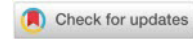


# EFFECTIVENESS OF OCCUPATIONAL THERAPY FOR PEOPLE WITH SYMPTOMS OF ANXIETY

Yoanna Vasileva Tzvetanova<sup>1\*</sup>

<sup>1</sup>SWU "Neofit Rilski", Bulgaria, e-mail: [ytzvetanova@swu.bg](mailto:ytzvetanova@swu.bg)



**Abstract:** The main objective of the empirical study is to establish the effect of the application of occupational therapy on residents living in an institutional environment, who often experience anxiety, distress, social isolation, sadness, which are processes that often lead to a decline in physical and psychological functioning. The high prevalence of these stress-related disorders has impeded the ability of a high number of individuals to participate in regular life activities (Fox et al., 2019). The experimental base of the present research is the Home for Adults with Physical Disabilities "Ilho Voivoda", Kyustendil, and the research contingent is 44 adults housed in the Home. The recipients of the social service have a wide range of diseases: multiple sclerosis, spina bifida, muscular dystrophy, limb malformations, cerebral palsy, paraplegia, heart attack, stroke, etc. All of them have preserved mental faculties. A test study was conducted with a personality-based questionnaire, created on the basis of the PAI - Personality Assessment Inventory, intended for the study of adults in order to provide information relevant to clinical diagnoses and screening for psychopathology. For the purpose of the present study, items from the PAI were used, which aim to detect the symptoms and phenomenology of anxiety. The Anxiety scale measures traits commonly associated with the experience of anxiety. Item content includes various characteristics of anxiety, including worry, subjective apprehension, and fear of humiliation, as well as the physical signs of tension and stress. The scale is composed of three subscales corresponding to three main modalities of anxiety: Cognitive, Affective and Physiological. The occupational therapy process was designed to move through multiple cycles of problem identification, followed by solution generation, while the main focus remained on occupation and the human factor in the occupational context (Crouch & Alers, 2014). The results after the occupational therapy are indicative of its significant effectiveness. The improved indicators include: the number of residents with anxiety from 41 (93.2%) before occupational therapy was carried out decreased to 21 (47.7%), i.e. by almost 50%.

In conclusion, according to the results of the present study, it can be assumed that occupational therapy occupies a leading position in rehabilitation therapies in social institutions. It provides an opportunity to get rid of negative emotions such as anxiety, anger, dissatisfaction, disappointment, insult, hostility.

Keywords: social work, anxiety, occupational therapy

Field: social sciences

## 1. INTRODUCTION

People who tend to experience anxiety in various settings have historically benefited from occupational therapy (Lovegrove et al., 2023). This is also proven by the growing body of literature pointing to the benefits of occupational therapy interventions on adults' mental health (Kirsh et al., 2019). Occupational therapy occupies a leading place in rehabilitation therapies in social institutions in Bulgaria. It is especially important in old people or in the so-called "third" age, in which individuals experience a crisis in terms of change in social status and interruption of employment. This leads to social isolation, a sense of worthlessness, interpersonal conflicts intensify, due to dynamics in emotional instability. Anxiety, depressive states increase and stress resistance decreases. It is here that specialists see the inclusion of occupational therapy, which provides an opportunity to release negative emotions such as anger, anxiety, dissatisfaction, disappointment, insult, hostility. Engagement in everyday life is of importance for the individual's health and well-being (Townsend & Polatajko, 2007).

According to the definition of the American Occupational Therapy Association, it is "a method of therapeutically using everyday activities and occupations by individuals or groups to integrate them into roles and situations in the home, workplace, school, or other systems." Occupational therapy services are designed to support the health and psychosocial functioning of those who are at risk of developing an illness, injury, disorder, disability, functional impairment, activity and ability limitation (AOTA, 2007). As noted by G. Mekhandzhiyska, "occupational therapy occupies a place in the methodological complex, which directly serves the target scope of interventions in the process of psychosocial rehabilitation, namely that individuals use their stored abilities, maintain them, restore them, as well as expand them and

\*Corresponding author: [ytzvetanova@swu.bg](mailto:ytzvetanova@swu.bg)



enrich their functional possibilities for autonomous life in the community” (Mekhandzhiyska, 2018: 11).

The objective of the empirical study is to establish the effect of the application of occupational therapy on residents living in an institutional environment, who often experience distress, social isolation, sadness, processes that often lead to a decline in physical and psychological functioning.

The experimental base of the present research is the Home for Adults with Physical Disabilities “Ilho Voivoda”, Kyustendil, and the research contingent is 44 adults housed in the Home. The distribution of residents by age, gender and education is presented in Table No. 1:

Table № 1. Distribution by age, gender and education level

Age	Resident Count	Gender		Education	
		Female	Male	College	High-school
68-73 y.o.	11	4	7	8	3
74-79 y.o.	22	4	18	9	13
Over 80 y.o.	11	9	2	3	8
All	44	17	27	20	24

The recipients of the social service have a wide range of diseases: multiple sclerosis, spina bifida, muscular dystrophy, limb malformations, cerebral palsy, paraplegia, heart attack, stroke, etc. All of them have preserved mental abilities.

For the implementation of the experiment, occupational therapy sessions were conducted, carefully selected according to the needs, wishes to participate and diseases of the residents. Through the method of open direct observation, some behavioral features were established: emotional reactions, gestures, facial expressions. We understood the needs and desires, interests, mood, what are the possibilities for physical and mental resistance (on which the duration of occupational therapy activities depends). The duration varied from 90 to 120 minutes, four times a month, for one year. The working environment was adapted adequately to the needs of each participant personally.

## 2. MATERIALS AND METHODS

A test study was conducted with a personality questionnaire created on the basis of the PAI - Personality Assessment Inventory. It is a questionnaire designed for the study of adults to provide information relevant to clinical diagnoses and to screen for psychopathology. In order to complete the questionnaire, the subjects must have reading and comprehension abilities developed at the level of primary education. It is self-administered and aims to obtain information on certain critical clinical scales. The scales contain subscales that facilitate interpretation and cover the full range of clinical constructs. For the purpose of the present study, items from the PAI were used, which aim to detect the symptoms and phenomenology of anxiety. The Anxiety scale measures traits commonly found in the experience of anxiety. Item content includes various characteristics of anxiety, including worry, subjective apprehension, and fear of being humiliated, as well as the physical signs of tension and stress. The scale is composed of three subscales corresponding to three main modalities of anxiety: Cognitive, Affective and Physiological.

Interpretation of results:

◆ between 60 and 69 T-points - indicative of experiencing stress and some worry, sensitivity and emotionality;

◆ 70 or more T-points – significant anxiety and tension is assumed. A person with such a result is tense most of the time and thinks about an expected misfortune. Such people have been described as tight-knit, nervous, timid and dependent. For scores above 70 T-scores, it is highly likely that at least one of the subscales is elevated, and scores on these should be considered to determine the modality in which the anxiety manifests.

◆ 90 or more T-scores (high elevations) - all three subscales may be elevated, indicating a generalized anxiety disorder. Life of research is greatly affected; he/she is unable to cope with even minimal role expectations without feeling overworked Mild stressors often trigger crises. In most such cases, it is a diagnosable anxiety disorder.

### 3. RESULTS AND DISCUSSION

The data obtained from the questionnaire about the state of the residents before the occupational therapy show that 93.2% of the residents are anxious and tense and most of the time they are thinking about an expected misfortune. 56.9% share strong worries and anxieties about the present. Physical manifestations of tension in the form of somatic complaints are observed in 97.7%. 90.9% share that they feel tired as a result of the stress they experience. 67% of residents have elevations on all three scales. They are so anxious that it prevents them from coping with daily activities - Table #2.

Residents with elevations on the Cognitive Anxiety subscale share strong worries and anxieties about the present; these concerns are expressed to such an extent that they significantly affect attention and concentration. Their acquaintances probably confirm their over-involvement with problems and events beyond their control.

Individuals with high Physiological Anxiety scores tend to experience and express stress in the form of somatic complaints. They show obvious physical signs of tension and stress (sweating palms, hand tremors, irregular heartbeat, rapid breathing).

Subjects with high levels of Affective Anxiety report being highly stressed, having difficulty relaxing and feeling tired as a result of the intense stress they experience.

The majority of the examined have elevations on the Anxiety scale, which form the so-called Configuration I (ie high Cognitive anxiety + high Affective anxiety + high Physiological anxiety). Individuals with high scores on all three subscales worry so much that it prevents them from concentrating and coping with their daily commitments. They worry about things that are apparently unimportant and over which they have no control. Visible motor tension, little opportunity for relaxation, and feelings of fatigue and malaise may be observed as a result of life being perceived as extremely stressful.

Table № 2. Anxiety scale results prior to receiving occupational therapy

Anxiety					
Points		Frequency	%	% Validity	Cumulative %
Valid	65	3	6,8	6,8	6,8
	75	1	2,3	2,3	9,1
	76	1	2,3	2,3	11,4
	77	2	4,5	4,5	15,9
	79	8	18,2	18,2	34,1
	80	10	22,7	22,7	56,8
	81	5	11,4	11,4	68,2
	83	1	2,3	2,3	70,5
	85	5	11,4	11,4	81,8
	88	2	4,5	4,5	86,4
	89	4	9,1	9,1	95,5
	93	2	4,5	4,5	100,0
	Total		44	100,0	100,0

Cognitive Anxiety					
Points		Frequency	%	% Validity	Cumulative %
Valid	57	3	6,8	6,8	6,8
	63	6	13,6	13,6	20,5
	66	10	22,7	22,7	43,2
	70	5	11,4	11,4	54,5
	73	7	15,9	15,9	70,5
	79	8	18,2	18,2	88,6
	83	1	2,3	2,3	90,9
	86	4	9,1	9,1	100,0
	Total	44	100,0	100,0	
Physiological Anxiety					
Points		Frequency	%	% Validity	Cumulative %
Valid	67	1	2,3	2,3	2,3
	71	9	20,5	20,5	22,7
	74	3	6,8	6,8	29,5
	78	1	2,3	2,3	31,8
	81	5	11,4	11,4	43,2
	85	13	29,5	29,5	72,7
	88	10	22,7	22,7	95,5
	99	2	4,5	4,5	100,0
	Total	44	100,0	100,0	

Affective Anxiety					
Points		Frequency	%	% Validity	Cumulative %
Valid	59	3	6,8	6,8	6,8
	69	1	2,3	2,3	9,1
	72	9	20,5	20,5	29,5
	75	13	29,5	29,5	59,1
	78	9	20,5	20,5	79,5
	81	3	6,8	6,8	86,4
	85	4	9,1	9,1	95,5
	88	2	4,5	4,5	100,0
	Total	44	100,0	100,0	

The results after the occupational therapy are presented in Table No. 2 and are indicative of its significant effectiveness. Improved metrics include:

The proportion of residents with anxiety from 41 (93.2%) before occupational therapy was reduced to 21 (47.7%), i.e. by almost 50%. No deterioration of the residents' condition was found after completion of the occupational therapy.

Table № 2. Anxiety scale results after receiving occupational therapy

Anxiety					
Points		Frequency	%	% Validity	Cumulative %
48		1	2.3	2.3	2.3
51		1	2.3	2.3	4.5
54		1	2.3	2.3	6.8
55		1	2.3	2.3	9.1
56		1	2.3	2.3	11.4
57		8	18.2	18.2	29.5
59		4	9.1	9.1	38.6
60		6	13.6	13.6	52.3
61		7	15.9	15.9	68.2
63		3	6.8	6.8	75.0
64		4	9.1	9.1	84.1
65		3	6.8	6.8	90.9
67		2	4.5	4.5	95.5
68		1	2.3	2.3	97.7
72		1	2.3	2.3	100.0
Total		44	100.0	100.0	

## 4. CONCLUSION

The analysis of the results obtained from the conducted occupational therapy gives us the basis for the following conclusion: Occupational therapy leads to a significant improvement in their condition, which speaks of its effectiveness. In accordance with the results of the research, it is permissible to make the following basic recommendations:

1. To create conditions for occupational therapy to be present to a greater extent in the activities of social and health institutions;
2. To prepare more specialists - occupational therapists in the caregiving professions and in clinical practice.

## REFERENCES

- Mekhanjiyska, G. (2018). Psychosocial occupational and recreational therapy in clinical social work. Sofia: University Publishing House "St. Kliment Ohridski".
- AOTA, American Occupational Therapy Association (2007). Model Occupational Therapy Practice Act. September.
- Lovegrove, C., Sturkenboom, I., Smith, M. K., Marsden, J., & Bannigan, K. (2023). Characteristics of Occupational Therapy Interventions for Community-Dwelling Adults with Anxiety: Protocol for a scoping review. *JMIR Research Protocols*, 12, e41230. <https://doi.org/10.2196/41230>.
- Townsend EA, Polatajko HJ. (2007). Enabling occupation II: advancing an occupational therapy vision for health, well-being, & justice through occupation. Ottawa: Ottawa: CAOT Publications ACE.
- Kirsh, B., Martin, L. S., Hultqvist, J., & Eklund, M. (2019). Occupational Therapy Interventions in Mental Health: A Literature

- review in search of evidence. *Occupational Therapy in Mental Health*, 35(2), 109–156. <https://doi.org/10.1080/0164212x.2019.1588832>
- Fox, J., Erlandsson, L., & Shiel, A. (2019). A systematic review and narrative synthesis of occupational therapy-led interventions for individuals with anxiety and stress-related disorders. *Occupational Therapy in Mental Health*, 35(2), 179–204. <https://doi.org/10.1080/0164212x.2018.1516172>
- Crouch, R., & Alers, V. (2014). *Occupational therapy in psychiatry and mental health*. John Wiley & Sons.