LUMEN ET VIRTUS

Cognitive functions in focus: Occupational therapist intervention with a group of patients in first episode psychosis

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ABSTRACT

Introduction: The First Psychotic Episode is the initial part of a picture of psychotic symptoms. Therefore, there are several cognitive changes, especially attention, working memory, and executive functions. Objectives: To analyze the cognitive functions of patients in First Episode Psychosis with an Occupational Therapy group. Method: This is a case study, with a descriptive and quantitative approach, carried out at the First Psychotic Episode Outpatient Clinic of a university hospital in Recife, PE. The final sample consisted of three volunteer participants. There was evaluation through a sociodemographic questionnaire, Addenbrooke's Cognitive Examination - revised version and Hotel Task, participation in eight group interventions and re-evaluation with Addenbrooke's Cognitive Examination - revised version and Hotel Task. Results: The answers to the sociodemographic questionnaire show that most of the participants are men, 24 years old, living in the metropolitan region, with varied schooling and unemployed. After reassessment, the mean increase in the Addenbrooke Cognitive Examination - revised version was 10.10% and in the Hotel Task was 45.83% and 54.28%. Conclusion: There is a deficit in functions such as working memory and executive functions, in addition to the importance of the practice of Occupational Therapy in this context and for this public.

Keywords: Psychotic Disorders, Occupational Therapy, Cognition, Hospital Occupational Therapy Service.

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INTRODUCTION

Psychosis presents as a mental alteration that promotes five main symptoms: delusions, hallucinations, disorganized thinking and/or speech, grossly disorganized motor behavior (including catatonia) and negative symptoms (decreased emotional expression, avolia). There are 3 phases that indicate the onset of symptoms: prodromal, acute, and recovery phases (APA, 2014; GOUVEA et al., 2014).

The prodromal phase is understood as a period of indefinite duration in which the individual feels that something will happen, being affected by: anxiety, depersonalization, derealization, isolation, among others. The First Psychotic Episode (PEP) is understood as the initial part of a picture of psychotic symptoms, which has as a fundamental aspect the loss of contact with reality and consequently a rupture in the functioning of the individual's mental state (GOUVEA et al., 2014).

There are several reasons why a PEP can be triggered in a person, such as: gender and age. There is a higher incidence among males, aged between 16 and 30 years. As for the female sex, its appearance is around the end of the second decade of life. Other risk factors are genetics, traumatic experiences, in addition to psychosocial ones such as: living in an urban area, unemployment and social isolation, frequent job change, school dropout and low energy level, in addition to *cannabis* consumption and exposure in childhood. An important point to be highlighted is that the family history of psychosis is related to an early onset of symptoms (APA, 2014; DE OLIVEIRA, 2019).

Because of this condition, changes in the individual's cognition may be presented from the beginning of the symptomatology, especially social cognition, defined by the set of skills necessary for social interaction. Among the altered cognitive functions, the following stand out: attention, episodic memory, working memory, processing speed, verbal fluency, and executive functions (DALGALARRONDO, 2019; ADAD; CASTRO; MATTOS, 2000).

Attention is understood as the path of entry of information into the brain from the environment, and the individual can select, filter and organize it. The time an individual spends in the process of performing a mental task is defined as processing speed. Memory, on the other hand, involves mental processes for encoding, storing, and recalling events, experiences, and information. Episodic memory refers to the ability to recall episodes of real facts contextualizing time and space, unlike working memory, which is characterized by establishing a connection between maintaining and temporarily manipulating information (DALGALARRONDO, 2019; OLIVEIRA, 2013).

Through language, human beings can express several facets: represent and transmit information from reality, convey emotional states, influence people, guide communication with another being, among others. Verbal fluency relates to a person's ability to evoke verbal behavior when there are previously established rules. It is closely linked to executive functions involving the ability to recall long-term memory and work, connecting with the individual's cognitive state (DALGALARRONDO, 2019; BECKER, 2014; DOS SANTOS; SANTANA, 2015; SILVA et al., 2011).

There is currently no consensus in the literature on the definition of executive functions (EF), and there are several models that include different cognitive functions. Adele Diamond's (2013) model addresses that EF is a group of *top-down* mental processes used in activities that the individual needs to be concentrated and attentive, which are not possible to perform on autopilot or instinctively. The three main ones would be inhibitory control, working memory, and cognitive flexibility, which will constitute the higher-order ones: decision-making, problem-solving, and planning. In view of this, in the period in which the PEP is concerned, there are several ways to attenuate or mitigate its symptoms.

Therefore, the recovery phase lasts for approximately 18 months and will be described as several stages in which it aims: remission of symptoms, social reintegration and resumption of the execution of activities that the individual performed before the psychic involvement. Pharmacological treatment with low-dose first- or second-generation antipsychotics is indicated, and used for a minimum of 1 to 2 years. In addition to the use of medications, the use of different types of psychosocial approaches such as psychotherapy and Occupational Therapy is also indicated (GOUVEA, 2014; LOUZÃ NETO, 2000).

Occupational Therapy within the context of Mental Health uses its appropriation of activities so that the individual can be beyond his psychic condition, seeking through the look of psychosocial rehabilitation, a person with different behaviors can guarantee his rights as a citizen and quality of life (RIBEIRO; MACHADO, 2008).

The occupational therapist, through resolution No. 445/2014, of the Federal Council of Physical Therapy and Occupational Therapy, is qualified to work in

> … small, medium or large hospital health institutions, whether general or specialized hospitals, at the secondary and tertiary levels of health care, including psychiatric and penitentiary hospitals, in all phases of ontogenetic development, with actions of prevention, promotion, protection, education, intervention and rehabilitation of the client/patient/user (COFFITO, 2014).

During the treatment of PEP in the hospital context, there are some objectives ranging from the identification, treatment of the acute phase and remission, to reduce its consequences, to collaborate with its social reintegration through the development of interventions that are consistent with the culture of the place (CHAVES, 2007).

Thus, it is beneficial that during the treatment of the PEP, occupational therapeutic treatment is made available, which will act on the daily life experiences that were affected in the individual due to their psychic involvement. The occupational therapist will act through client-centered practice, skill development, using meaningful activities for those individuals as a resource during the interventions (KRUPA; WOODSIDE; POCOCK, 2010).

One of the possibilities within Occupational Therapy is a therapeutic group that, according to Benetton (1999), inserted in the triadic relationship (patient-therapist-activity), is a fourth element that proposes to connect with the objective of performing an activity. Gomes, Teixeira, and Ribeiro (2021) present that groups are a resource in which the activity becomes a component that is predisposed to generate possibilities to get in touch and advance in various skills, such as cognitive functions.

Within the group experience, the occupational therapist can use several paths, such as resources and approaches to reach the proposed goal. One of these is the training of cognitive functions, characterized by the professional who will provide means for patients to acquire skills, aiming to improve their performance (GOMES; TEIXEIRA; RIBEIRO, 2021).

Therefore, the occupational therapist can use the group activity strategy for people who are in mental suffering, offering participants experiences in skills such as autonomy and individual development, in addition to working with the unconscious are possibilities within a given therapeutic *setting* (MONTREZOR, 2013).

The specificity of people who are on the spectrum of psychotic disorders can benefit from participation in groups since their occupations are altered, especially in what discerns social participation and consequently cognitive functions, and the performance of the occupational therapist is an enhancer in this action of resumption of these skills (MACEDO et al., 2018; KRUPA; WOODSIDE; POCOCK, 2010).

Thus, the occupational therapist's intervention with patients in PEP can also aim to stimulate competencies with regard to cognitive functions, since they directly impact the performance of occupations such as social participation. Considering the findings, this study aims to analyze the cognitive functions of patients in First Psychotic Episode with an Occupational Therapy group.

METHOD

This research is a case study with a descriptive approach and of a quantitative nature. The case study is characterized by deepening the investigation about more than one individual, in which there is a wealth of descriptive information and analyzes relevant points for the development of those individuals studied. In addition, it points out that the results generated refer to their replication with the possibility of similar results (POLIT; BECK, 2011; YIN, 2015).

As for the descriptive part, Gil (2008) points out that its purpose is to describe and characterize a population through age, sex, origin, level of education, income level, physical and mental health status, among other points that will manifest the profile of a certain group.

According to Fonseca (2002), quantitative research seeks to bring through the sample a representation of a portion of the population, together with a mathematical analysis of the results obtained, aiming to describe causes and variables of a given phenomenon.

The research was carried out at the First Psychotic Episode Outpatient Clinic of a University Hospital, located in Recife, PE. The service has three psychiatrists, one of whom is the coordinator of the Program, psychiatry and child psychiatry residents, an occupational therapist, residents and interns of Occupational Therapy, along with the monitoring of family members by two psychology professors. To join as a participant in the service, it is necessary to send an email with a brief description of the case, in addition to the contacts for scheduling the patient and/or their companions (ASCOM, 2018).

For this study, a non-probabilistic and convenience sample was used. Gil (2008) points out that there are two biases to select the type of sampling: probabilistic and non-probabilistic. The main feature of non-probabilistic is that it depends only on the researcher's criteria. Within this type there is convenience sampling, where the researcher will choose members to whom she has access. To become an eligible participant for the research, people had to be 18 years of age or older, of both sexes, in First Psychotic Episode and be accompanied by the occupational therapist of the PEP outpatient clinic of the University Hospital. Those who had neurological comorbidities present in their medical records that impaired partition in group activities were excluded.

During the evaluation stage, general data from the participants' medical records were used, an interview with a sociodemographic and clinical questionnaire, prepared by the researchers, along with two assessments: one that measures the individual's cognitive state called Addenbrooke's Cognitive Examination - revised version (ACE-R - Brazilian version) and the other called Hotel Task (HT). The sociodemographic questionnaire was composed of questions that involve the identification of the individual such as age, gender, city in which they live, education, employment relationship, as well as types of treatment, use of psychoactive substances and family history.

The Addenbrooke's Cognitive Exam - revised version is a battery of quick cognitive

assessment, and its application takes about 20 minutes. It was translated into Portuguese and adapted to the Brazilian population. The ACE-R addresses orientation and attention (18), memory (26), verbal fluency (14), language (26) and visual-spatial ability (16). The score for each session can be measured separately or added equivalent to its final score, which can range from 0 to 100. To facilitate its application, a guide for punctuation and instructions are made available (CARVALHO, 2009).

The Hotel Task evaluates in an ecological way possible functional difficulties during the execution of more than one activity and consequently the executive functions through the simulation that the individual is an employee of a hotel and his manager would like him to perform certain tasks in the time of 15 minutes (CARDOSO et al., 2015).

The tasks presented by the evaluation are: organize the guests' accounts (a list that contains the expenses of all hotel guests, which must be separated in each customer's file), separate the currencies (separate the currencies of reais from foreign ones), look for promotions of the month on the menu (there is a list with the promotions of the month on the menu in which the participant must look for the value on the menu and write it down in the list), organize in alphabetical order the badges of a meeting, review the new hotel advertising brochure (check and mark spelling errors - wrong duplicate letters). In addition, the participant must call two guests by pressing telephone numbers already established by the applicator of the evaluation at different times (ZIMMERMANN; FONSECA, 2017).

The number of tasks attempted is most directly related to inhibitory control, working memory, cognitive flexibility, and planning. During the evaluation, it is necessary to do a little of each activity, within fifteen minutes. For the planning score, it evaluates planning, inhibitory control, working memory, problem solving, decision-making, and cognitive flexibility. Its score is composed of the number of activities attempted and the average time in each activity, accounting for thirty seconds as standard deviation (ZIMMERMANN; FONSECA, 2017).

Then, the volunteers participated in eight group sessions of Occupational Therapy, once a week, lasting from forty to sixty minutes each. Through the focus on the training of cognitive functions, aiming to favor social participation, the sessions were conducted by the occupational therapist of the service, who was already in care with her. At the end of the eight group sessions, all participants were reassessed using the Addenbrooke Cognitive Examination - revised version (ACE-R - Brazilian version) and the Hotel Task.

TABLE 1 - Planning of sessions

ACTIVITY	MATERIALS	OBJECTIVES	PARTICIPANTS
Construction and assembly of puzzles	A4 sheet printed with the images, contact paper,	Stimulate planning, cognitive flexibility,	Everyone participated

	water-based marker and scissors	decision-making, working memory, visuospatial skills, and focused attention	
Cake recipe using the OGI method	Mugs, wheat, chocolate, egg, yeast, butter, condensed milk, microwave, spoons and OGI plug	Stimulate divided attention, alternating attention, working memory, planning, cognitive flexibility, decision-making, and inhibitory control	Everyone participated
Purchase simulation	A4 paper printed with images of "absurd" objects, cut out and laminated with contact paper	Stimulate cognitive flexibility, planning, problem solving, decision-making, working memory, inhibitory control, response selection, and inhibitory control	2 participants (S and M)
What now?	Fables slideshow with a question at the end, computer	Stimulate concentrated attention, working memory, problem-solving, decision-making, cognitive flexibility, planning and inhibitory control	Everyone participated
Activity circuit	Five cones, ball, game with alphabet letters, stick, box with words printed on A4 paper inside, nesting game, tangram, 4 hula hoops, popular sayings	Stimulate planning, alternating attention, short-term and working memory, decision-making, problem-solving, inhibitory control, and cognitive flexibility	2 participants (P and R)
Plan a trip	Sheet with conductive questions, pencil and eraser	Stimulate working memory, focused attention, cognitive flexibility, problem-solving, planning, decision-making, and inhibitory control	Everyone participated
Sequencing activity	Use of material with written guide activities	Stimulate working memory, focused attention, cognitive flexibility, problem-solving, planning, decision-making, and inhibitory control	2 participants (S and M)
Therapeutic tour - Botanical Garden of Recife	Means of transportation (car), snacks and activities (one lyric, one song, one adedonha/stop)	Stimulate cognitive flexibility, volition, planning, motor action, effective performance, response selection, and selective control	2 participants (S and M)

Caption: OGI; Occupational Goal Intervention
Source: Prepared by the authors

Thus, the data obtained from the evaluation and reevaluation of the research volunteers were analyzed by tabulation, which consists of gathering, counting and categorizing the data. For this study, simple and electronic testing was performed. Simple tabulation is defined by counting the frequency of each category, while electronic tabulation occurs when the researcher uses a computer to perform it in less time, in addition to facilitating access to data (GIL, 2008).

Thus, tabulation was used to create electronic spreadsheets in Microsoft Excel to organize the data from the sociodemographic and clinical questionnaire, in addition to the results obtained through the Addenbrooke's Cognitive Examination - revised version and the Hotel Task. Then, the data were compared with each other, from the evaluations and reevaluations.

For this research, the Ethics Committee for Research with Human Beings of the Federal University of Pernambuco was approved under opinion number 5.534.267 and CAAE number 59015022.5.0000.5208.

RESULTS

SOCIODEMOGRAPHIC AND CLINICAL PROFILE

Data were collected from three participants: P. is 32 years old, female, and participants R. and M. are both 24 years old and male. All currently reside in the metropolitan region of Recife. M. has completed higher education, R. has not completed higher education and M. has completed high school. All participants do not have any type of employment relationship.

Regarding clinical issues, two of the three individuals undergo some type of professional follow-up in addition to Occupational Therapy: P. com psychiatrist and psychologist and M. com psychiatrist. M. is the only one with a family history of First Episode Psychosis and P. drinks alcohol sporadically.

CHART 2 - Sociodemographic and clinical data

	SOCIODEMOGRAPHIC					**CLINICAL**		
N	**Age**	**Sex**	**Residence**	**Schooling**	**Employment**	**Treat.**	**Histor y.**	**Substance**
P	32	F	Jaboatão	Superior Complete	No	Psiq + Psi	No	Alcohol
M	24	M	Swarthy	Complete High School	No	Psiq	Yes	No
R	24	M	Reef	Incomplete Superior	No	No	No	No

Caption: N, sample; Treatment, Treatment; Hist., Historical; Psiq, psychiatrist; Psi, psychologist
Source: Prepared by the authors

ADDENBROOKE'S COGNITIVE EXAMINATION – REVISED VERSION

The Addenbrooke Cognitive Examination assesses cognitive functions, dividing them into

five main blocks, which are: attention and orientation, memory, verbal fluency, language, and visual-spatial ability. In the first block, the maximum score is 18 points, during the evaluation it presented an average of 12 and the reevaluation of 13.66, presenting an average increase of 13.83%.

Memory, initially at 13.66 and went to 18.33, with an average increase of 34.18%. Verbal fluency in the assessment showed 8 and then 9.33, increasing about 16.62%, while language was at 25 and went to 24, decreasing 4%. Finally, there are the visual-spatial skills, in which in the evaluation the average was 14 and in the reevaluation it went to 15.33, increasing 9.5%. The final average in the evaluation period was 72.66 and in the reevaluation it is 80, indicating a percentage increase of 10.10%.

TABLE 1 - Results of the evaluation and reevaluation of the Addenbrooke's Cognitive Examination

N	ATEN + STALLION	MEM	FLU	LIN	ROOM. VISUAL-ESP	SCORE
EVALUATION						
P	14	10	10	25	16	75
M	9	17	6	26	11	69
R	13	14	8	24	15	74
AVERAGE	12	13,66	8	25	14	72,66
REVALUATION						
P	14	15	12	25	16	82
M	12	16	8	24	14	72
R	15	24	8	23	16	86
AVERAGE	13,66	18,33	9,33	24	15,33	80

Caption: ATEN+ORI, attention and guidance; MEM, memory; FLU, verbal fluency; HAB. VISUAL-ESP, visual-spatial skills

Source: Prepared by the authors

HOTEL TASK

In the Hotel Task evaluation, focusing on executive functions, the scores of number of tasks attempted and planning were analyzed. Regarding the number of tasks attempted, the maximum score to be obtained is 5, where in the evaluation period two participants scored 4 points and the other 3. When the reassessment is observed, two participants went to 5 points, reaching an average increase of 45.83% and the other remained in the same as the assessment.

The planning score scores up to 10, where two participants during the evaluation scored 7, and the other 5. In the reassessment, two went to 9, with an average increase of 54.28% and another participant remained at 7. The participant who maintained their scores was the one who obtained the lowest frequency during the interventions.

TABLE 2 - Results of the evaluation and reevaluation of the Hotel Task

N	N. TAREFA HAS BEEN.	PLANNING
EVALUATION		
P	4	7
M	3	5
R	4	7
AVERAGE	3,66	6,33
REVALUATION		
P	5	9
M	5	9
R	4	7
AVERAGE	4,66	8,33

Legend: N, sample; N. Tasks Ten., Number of Tasks Attempted
Source: Prepared by the authors

DISCUSSION

SOCIODEMOGRAPHIC AND CLINICAL PROFILE

The First Psychotic Episode is triggered by a series of factors, mainly linked to the environmental context in which that person is inserted. In the results obtained by applying the sociodemographic questionnaire, most participants are men, around 24 years old, living in the Metropolitan Region of Recife, only one of the participants has a family history and another uses a psychoactive substance. All have completed high school, do not work and undergo treatment with professionals from different areas.

Cohort studies indicate that the mean incidence of PEP is higher in men, being approximately 59% of the population. When talking about the average age group, there is a portion from 17 to 40 years of age, with an average of 28.4 years. One of the points of Thorup et al. (2007) is that there is a stigma related to women that triggers an underdiagnosis due to social expectations and cultural norms that present women as more affected or emotional, contributing to their being led to the diagnosis of mood or personality disorders. However, women have better functionality, especially for social skills, associating better remission of symptoms (THORUP, et al., 2007; O'DONOGHUE, et al. 2015; OCHOA, et al., 2012).

Living in urban areas may be a predisposing factor for PEP, with approximately 81.1% of individuals in PEP being born in urban areas. Being born and living in these places is related to the appearance of psychotic symptoms in 30% of people, in addition to the fact that there is a higher risk in people who have some genetic factor and who live in these spaces, indicating a prevalence of 10 to 20%, since it presents itself as a stress factor corroborating the appearance of symptoms (O'DONOGHUE, et al., 2015; KRABBENDAM; VAN OS, 2005; DRAGT et al., 2011). All the participants in the study come from the Metropolitan Region of Recife, which is configured as an urban area.

Studies show that the family history of psychosis is not directly related to the onset of a First Psychotic Episode. In the data collected, it can be observed that only one of the participants has this history. The literature indicates that this relationship between previous family history and PEP is linked to the age of onset of symptoms, being earlier than in individuals who do not have family members with a psychotic disorder, but another point is that it impacts the course of the illness and the response to its treatment. Early initiation is also related to the use of substances, such as *cannabis*, which differs from the results found in the sample of this study, which has an individual who uses alcohol only (PARUK et al., 2017; O'DONOGHUE, et al, 2015).

Educational level has a significant impact on the PEP process, with the lowest being associated with the emergence of psychotic symptoms. Within the sample, a varied result was obtained between complete high school, incomplete higher education and complete higher education, which is indicated as the groups that have a greater chance of obtaining an evolution of cognitive functions (AYESA-ARRIOLA, et al., 2023).

People who are in psychological distress live with the stigma that associates them with being unable to perform a work activity. They feel impacts in several dimensions of their lives, such as: social participation, career, confidence, self-esteem and identity. Nowadays, there is an exclusionary and competitive labor market, where these people do not have a sense of belonging. None of the participants were working at the time of data collection (ZAMBRONI-DE-SOUZA, 2006; GEREMIAS, ZAMBRONI–DE-SOUZA, LUCCA, 2021).

The first two years after PEP are of paramount importance for recovery and the possibility of remission of symptoms, known as the critical period. All participants are being treated by an Occupational Therapist and others by a psychiatrist and one person by a psychologist. Multiprofessional intervention with pharmacological and psychosocial treatments is extremely relevant to reduce the recurrence of episodes, in addition to reducing the chances that the patient will evolve to a severe mental disorder, and is also linked to benefits related to clinical status, mainly related to cognitive functions and social functioning (PENN, 2005; RIBEIRO, 2014; GOUVEA, 2014; LOUZÃ NETO, 2000).

COGNITIVE FUNCTIONS

Attention is a construct that guides various aspects of daily life. People who have a psychotic disorder carry some deficits that can alter this function, such as: greater distractibility, shorter reaction time, slowing them down, and divided attention. Orientation is correlated with attention, being essential for its performance. It is defined by an association that the individual makes about the environment and time and their experiences, helping the person to locate themselves in the contexts of the past, present and future. Therefore, people who are going through the PEP, due to the change

in perception, also go through changes in orientation (OLIVEIRA, 2013; COHEN; SALLOWAY; ZAWACKI, 2006; DALGALARRONDO, 2019).

The Addenbrooke Cognitive Examination finds tasks such as time-space orientation, registration, attention, and concentration. We can see how these changes are established within the group, especially in the case of M who presents the lowest result. After the interventions, we found an average score of 13.66 where, even presenting the lowest result, compared to the other participants, it is perceived that M obtained the best increase with a differential of 33.33%.

For memory to perform well, attention must be in good working order. Therefore, if one is not in full operation, it will affect the other. Memory is affected in the EHR, especially working memory which is related to executive functions. In the Addenbrooke Cognitive Examination, recall, anterograde and retrograde memory, recall and recognition are evaluated, in which there was an average increase of 34.18%, showing an initial deficit, as well as an overall improvement. M showed a decrease of one point in the reassessment in this block (STERN; SACKEIM, 2006; DALGALARRONDO, 2019).

Within the ACE-R we find the Verbal Fluency Test (VFT), composed of both the phonological fluency test and the semantic or category test. Fluency is also related to semantic memory in addition to executive functions and language, being one of the most sensitive indicators of the cognitive functioning of these individuals. (DOS SANTOS; SANTANA, 2015; HAATVEIT et al., 2015). In this study, two participants increased two points, while one presented this function without changing the time of evaluation for reevaluation, which we can associate with the intervention time, since it was the one with the highest rate of absences.

Another domain evaluated and reevaluated was language, in which it passes the comprehension, writing, repetition, naming and reading tests. The construct of semantics, which is related to the meaning of words, is one of the most affected by the First Psychotic Episode, in which during the dialogue, individuals affected by PEP may present a disorganization arising from an alteration in thinking linked to concepts, judgment and reasoning that indicates some type of decline in this cognitive function. Thus, he showed a decrease in the mean by 4%, which converges with the literature, since it was expected that after the interventions he would present an increase in this function (ANAND et al., 1994; DALGALARRONDO, 2019).

The last domain is visuospatial ability which is defined by McGrew and Evans (2004) as "specific cognitive processes of mental image processing, including generation, transformation, storage and retrieval". Within Addenbrooke, your evaluation is done through images, the test of the clock design and perception with images and letters. One study points out that healthy patients associated with situations with high levels of stress have a greater deficit in visuospatial abilities than the group of patients with PEP (AAS et al., 2011). In this study, we saw an average increase of 9.5%,

where at the end of the interventions two individuals reached the total score and M increases by about 27%, which is a good indication of the effectiveness of the sessions.

The Hotel Task assessment analyzes the state of executive functions through multitasking performed by the participant, simulating being a hotel employee, thus being an ecological evaluation. Ecological evaluation is a means of evaluating the individual's performance in which it seeks to get as close to real-life performance as possible, through verisimilitude (which cognitive demands of the test will resemble those of reality) and veracity (it is linked to quantifying the functionality of the real world). The main objective of using an ecological assessment is that it is closer to reality, and is indicated for the assessment of cognitive functions, especially executive functions (CARDOSO et al., 2015; CHAYTOR; SCHMITTER-EDGECOMBE, 2003; FERREIRA et al., 2021).

To perform each activity of the assessment, there are related executive functions. The scores addressed in this study refer to inhibitory control, working memory, cognitive flexibility, decision-making, problem-solving, and planning. In terms of the number of tasks attempted, one point is established for each task that the subject performs, and can reach five points in total. There was a significant increase within the sample, considering that in the evaluation stage none of the participants reached the maximum score and in the reevaluation stage two of the three participants managed to achieve it (DIAMOND, 2013; ZIMMERMANN; FONSECA, 2017).

In the planning score, the average execution time of each activity and the number of activities attempted are linked, stipulating an associated score from 0 to 10, with 0 being the worst performance and 10 the best. The sample also showed an increase in this score, with a mean of 31.59% (ZIMMERMANN; FONSECA, 2017).

There are several alterations in executive functions found in patients on PEP, such as: disorganization (linked to low functioning in working memory and inhibitory control), working memory deficit, failures in inhibitory control linked to impulsivity, disinhibition, decreased attention, inability to maintain or develop strategies, in addition to planning difficulties linked to psychomotor slowing, low cognitive flexibility. Thus, there is an association between occupational inactivity and poor executive functioning, including low occupational engagement (LIU et al., 2011; IGNÁCIO, 2016; SILVA, 2018; GREENWOOD et al., 2008, FORNELLS-AMBROJO, M.; CRAIG, T.; GARETY, 2014).

Adele Diamond (2013) defines inhibitory control as "the ability of an individual to control their attention, behavior, thoughts, and/or emotions above an internal or external will or attraction, performing the most appropriate or necessary behavior". It is associated with working memory, which involves the ability to keep information while the person is developing some action, such as adding new information to the activities that are being performed, talking and thinking of alternatives when there is a problem to be solved.

The functions operate together, with one being the support of the other, understanding what is relevant or not for the activity to be done. An example is the session in which a trip was planned. To accomplish this requires the individual to establish the place he will go and what his financial planning and roadmap will be. Inhibitory control is associated with not exceeding the financial budget, for example. Working memory, on the other hand, acts in the organization of the information selected for the travel itinerary, joining desires with reality, through the selection of what is possible to be planned (DIAMOND, 2013).

Cognitive flexibility is when the individual seeks to get out of a restricted and known pattern, changing his perspective on some thought or motor action. This is a skill required when it is necessary to adapt and establish creative solutions, such as during the shopping simulation session, in which it was necessary to create ways to convince the other participant that that product is valuable in some way (DIAMOND, 2013).

Higher-order executive functions are formed by decision-making, problem-solving, and planning, which together make up fluid intelligence, which is defined by problem-solving that has a simple answer, and it is necessary to question the possibilities and predict the results in advance. The construction of a puzzle is an activity that involves these more complex functions, by changing what would be usual (assembling the puzzle already ready), planning the number of pieces and fittings, also generating decision-making, in addition to creating strategies for a problem that was not expected by the participants (DALGALARRONDO, 2019; DIAMOND, 2013).

When executive functions are related to the Hotel Task scores, it is verified how they were affected before and how they changed after the intervention period. Only one of the participants, R., maintained the same score. This may be related to his number of absences, since he attended half of the sessions.

SOCIAL PARTICIPATION, GROUP AND OCCUPATIONAL THERAPY

When an individual engages and engages in activities that aim at social interaction with other people, it is an occupation called social participation. It is composed of participation in the community, family, friendships, intimate relationships and peer groups. The individual who has a psychotic disorder has his life affected in several aspects, especially in relation to his social participation, often feeling unable and incapable, often generating isolation from his relationships (SALLES; BARROS, 2009; GOMES; TEIXEIRA; RIBEIRO, 2021). During the structuring of this study, it was decided that the interventions would be carried out in groups with the purpose of stimulating and improving the social participation of these individuals.

The role of occupational therapeutic intervention with patients in PEP is to promote occupational balance, which is defined by occupational areas, with different characteristics and time

to manage each occupation, thus generating engagement in the occupations chosen by the individual in individual and/or group activities, aligned with client-centered practice and an individualized occupational therapeutic process. The occupational therapeutic group, in the context of mental health, is a tool that generates opportunities for engagement, in addition to collaborating in the evolution of the performance of their occupational roles. Thus, the occupational therapist collaborates in the rehabilitation of functional skills, such as cognitive functions through the maintenance and restoration of occupational roles (WAGMAN; HÅKANSSON; BJÖRKLUND, 2012; LLOYD et al., 2008; COOK; BIRRELL, 2007; GOMES; TEIXEIRA; RIBEIRO, 2021).

Through the experience of group training, the support and sense of identification among the participants was visible, which contributed to their performance in the proposed activities as well as interaction between them. The group proved to be powerful during its progress, mainly by strengthening the bond between the participants.

A scoping review by Rocamora-Montenegro, Compañ-Gabucio, and De La Hera (2021) shows that the interventions most used by occupational therapy professionals today are psychosocial, psychoeducation, and interventions with cognitive exercises. The articles in this study point out that there is an association between the work of occupational therapists and positive results for people with mental disorders, especially when addressing the spheres of cognition and social participation. Through interventions aimed at cognitive functions, it promotes improvements mainly in memory and executive functions and consequently in functionality and participation.

The group in question was made up of both group activities and group activities depending on the planning of the day. Group activities are defined as activities carried out jointly by the group, unlike the group of activities in which each member does his or her activity individually. What will connect the members in the two modalities will be the preparation or performance of activities, which characterizes an occupational therapeutic relationship (BENETTON, 1999).

Thus, the participants were able to increase contact with other people who understand them as a complete being and not just a pathology, generating greater engagement and belonging in social participation. People with psychotic disorders tend to go through periods of social isolation, often as a result of rejection by other people, and this impacts the process of establishing and continuing relationships, in addition to obtaining less support from family and friends, generating feelings associated with low self-esteem (SILVA, 2017).

Therefore, the group becomes a resource that enhances the promotion of social participation, in addition to strengthening self-esteem and creating and/or strengthening bonds with other people, including this person in an integral way both in the occupational therapeutic process and in other spheres of their life. Throughout the intervention period, it was noticeable that the group welcomed each other and how they felt more open and comfortable within the therapist-patient-activities

relationship with each session.

CONCLUSION

The First Psychotic Episode is an extremely important initial phase, where multidisciplinary interventions can change the course of the psychic illness of those affected individuals. Therefore, this research aimed to analyze the cognitive functions of patients in First Psychotic Episode with an Occupational Therapy group.

Thus, it is pointed out that there is a deficit related to cognitive functions, especially memory, highlighting working memory, which is linked to executive functions, consequently presenting a significant deficit. Language was the construct that did not increase, being related to its deficit due to the PEP, being based on the scientific literature.

From the moment of the evaluation, with interventions and reevaluation, we sought to bring the process of Occupational Therapy linked to mental health, using scientific evidence as a basis for this. Through it, the importance of the occupational therapist's performance with this public becomes visible, even though there are few national studies that relate this practice to the First Psychotic Episode.

It is important to emphasize that this research is not configured as a manual for occupational therapeutic interventions, and it is necessary for the professional to know his patients, and one of the pillars of occupational therapeutic practice is the activities that are significant for each individual or group. Rather, a suggestive orientation emerges that can collaborate with clinical practice, especially related to the hospital outpatient context.

The limiting factor was the sample size, in addition to the intervention time, both of which were reduced. Therefore, it is recommended that this study be replicated in a larger sample with longer intervention time, aiming at results that are more reliable to the reality of the Brazilian population. Another interesting factor would be to carry out research that deepens the relationship with executive functions, in which their deficit was noticeable and in how there is the possibility of evolution through Occupational Therapy.

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