Motor	755 minutes	
Coping Skills	270 minutes	
Stress Management	105 minutes	
Total minutes of therapeutic treatment received	2795 minutes	

THERAPEUTIC ACTIVITY INTERVENTIONS COMMONLY UTILIZED		
Provide a safe and structured	Provide sensory and cognitive	
environment on a locked unit	stimulation	
Provide redirection/reorientation as	Increase attention/concentration to	
needed	task	
Promote socialization with staff and	Promote physical and emotional	
peers	health	
Facilitate coping skills	Establish therapeutic relationship	
Encourage daily goal establishment	Facilitate calm acceptable behavior	
Utilize fall precautions	Provide safe - locked unit	

THERAPEUTIC SUMMARY: PATIENT NUMBER TWO (M.D.)

Demographic Data		
Patient Number: Two Diagnosis: Anxiety		
Age: 82	Gender: Female	
Marital Status: Widow	Initials: M.D.	

COPM: PATIENT TWO'S IDENTIFIED PROBLEMS/RATINGS/SCORES				
	Performance	Satisfaction	Performance	Satisfaction
Occupational	1	1	2	2
Performance	Rating	Rating	Rating	Rating
Problems	(pre-test)	(pre-test)	(post-test)	(post-test)
Decreased				
motivation for				
completion of				
self-care tasks	7	5	9	10
Decreased				
activity				
participation	5	4	8	8
Decreased				
community				
involvement				
during bus				
rides	5	4	5	4
Decreased				
social dining				
activities	5	4	5	4
Decline in				
phone calls	7	7	10	10
Total Score =	Total Score = Total performance or satisfaction score / # of problems		problems	
Performance Sco	rmance Score 1 29/5 = 5.8			
Satisfaction Scor	tion Score 1 24/5 = 4.8			
Performance Sco	ore 2	37/5 = 7.4		
Satisfaction Scor	sfaction Score 2 35/5 = 7.2			
Change in pre-test/post-test patient rated scores				
Change in Perfor	ange in Performance 7.4 – 5.8 = 1.6			
Change in Satisfaction $7.2 - 4.8 = 2.4$				

PROBLEM AREAS IDENTIFIED BY TREATMENT TEAM: PATIENT TWO (M.D.)	
Depressive Thoughts /	
Hopelessness	Pain
Health Maintenance Deficit	Anxiety
Impaired Mobility	Fall Risk

THERAPEUTIC INTERVENTION SUMMARY: PATIENT TWO (M.D.)		
Number of days on the behavioral unit	12 days	
Total number of treatment sessions offered	35 sessions	
Total number of treatment sessions - active participation	20 sessions	
Total number of treatment sessions - passive participation	1 session	
Total number of treatment sessions refused	11 sessions	
Total number of treatment sessions excused	3 sessions	

MINUTES OF THERAPEUTIC ACTIVITIES: PATIENT TWO (M.D.)		
Life Skills	165 minutes	
Leisure Skills	75 minutes	
Social Skills	75 minutes	
Reminiscing	60 minutes	
Task	60 minutes	
Art Therapy	300 minutes	
Goal and Gross Motor	330 minutes	
Coping Skills	75 minutes	
Stress Management	45 minutes	
Total minutes of therapeutic treatment received	1185 minutes	

THERAPEUTIC ACTIVITY INTERVENTIONS COMMONLY UTILIZED		
Promote physical and emotional	Provide sensory and cognitive	
health	stimulation	
Provide redirection/reorientation as	Increase attention/concentration to	
needed	task	
Promote socialization with staff and	Assist with positioning needs to	
peers	maximize pain relief	
Facilitate coping skills	Establish therapeutic relationship	
Encourage daily goal establishment	Facilitate calm acceptable behavior	
Utilize fall precautions	Identify purposeful/calming activities	

THERAPEUTIC SUMMARY: PATIENT NUMBER THREE (E.S.)

Demographic Data	
Patient Number: Three Diagnosis: Major Depression	
Age: 70	Gender: Male
Marital Status: Divorced	Initials: E.S.

COPM: PATIENT THREE'S IDENTIFIED PROBLEMS/RATINGS/SCORES				
	Performance	Satisfaction	Performance	Satisfaction
Occupational	1	1	2	2
Performance	Rating	Rating	Rating	Rating
Problems	(pre-test)	(pre-test)	(post-test)	(post-test)
Decreased				
motivation to				
walk at the				
mall	5	5	5	5
Decreased				
socialization	4	5	6	6
Decreased				
motivation to				
volunteer	2	1	3	2
Not going up				
and down				
steps	2	2	2	2
Decreased				
motivation to				
complete				
laundry/light				
cleaning	2	2	2	2
	•	nce or satisfact	ion score / # of	problems
Performance Sco	ore 1		15/5 = 3.0	
Satisfaction Scor	e 1	15/5 = 3.0		
Performance Sco	ore 2	18/5 = 3.6		
Satisfaction Scor	e 2	17/5 = 3.4		
Change in pre-test/post-test patient rated scores				
Change in Perfor	Change in Performance 3.6–3.0 = 0.6			
Change in Satisfa	Change in Satisfaction 3.4– 3.0 = 0.4			

PROBLEM AREAS IDENTIFIED BY TREATMENT TEAM: PATIENT THREE (E.S.)		
Depressive Thoughts /		
Hopelessness	Potential for Harm	
Health Maintenance Deficit	Pain	

THERAPEUTIC INTERVENTION SUMMARY: PATIENT THREE (E.S.)	
Number of days on the behavioral unit	2 days
Total number of treatment sessions offered	9 sessions
Total number of treatment sessions with active participation 5 ses.	
Total number of treatment sessions refused	3 sessions
Total number of treatment sessions excused	1 sessions

MINUTES OF THERAPEUTIC ACTIVITIES: PATIENT THREE (E.S.)		
Life Skills	45 minutes	
Leisure Skills	0 minutes	
Social Skills	0 minutes	
Reminiscing	45 minutes	
Task	60 minutes	
Art Therapy	0 minutes	
Goal and Gross Motor	90 minutes	
Coping Skills	45 minutes	
Stress Management	45 minutes	
Total minutes of therapeutic treatment received	330 minutes	

THERAPEUTIC ACTIVITY INTERVENTIONS COMMONLY UTILIZED		
Assist in providing a safe/structured		
environment on a locked unit	Establish therapeutic relationship	
Provide positive feedback for		
control/behavior	Encourage daily goal establishment	
Promote physical and emotional		
health	Provide redirection/reorientation	
Provide safe environment on locked		
unit	Utilize fall precautions	
Provide sensory/cognitive		
stimulation	Facilitate coping skills	

THERAPEUTIC SUMMARY: PATIENT NUMBER FOUR (D.G.)

Demographic Data		
Patient Number: Four Diagnosis: Major Depression		
Age: 73 Gender: Male		
Marital Status: Married	Initials: D.G.	

COPM: PATIENT FOUR'S IDENTIFIED PROBLEMS/RATINGS/SCORES				
	Performance	Satisfaction	Performance	Satisfaction
Occupational	1	1	2	2
Performance	Rating	Rating	Rating	Rating
Problems	(pre-test)	(pre-test)	(post-test)	(post-test)
Decreased				
motivation to				
volunteer	4	4	5	4
Decreased				
motivation to				
read	2	5	6	5
Increased				
stress				
therefore less				
leisure	2	2	6	7
Difficulty				
concentrating				
on				
tasks/activities	2	2	7	7
Worry				
impacting daily				
tasks	2	2	7	7
Total Score =	Total performa	nce or satisfact	tion score / # of	problems
Performance Sco	ore 1		12/5 = 2.4	
Satisfaction Scor	e 1		15/5 = 3.0	
Performance Sco	ore 2	31/5 = 6.2		
Satisfaction Scor	e 2	30/5 = 6.0		
Change in pre-test/post-test patient rated scores				
Change in Perfor	mance		6.2-2.4 = 3.8	
Change in Satisfa	action		6.0-3.0 = 3.0	

PROBLEM AREAS IDENTIFIED BY TREATMENT TEAM: PATIENT FOUR (D.G.)		
Depressive Thoughts /		
Hopelessness	Potential for Harm	
Health Maintenance Deficit	Anxiety	
Impaired Mobility	Fall Risk	

THERAPEUTIC INTERVENTION SUMMARY: PATIENT FOUR (D.G.)		
Number of days on the behavioral unit	6 days	
Total number of treatment sessions offered	17 sessions	
Total number of treatment sessions with active participation	7 sessions	
Total number of treatment sessions refused	10 sessions	

MINUTES OF THERAPEUTIC ACTIVITIES: PATIENT FOUR (D.G.)		
Life Skills	95 minutes	
Leisure Skills	45 minutes	
Social Skills	45 minutes	
Reminiscing	0 minutes	
Task	0 minutes	
Art Therapy	40 minutes	
Goal and Gross Motor	0 minutes	
Coping Skills	60 minutes	
Stress Management	30 minutes	
Total minutes of therapeutic treatment received	315 minutes	

THERAPEUTIC ACTIVITY INTERVENTIONS COMMONLY UTILIZED		
Assist in providing a safe/structured		
environment on locked unit	Establish therapeutic relationship	
Facilitate improvement of coping	Provide sensory/cognitive	
skills	stimulation	
Increase attention/concentration to	Provide positive feedback for	
task	control/behavior	
	Promote physical and emotional	
Encourage daily goal establishment	health	
Promote socialization with	Facilitate identification of calming	
staff/peers	leisure tasks/pursuits	

THERAPEUTIC SUMMARY: PATIENT NUMBER FIVE (C.H.)

Demographic Data		
Patient Number: Five	Diagnosis: Depression	
Age: 78	Gender: Female	
Marital Status: Widow	Initials: C.H.	

COPM: PATIENT FIVE'S IDENTIFIED PROBLEMS/RATINGS/SCORES				
	Performance	Satisfaction	Performance	Satisfaction
Occupational	1	1	2	2
Performance	Rating	Rating	Rating	Rating
Problems	(pre-test)	(pre-test)	(post-test)	(post-test)
Difficulty				
managing				
stress	1	1	7	8
Decreased				
sleep	4	3	8	8
Decreased				
motivation for				
self-care				
completion	6	1	9	9
Decreased				
sense of				
purpose/self-				
worth	1	1	8	6
Decreased				
motivation for				
home				
management	4	1	8	7
	Total Score = Total performance or satisfaction score / # of problems			problems
Performance Sco	ore 1	16/5 = 3.2		
Satisfaction Scor	e 1	7/5 = 1.4		
Performance Sco		40/5 = 8.0		
Satisfaction Scor	Satisfaction Score 2 38/5 = 7.6			
Change in pre-test/post-test patient rated scores				
Change in Perfor	mance	8.0 - 3.2 = 4.8		
Change in Satisfa	nge in Satisfaction $7.6 - 1.4 = 6.2$			

PROBLEM AREAS IDENTIFIED BY TREATMENT TEAM: PATIENT FIVE (C.H.)		
Depressive Thoughts /		
Hopelessness	Potential for Harm	
Health Maintenance Deficit	Anxiety	
Impaired Mobility	Fall Risk	

THERAPEUTIC INTERVENTION SUMMARY: PATIENT FIVE (C.H.)	
Number of days on the behavioral unit	2 days
Total number of treatment sessions offered	6 sessions
Total number of treatment sessions with active participation	5 sessions
Total number of treatment sessions excused	1 session

MINUTES OF THERAPEUTIC ACTIVITIES: PATIENT FIVE (C.H.)		
Life Skills	45 minutes	
Leisure Skills	0 minutes	
Social Skills	0 minutes	
Reminiscing	0 minutes	
Task	0 minutes	
Art Therapy	45 minutes	
Goal and Gross Motor	60 minutes	
Coping Skills	25 minutes	
Stress Management	30 minutes	
Total minutes of therapeutic treatment received	205 minutes	

THERAPEUTIC ACTIVITY INTERVENTIONS COMMONLY UTILIZED		
Assist in providing a safe/structured		
environment on a locked unit	Establish therapeutic relationship	
Facilitate improvement of coping		
skills	Encourage daily goal establishment	
Increase attention/concentration to	Promote physical and emotional	
task	health	
	Facilitate identification of leisure	
Utilize fall precautions	pursuits	
Promote socialization with	Facilitate identification of calming	
staff/peers	leisure tasks	