CIÊNCIAS DA VIDA E DA SAÚDE
LIFE AND HEALTH SCIENCES
CIENCIAS DE LA VIDA Y LA SALUD

millenium

39

en

VAMOS CONVERSAR! PROJETO DE INVESTIGAÇÃO CLÍNICA EM ATIVIDADES DE OCUPAÇÃO TERAPÊUTICA NA CONVERSAÇÃO E INTERAÇÃO SOCIAL

LET'S TALK! CLINICAL RESEARCH PROJECT OF THERAPEUTIC OCCUPATION ACTIVITIES ON CONVERSATION AND SOCIAL INTERACTION

¡VAMOS A HABLAR! PROJETO DE INVESTIGACIÓN CLÍNICA EN LAS ACTIVIDADES DE OCUPACIÓN TERAPÉUTICA EN LA CONVERSACIÓN Y LA INTERACCIÓN SOCIAL

Carlos Melo-Dias[1]   Jorge Façanha[2]
Cândida Canotilho[2]   Amorim Rosa[3]
Delfim Sousa[3]   Alberto Pinto[3]
Glória Pereira[4]   Ana Carvalho[2]
Joaquim Ferreira[5]   Joaquim Rodrigues[4]

[1] Escola Superior de Enfermagem de Coimbra (ESEnfC); Investigador responsável do Projeto PBE-MENTAL (Prática Baseada na Evidência em Enfermagem de Saúde Mental e Psiquiátrica) na UICISA-E (Unidade de Investigação em Ciências da Saúde-Enfermagem); Centre for Evidence Based Practice: A JBI Collaborating Centre, Portugal
[2] Centro Hospitalar Universitário de Coimbra – Unidade de Reabilitação do CRI de Psiquiatria e Unidade de Cuidados Avançados de Esquizofrenia Resistente ao Tratamento (UCAERe-T), Coimbra, Portugal.
[3] Escola Superior de Enfermagem de Coimbra, Coimbra, Portugal
[4] Centro Hospitalar Universitário de Coimbra – Unidade de Reabilitação do CRI de Psiquiatria e Unidade de Cuidados Avançados de Esquizofrenia Resistente ao Tratamento (UCAERe-T), Coimbra, Portugal

Carlos Melo-Dias - cmelodias@esenfc.pt | Cândida Canotilho - c.canotilho@hotmail.com | Delfim Sousa - delfimsousa75@gmail.com | Glória Pereira - gloriacpereira2@gmail.com | Joaquim Ferreira - jcffcj@gmail.com | Jorge Façanha - jorgefacanha@gmail.com | Amorim Rosa - amorim@esenfc.pt | Alberto Pinto - mpinto@esenfc.pt | Ana Carvalho - ana.carvalho@chuc.min-saude.pt | Joaquim Rodrigues - joaquim.rodrigues@chuc.min-saude.pt

Corresponding Author
Carlos Melo-Dias
Escola Superior de Enfermagem de Coimbra
UCP Enfermagem de Saúde Mental e Psiquiatria
Rua 5 de Outubro (Pólo B)
3046-851 Coimbra
cmelodias@esenfc.pt

RESUMO

Introdução: A pessoa com esquizofrenia apresenta classicamente prejuízo do processo do pensamento, da perceção e das habilidades de interação e de funcionamento social. As Atividades de Ocupação Terapêutica (AOT) promovem, previnem, e habilitam e recuperam as habilidades sociais, os comportamentos verbais e não-verbais apropriados, apresentando-se a revisão de evidências que mostram a pertinência, eficácia e os benefícios desta aprendizagem e treino.

Desenvolvimento: Selecionando especificamente clientes com esquizofrenia internados na Unidade de Reabilitação (UCAERe-T) aplica-se, um estudo experimental de sujeito único, com a finalidade de avaliar a eficácia do programa estruturado de AOT de Conversação e Interação Social para aprendizagem e treino habilidades de comunicação/conversação de clientes com Esquizofrenia.

Conclusão: Este projeto de melhoria contínua, em duas vertentes: investigação clínica e extensão de serviços em parceria, prospetiva por um lado a melhoria dos diversos outcomes clínicos, nomeadamente: funcionamento pessoal e social; envolvimento social; habilidades de interação social; bem-estar pessoal; comportamento interpessoal; equilíbrio do humor; motivação; autoestima; e autonomia pessoal; e por outro lado a concretização de indicadores de produção

Palavras-chave: Enfermagem; Conversa; Atividades de Ocupação Terapêutica; Funcionamento pessoal e social; Reabilitação.

ABSTRACT

Introduction: Impairments in thought processes, perception, interaction skills, and social functioning are common in individuals with schizophrenia. The Therapeutic Occupation Activities (TOA) promote, prevent, empower, and recover their social skills and appropriate verbal and nonverbal behaviors. This study reviews the evidence on the relevance, effectiveness, and benefits of this learning and training.

Development: A single-case experimental study was conducted with individuals with schizophrenia admitted to the Rehabilitation Unit (UCAERe-T), with the purpose of assessing the effectiveness of the structured TOA program of Conversation and Social Interaction for learning and training communication/conversation skills with individuals with schizophrenia.

Conclusion: This continuous improvement project, in both areas related to clinical research and outreach partnership services, intends to improve several clinical outcomes, namely personal and social functioning, social involvement, social interaction skills, personal well-being, interpersonal behavior, mood equilibrium, motivation, self-esteem, and personal autonomy, as well as achieve production indicators.

Keywords: Nursing; Conversation; Therapeutic Occupation Activities; Personal and Social Functioning; Rehabilitation.

RESUMEN

Introducción: Los clientes con esquizofrenia presentan alteraciones clásicas de los procesos de pensamiento, de percepción y de interacción y funcionamiento social. Las Actividades de Ocupación Terapéutica (AOT) promueven, previenen, potencian y recuperan habilidades sociales, comportamientos verbales y no verbales apropiados, por lo que se presenta la revisión de evidencias que muestran la pertinencia, la eficacia y los beneficios de este aprendizaje y capacitación.

Desarrollo: Los clientes con esquizofrenia fueron seleccionados dentro de la Unidad de Rehabilitación (UCAERe-T), aplicando un estudio de Diseño Experimental de Caso Único, con el propósito de evaluar la efectividad del programa estructurado de AOT de Conversación e Interacción Social para el aprendizaje y entrenamiento de habilidades de comunicación/conversación con clientes con esquizofrenia.

Conclusión: Expresando los resultados con la escala de desempeño personal y social y la escala para el comportamiento interpersonal, se espera una mejora relativa de los diversos resultados clínicos, a saber: funcionamiento personal y social; implicación social; habilidades de interacción social; bienestar personal; comportamiento interpersonal; equilibrio del estado de ánimo; motivación; autoestima; y autonomía personal.

Este proyecto de mejora continua, en dos líneas: investigación clínica y extensión de servicios en asociación, prospectiva, por un lado, mejora de varios resultados clínicos, a saber: funcionamiento personal y social; implicación social; habilidades de interacción social; bienestar personal; comportamiento interpersonal; equilibrio del estado de ánimo; motivación; autoestima; y autonomía personal; y por otro lado la concretización de indicadores de desempeño.

Palabras-clave: Enfermería; Conversación; Actividades de Ocupación Terapéutica; Funcionamiento personal y social; Rehabilitación.

*m*₁₀

INTRODUCTION

Schizophrenia is one of the most common and disabling mental disorders, with a significant negative impact on the quality of life of patients and their families (OMS, 2001). In its clinical course, it impairs thinking, social perception, and social interaction, persistently changing social functioning (Melo-Dias & Silva, 2015). Moreover, individuals with severe mental illness usually suffer from apathy and social withdrawal and isolation and are less likely to engage in intimate relationships as a result of positive symptoms (for example, delusions, hallucinations) and negative symptoms (for example, loneliness, and social isolation) (Coelho, Silva, Silvério, & Palha, 2002; Santos, 2000; Stuart, 2013; Briddon, Richards, & Lovell, 2003; Townsend, 2011; Melo-Dias, 2015).

The difficulties in social functioning may result from three circumstances: when the individual does not know how to do things appropriately, when the individual does not use his or her skills when needed, or when inappropriate behaviors undermine correct behaviors (Bellack, 2004).

The psychosocial impact of schizophrenia is associated with an increased likelihood of unemployment and homelessness; approximately 1/5 of patients have a regular job; approximately 2/3 of patients never marry, have little contact with the family, have few friends, and low perceived quality of life. These families experience high objective and subjective burden, poor access to evidence-based treatments, low social support, financial problems, and less close interpersonal relationships (Melo-Dias, 2015).

Therapeutic Occupation Activities (TOA) are defined as a set of organized and systematic activities that structure and guide the individual's functional performance within the scope of the nurse-client interpersonal relationship and the assessment of fundamental human needs (FHNs). Nurses use therapeutic techniques which are selected and prescribed depending on the desired outcome(s) and have psychotherapeutic, psychoeducational, psychomotor, psychosocial, socio-therapeutic, and spiritual consequences. They aim to promote, prevent, enable, maintain and/or recover and develop the individual's skills so as to reach their maximum potential for performance, autonomy, and satisfaction of their FHNs, activities of daily living, occupation, and recreation (Melo-Dias, Rosa, & Pinto, 2014).

Therapeutic occupation is a continuous adaptive process which allows individuals to develop their own identity and competencies, enabling self-expression, construction of identity, and development of social and cultural bonds, thus making them feel like active members of society and improving their well-being and overall health (Melo-Dias, Rosa, & Pinto, 2014; Melo-Dias, Rosa, & Pinto, 2016).

The training of social skills allows individuals to express appropriate verbal and non-verbal behaviors in social situations that facilitate the development of satisfactory interpersonal relationships (Canotilho, 2017). Conversation is the basic form of communication for every type of social skill, either verbal or non-verbal, being a socially skilled behavior considered as "that set of behaviors issued by an individual in an interpersonal context that expresses the feelings, attitudes, desires, opinions or rights of that individual in a way appropriate to the situation, respecting those behaviors of the others, and that usually solves the immediate problems of the situation, while minimizing the likelihood of future problems." (Melo-Dias, 2015).

This type/area of intervention also falls within the scope of the role of the clinical nurse specialist in mental health and psychiatric nursing. They intend to help and adjust the responses of each patient and family to specific problems related to the mental illness, establishing relationships of trust and partnership with the patient and using psychotherapeutic, socio-therapeutic, psychosocial, and psychoeducational techniques that increase patients' insight about their problems and empower them to find new ways of solving them (Ordem dos Enfermeiros, 2011a).

A socially skilled individual is able to demonstrate a set of conversation behaviors, being competent or not in this social exercise based on the subjective evaluation by the interactants or interaction observers.

In a systematic review on the generalization of conversational skills training in patients with schizophrenia, 27 studies were selected and divided into three subgroups according to the research designs: (Melo-Dias, 2015) a subgroup with 4 case studies about of interaction with strangers; a subgroup with 11 quasi-experimental studies; and a subgroup with 12 experimental studies.

The 11 quasi-experimental studies used several training methodologies with different approaches, reinforcements, and foci of attention. Some of them were very structured and others were flexible; some of them were of short duration, with 12 sessions, while others were of long duration, with more than 100 sessions. Yet, despite the multiplicity of structures and dynamics of the training programs, the majority of these studies concluded on the therapeutic benefits of participating in skills training programs on an individual's interaction with the self and others (Melo-Dias, 2015).

In the 12 experimental studies, conversation skills interventions were compared to other standard interventions of the services, with most of them using large samples of participants, 2 or more months of training, two times a week or more, usually with 16 sessions, on average lasting for 1 hour. They showed overall improvements in the post-training evaluation that remained until the follow-up, being an efficient method for teaching specific interpersonal skills to patients with schizophrenia and improving role-play performance, behavior, social interaction, and assertiveness (Melo-Dias, 2016).

With regard to the effects of training on participants, all of these studies found benefits and improved the generalization of conversation skills. Despite this, they concluded that more regular and closer training sessions are more productive and that real-life sessions, that is, sessions using participants' own experience are more productive and meaningful. They also found that it is useful to strengthen the trainer-trainee or therapist-patient relationship, with exclusively positive reinforcements (Melo-Dias, 2015; Melo-Dias 2016; Melo-Dias, 2019).

The relevance, effectiveness, and benefits of these interventions was also demonstrated, namely in the study of Melo-Dias (2016), in particular the significant improvements in vulnerability to stress, state of anxiety, overall self-efficacy, and personal and social performance, but only in subgroups of participants in the experimental group and in just a few moments of post-training evaluation and/or follow-up. It can be concluded that stress management and self-perception of skills improve, as well as the personal and social functioning perceived by others (caregivers) (Melo-Dias, 2014).

Another study of Canotilho on the same topic (Canotilho, 2017) reported that the eight patients with schizophrenia had significantly less difficulty in social situations throughout the communication/conversation skills training program. Despite the low score in personal and social performance in the PSP (Personal and Social Performance scale at the beginning of training, patients managed to improve their perceived personal and social performance in their socio-family environment and double that score at the end of training and in the follow-up period.

The Let's talk! project aims to improve communication/conversation skills and, given the expected increase in the patient's behavioral action and the increased influence of the nurse in the relationship developed with the patient, it also aims innovation in the increased potential for accomplishing the generalization of conversational skills, facilitating the transfer from a protected, balanced, and safe environment to an unpredictable and sometimes unprotected environment in the community (Melo-Dias, 2015). The project anchors within the scope of the 2007-2016 Plan for Restructuring and Development of Mental Health Services in Portugal (CNRSSM, 2007) which strengthened the importance of helping patients with schizophrenia to live in the community. This project is also a Continuous Improvement Project at the Coimbra University and Hospital Center (CHUC) which was approved by the Nursing Direction at the end of 2018. The only constraints were the unpredictability related to available and interested patients (including informed consent), patients meeting the selection criteria, and the stability of the team for the maintenance of the planned shifts.

DEVELOPMENT

METHODS

Study design

This study used an A_1-B-A_2 single-case experimental design (SCED). In the A_1-B-A_2 research design, each participant in A_1 is their own control, which is called "time protocol" (which is the exposure to the usual routine of the service during the same duration of the experimental program) and, in a second moment, they are exposed in B to the Let's Talk! intervention (experimental exposure), and, in a third moment, in A_2, to the same "time protocol" (which is the exposure to the usual routine of the service in the group functions/control time). First, all participants will be part of a control group (phase A) and then integrate the experimental group (phase B), in which they will participate in the Let's talk! program.

In clinical research, we are faced with the uniqueness of the subject whom we care for, study, and investigate. In this clinical uniqueness, the conclusions obtained in the group studies are sometimes difficult to apply to each of the subjects, all the more so because, despite the similarities, there are many aspects and variables related to each subject which require Focused Nursing Interventions (FNI) that are specific, multifaceted, and flexible and directed/focused on key areas of their functioning/performance/behavior (Kadzin, 1983; Melo-Dias, Rosa, & Pinto, 2016).

With the purpose of assessing the effects of the interventions in this circumstance, SCED studies analyze the individual intensively and prospectively, using an a priori methodology, namely systematic observation, variable manipulation, continuous measurements, and outcome analysis (Smith, 2012; Correia, Daniel, & Aguiar, 2014; Peyroux & Franck, 2016; Tate, et al., 2016; Aguiar, Moiteiro, Correia, & Pimentel, 2011).

In SCED studies, each participant is exposed to, at least, one control or baseline condition (A) and, at least, one intervention condition (B) (there are several variations of these designs) which allow assessing the effectiveness of this intervention, through continuous and repeated measurements of specific behavior(s) in quantitative terms using systematic direct observation procedures. The control of the effects of alternative explanations (experimental control) is ensured through the alternation between controlled baseline phases (A) and intervention/treatment phases (B).

Single-case or single-subject studies, may involve only one subject, but typically involve multiple subjects (usually three to eight subjects). Each subject serves as his or her own control, allowing the researcher to compare the information and check if the treatment causes any changes in the response of each subject to the variables of interest.

Durability, continuity, and transfer of the beneficial effects of the intervention are usually assessed through maintenance of the changes in behavior after the intervention has ended and generalization (the degree to which behavior changes occur in other settings or with other people) (Kadzin, 1983; Aguiar, Moiteiro, Correia, & Pimentel, 2011; Smith, 2012; Evans, Gast, Perdices, & Manolov, 2014; Correia, Daniel, & Aguiar, 2014).

These characteristics inherent to SCED (client-centered, problem-driven, flexible process) make them suitable for use in clinical and pedagogical settings (Stapleton & Hawkins, 2015), especially involving issues of personal functioning and the study of behavior (Peyroux & Franck, 2016; Evans, Gast, Perdices, & Manolov, 2014; Smith, 2012), as supported by its history with its emergence in

m_{10}

studies of experimental analysis of behavior in education and psychology by Skinner in the 1930s (Evans, Gast, Perdices, & Manolov, 2014; Correia, Daniel, & Aguiar, 2014).

Finally, to ensure the rigor and standardization of SCED studies, four criteria are used. The first, on the study protocol indicating the independent variable (the intervention) and the systematic manipulation that will occur (description of when and how the intervention will occur). The second, on the measurement of each outcome in rigorously selected moments. The third, on the experimental control, the demonstration of the impact of the intervention with the existence of at least three opportunities for assessment on three different occasions. The fourth, on the regular repetition of assessment at all stages, because SCED studies examine not only the pattern of responding at a moment in time but also the trajectory/development process of this response (Kratochwill et al., 2013).

Specific objectives

1. To assess the clinical status of persons admitted to the UCAERe-T (Treatment Resistant Schizophrenia Advanced Care Unit) regarding the following variables: personal and social performance, social involvement, social interaction skills, personal well-being, interpersonal behavior, mood equilibrium, motivation, self-esteem, and personal autonomy.
2. To assess the effectiveness of the structured program of TOA of Conversation and Social Interaction for learning and training communication/conversation skills: "Let's talk!" in the following variables: psychosocial adjustment, social involvement, social interaction skills, personal well-being, personal resiliency, mood equilibrium, motivation, self-esteem, and personal autonomy.

Research hypothesis

H1: After participation in the "Let's talk!" program, the subjects improved the following clinical indicators: a) psychosocial adjustment, b) social involvement, c) social interaction skills, d) personal well-being, e) personal resiliency, f) mood equilibrium, g) motivation, h) self-esteem, and j) personal autonomy.

PICOD

P (Participant) = Adults admitted to the Rehabilitation Unit of the CHUC Integrated Psychiatry Responsibility Center, namely the UCAERe-T and Daycare Hospital (Pavilion 13 - facility with residence and daycare area) with a diagnosis of schizophrenia (DSM-V) who accept and agree to participate, previously signing an informed consent form (see also sampling).

I (Intervention) = Structured program of TOA of Conversation and Social Interaction for learning and training communication/conversation skills: "Let's talk!"

C (Comparison) = To compare with usual care without this program ("time protocol": the exposure to the usual routine of the service during the same two weeks of the experimental program).

O (Outcomes) = Psychosocial adjustment, social involvement, social interaction skills, personal well-being, personal resiliency, mood equilibrium, motivation, self-esteem, and personal autonomy.

D (Design) = ABA single-case experimental design

Sampling

Inclusion criteria

The intentional sampling of adult patients of the Rehabilitation Unit of the CHUC Integrated Psychiatry Responsibility Center to participate in the program will be conducted through semi-structured, exploratory nursing interviews performed by the same clinical nurse specialist who will record all the assessment throughout the program, based on the models of Virginia Henderson and Margot Phaneuf, and validate the results on the foci of attention corresponding to each of the PSP and ECI subscales, with impaired psychosocial adjustment, social involvement, social interaction skills, personal well-being, personal resiliency, mood equilibrium, motivation, self-esteem, and personal autonomy.

Exclusion criteria

Assessed based on the structure of the Mental State Examination, in the hour before each session and during the session, by the same clinical nurse specialist, they correspond to the clinical status with positive symptoms (e.g., delirium, hallucinations), or state of hypomania or mania, high anxiety level, or another state of agitation/elation hindering learning and/or proper social functioning.

Ethics, informed consent, and guarantee of voluntariness and confidentiality

Each participant will be asked to sign a written informed consent form, after having been adequately and explicitly presented the Let's Talk! program, their role as participants, the guarantee of freedom of decision-making, their participation in the training program, their anonymity in the use of specific research data and publication, and the inclusion of evaluation of outcomes and results in their personal files to contribute to their clinical evolution.

Based on the abovementioned scientific evidence, each participant in the Let's Talk! program can achieve individual and group benefits, namely improved conversation, communication, and social interaction skills, without being charged any cost and being released of liability for participating or the results obtained.

On a voluntary basis, all patients admitted to the UCAERe-T and the Daycare Hospital (Pavilion 13) will have access to the Let's talk! program.

The program is already approved in writing by the Director of the Integrated Psychiatry Responsibility Center, the coordinator of its Rehabilitation Unit, the CHUC Nursing Director, and the CHUC Nursing Research Cluster. The study is being assessed by the CHUC Ethics Committee.

Learning and training program: Let's talk!
Responsibility for the intervention

"Let's talk!" is an autonomous Nursing intervention, initiated by a prescription of the nurse who is also responsible for its technical implementation.

Its purpose is the satisfaction of the FHNs and the maximum independence in personal and social functioning - specifically in the statements describing the set of quality standards of professional nursing practice - in the functional adaptation to the deficits and the adaptation to multiple imbalanced factors - often through patient's learning processes, as well in well-being and self-care (Ordem dos Enfermeiros - Conselho de Enfermagem, 2001).

The Let's talk! program involves several complex tasks, such as identifying the problem, determining the goals and objectives of the intervention, establishing the principles, the intervention structure, and the research design, analyzing the effectiveness of this type of interventions, the collaboration of experts, from specificity to nursing clinical practice (Corry, Clarke, While, & Lalor, 2013), and its use in clinical practice as a socio-therapeutic intervention/technique (Ordem dos Enfermeiros, 2011a). Thus, we believe that it should be carried out by clinical nurse specialists (in Mental Health Nursing or another nursing specialty related to the specificity health needs of patients), namely through the implementation of continuous and co-dependent TOA sessions; the selection and implementation of Focused Nursing Interventions (FNI) in TOA sessions; a more in-depth relationship and negotiation with the patient living with a severe mental illness; and the simultaneity of data mining, intervention, and outcome assessment.

Structure of the intervention

The structured TOA program of Conversation and Social Interaction for learning and training communication/conversation skills: Let's talk! is adapted from previous versions (Melo-Dias, 2015; Canotilho, 2017), and covers six conversation areas (Melo-Dias, 2015):

> (1) Observing, listening to others, and non-verbal communication;
> (2) Active listening and listening comments;
> (3) Talking about a topic (initiating and maintaining a conversation);
> (4) Ending a conversation;
> (5) Talking on the phone;
> (6) Talking to a stranger ("unfamiliar person").

The Let's talk! program is implemented with a minimum of 4 participants and will be initiated at after the third week of hospitalization (after this minimum period of hospitalization, it can be performed at any time).

It is composed of 12 consecutive sessions (6 theoretical-practical (TP) and 6 practical (P) sessions) with 1 pair of sessions (a TP and a P session) on the same day, three days a week. Each session will last 30 to 60 minutes (with a break midway through the session, agreed on before the beginning of the sessions) (see table 1).

The sessions will be conducted by one of the clinical nurse specialists of the working group, which may include undergraduate nursing students as co-therapists, where relevant, and based on the relationship of trust developed with each patient (within the scope of the several interviews and other planned nursing interventions).

The sessions will have the following development model: before addressing new skills, the nurse will review the topic taught before and, in group, evaluate each participant's homework, difficulties, and constraints.

The issues addressed in each one of the sessions by the group of participants will always be selected by the nurse (avoiding reports of clinical episodes of the disease).

For theme presentation, the nurse uses image projection to capture the participant's attention and modeling situations through role-play, always making a positive reinforcement.

As for the organization of each session (see table 1), after each TP session on a given skill, there is always a practical session at the end of the day based on the "homework" done by each participant on that topic, in the time between the end of the TP session and the P session:

(1) Introduction/Rationale: The Nurse presents a summarized rationale/justification for each skill using slides, focusing on its relevance.

(2) Instructions: The Nurse talks about each topic in a clear manner, analyzing each skill step by step. The Nurse uses the interactive model to previously assess what each participant knows about the topic.

(3) Modeling: After presenting each skill, the Nurse invites the group to participate in role-play activities so that everyone is familiar with that particular skill. Initially, the Nurse invites the more skillful participants with fewer difficulties in exposing themselves to the group (to promote the image of the positive and successful role model), encouraging others to also participate.

(4) Reinforcement: Positive feedback will always be used by the Nurse - as a general disposition of positive mental health - after each participant had an opportunity to role-play, highlighting the specific aspects performed correctly, as well those less expressive behaviors.
     The Nurse also asks for the feedback of the remaining group members, such as "What did you observe in the behavior of A?", "Which steps did you identify in the behavior observed?", "What did you like the most in the behavior of A?"

(5) Corrective feedback: Corrective feedback will be used at this phase because the Nurse intends that the participants change their behavior in order to improve their skills.
     After the positive feedback, the Nurse uses the corrective feedback (in the coaching style) regarding one or two specific behaviors, without criticizing the participant. The Nurse also identifies, together with the group members, key aspects in the role-play activities that can help to improve these behaviors.

(6) Homework (HW) (Melo-Dias, 2015): At the end of each TP session, the Nurse asks each participant to do their HW, thus encouraging them to interact with the people in their environment (hospital, institution, community, at home with family members,…). The Nurse encourages all participants to experience the skills taught and trained at that session, enabling the transfer of those skills from the protected environment to the more complex and natural environment of the community in which they are inserted aiming at the development of those skills with other people in a more natural, functional, and satisfactory way.
     HW should be described in a simple, clear and specific way and based on each patient's skills and personal and social experiences (Melo-Dias & Silva, 2015b).

(7) Review and analysis of the HW: P sessions refer to HW and are planned in the TP session immediately preceding it. So, at the beginning of each TP session, the following aspects are analyzed:

     - If all participants were able to perform the skill in appropriate conditions;
     - The success achieved in performing that skill;
     - Establishes, together with the group, real situations that can serve as models/examples of that skill, aiming at its future use…
     - Reviews the situation experienced, without going into excessive detail, focusing on the conversation and interaction skills while learning and training;

The partial or full success in performing the skills are simultaneously reinforced with the remaining group members, suggesting alternative strategies that could have been used to achieve the goal of the experience (Melo-Dias, 2015).

Table 1 - Let's Talk! Program

Month	…	…	…	…	…	…	…	…
Day	…	…	…	…	…	…	…	…
Day of the week	…	…	…	…	…	…	…	…
Session Assessment	Theoretical-Practical Session 1	Theoretical-Practical Session 3	Theoretical-Practical Session 5	Theoretical-Practical Session 7	Theoretical-Practical Session 9	Theoretical-Practical Session 11	Assessment Session	Follow-up Session
Time schedule to be determined	Time schedule to be determined	>>	>>	>>	>>	>>	>>	>>
Initial assessment	**Observing**, listening to others, Nonverbal communication	**Active listening**	**Talking**	**Ending a conversation**	Talking on the **phone**	Talking to a **stranger**	Conclusion & Assessment & Certificate	Follow-up
	Practical Session 2	Practical Session 4	Practical Session 6	Practical Session 8	Practical Session 10	Practical Session 12		
	Time schedule to be determined	>>	>>	>>	>>	>>		
	Observing, listening to others, Nonverbal communication **Homework**	**Active listening Homework**	**Talking Homework**	**Ending a conversation Homework**	Talking on the **phone Homework**	Talking to a **stranger Homework**		

Adapted from (Melo-Dias C, 2014; Melo-Dias C, 2015).

Strategies and methods for assessment

m_{10}

There will be 2 sessions per day, 3 days per week, in 2 consecutive weeks (a total of 12 sessions, as previously mentioned), prescribed in the information system as "therapy through activity".

The outcomes will be immediately assessed at the beginning and end of the phase, following the same pattern in all phases, particularly in phase A_1 (baseline or "time protocol", with a duration of 2 weeks), phase B (Let's talk! intervention, with a duration of 2 weeks), and phase A_2 (immediate follow-up or "time protocol, with a duration of 2 weeks).

Thus, both assessment tools/scales will be completed at each phase (A1BA2), on the first day at a pre-session (between 9 and 10 a.m.) and on the last day, after the afternoon session (between 5 and 6 p.m.) in order to respect the daily routine of the program participants.

Thus, the SCED research methodology allows for the global/comparative analysis of results between subjects, in the same subject, and present the sample trends.

The same Nurse will perform the 12 moments for assessment of each patient in each program, either in the control group (CG), in the time protocol, or in the experimental group (EG), in the intervention itself, thus ensuring interrater agreement and reliability and preventing variability.

In each semi-structured exploratory interview, this clinical nurse specialist will ask participants to complete each scale PSP (figure 1) and SIB (figure 2) in 5 to 15 minutes based on their personal and social events in the past 24 hours.

The outcomes/assessment data (for research, but also for the CHUC clinical information system) will include the total score of each scale PSP and SIB, as well as the specific score in each of its subscales.

Outcomes and measurement instruments

To record the data from the subscales in the information system, each domain/variable of each subscale was translated/categorized by the authors of this project, from a scientific and clinical perspective, into Nursing Outcomes Classification (NOC) indicators (see Table 2 and Table 3). In the PSP, in addition to the total score of the scale, the results on the psychosocial adjustment, the social involvement, and the social interaction skills will also be recorded. In the SIB, in addition to the total score of the scale, the results on the personal well-being, personal resiliency, mood equilibrium, motivation, self-esteem, and personal autonomy will also be recorded. Each item and set of items of each subscale and scale is rated on a 5-point Likert scale which is exactly the same as the 5-point Likert scale of the NOC. In this way, the score obtained in each subscale will be directly entered into the corresponding NOC in the information system.

Table 2 - Categorization of the PSP subscales – Personal and Social Performance scale in NOC indicators

Scale / Subscale	PSP scale – Personal and Social Performance scale	PSP Subscale Socially Useful Activities	PSP Subscale Personal and Social Relationships	PSP Subscale Self-care
Indicator to be recorded (suggest to the information system)	**Personal and Social Performance OR PSYCHOSOCIAL ADJUSTMENT**	**SOCIAL INVOLVEMENT**	**SOCIAL INTERACTION SKILLS**	**PERSONAL WELL-BEING**
Conceptualization	Psychosocial adjustment: adaptive psychosocial response of an individual to a significant life change, in which he or she maintains productivity, reports feeling socially engaged, expresses satisfaction with living arrangements.	Social involvement: social interactions with persons, groups, or organizations, and participation as a volunteer.	Social interaction skills: personal behaviors that promote effective relationships, in cooperation with others.	Personal well-being: Extent of positive perception of one's current health status, in the performance of Activities of Daily Living, with the ability to cope and the ability to relax.

Adapted from (Moorhead, Johnson, Maas, & Swanson, 2010)

m₁₀

Table 3 - Categorization of the SIB subscales – Scale for Interpersonal Behavior in NOC indicators

Scale / Subscale	SIB – Scale for Interpersonal Behavior	SIB Subscale Expression of negative feelings	SIB Subscale Expression of positive feelings	SIB Subscale Expression and management of personal limitations	SIB Subscale Taking initiative
Indicator to be recorded (suggest to the information system)	Interpersonal Behavior OR **PERSONAL RESILIENCE**	**MOOD EQUILIBRIUM**	**MOTIVATION**	**SELF-ESTEEM**	**PERSONAL AUTONOMY**
Conceptualization	**Personal resiliency**: positive adaptation and function of an individual following significant adversity or crisis, in the balance between: clarify ambiguous communication; refrain from harming others; take responsibility for own actions, and remove self from abusive relationships.	**Mood equilibrium**: appropriate adjustment of prevailing emotional tone in response to circumstances, with exhibition of affection that fits the situation.	**Motivation**: inner urge that moves or prompts an individual to positive actions and/or belief in the ability to perform.	**Self-esteem**: personal judgment of self-worth, including acceptance of self-limitations and constructive criticism.	**Personal autonomy**: personal actions of a competent individual to exercise governance in life decisions, including decisions free from undue pressure and according to personal preferences.

Adapted from (Moorhead, Johnson, Maas, & Swanson, 2010)

The following measuring instruments are used in their Portuguese versions: the **Personal and Social Performance (PSP) scale** (Brissos et al., 2011) and a short version of the **Scale for Interpersonal Behavior (SIB)** (Vagos & Pereira, 2010), as well as the corresponding subscales.

Personal and Social Performance (PSP) scale (see figure 1)

The concept of social functioning is complex because it includes the individual's capacity to play different social roles, such as homemaker, worker, student, spouse, family member or friend. Also of essential importance is the individuals' satisfaction with their ability to play these different roles, to take care of themselves, and their degree of involvement in interpersonal leisure and recreational activities (Brissos et al., 2011).

Each domain is rated on a 6-point scale based on severity: absent, mild, manifest, marked, severe or very severe, according to specific operational definitions. The interviewer assigns a score based on the evaluation of each domain, the interview with the patient, and other valid sources (formal or informal caregivers) (Morosini *et al.,* 2000, as cited in Brissos et al., 2011).

This scale assesses four domains: a) socially useful activities, including work and study; b) personal and social relationships; c) self-care; and d) disturbing and aggressive behaviors.

The total score is usually divided as follows: 71-100, without difficulties or mild functioning difficulties; 31-70, reflecting varying degrees of difficulty; and 0-30, representing such a poor functioning that the people in this group require intensive support and supervision to ensure functioning. To simplify the analysis of the scale, the participants are divided into two groups: high-functioning (PSP scores >70) and low-functioning (PSP scores <70) (Brissos et al., 2011).

The internal consistency of the PSP scale and its four domains was obtained through Cronbach's alpha of 0.789, also confirming its psychometric properties in patients with schizophrenia (Brissos et al., 2011). In a systematic review of clinical instruments to assess levels of functioning in specialized mental health services, other authors also found a moderate to high internal consistency, with alpha values ranging from 0.64 to 0.87 (Burgess, Harris, Coombs, & Pirkis, 2017).

The Portuguese version of the PSP scale was proven to be a valid and reliable instrument for assessing social functioning, regardless of clinical severity or the type of treatment in hospital or community settings (Brissos et al., 2011).
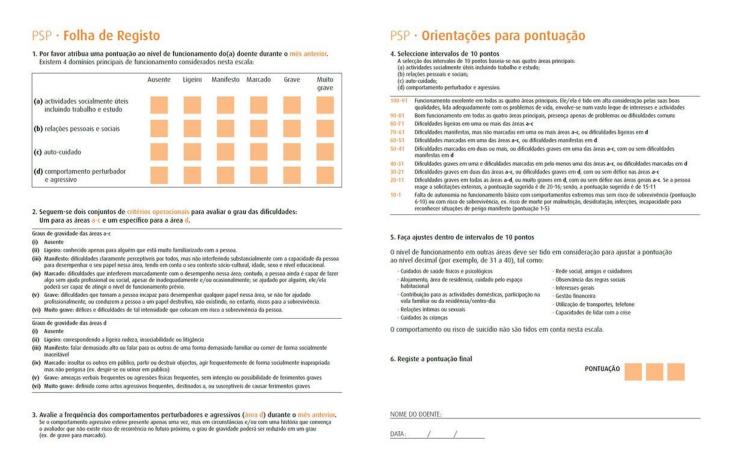
PSP · Folha de Registo

1. Por favor atribua uma pontuação ao nível de funcionamento do(a) doente durante o mês anterior.
Existem 4 domínios principais de funcionamento considerados nesta escala:

	Ausente	Ligeiro	Manifesto	Marcado	Grave	Muito grave
(a) actividades socialmente úteis incluindo trabalho e estudo						
(b) relações pessoais e sociais						
(c) auto-cuidado						
(d) comportamento perturbador e agressivo						

2. Seguem-se dois conjuntos de critérios operacionais para avaliar o grau das dificuldades:
Um para as áreas a-c e um específico para a área d.

Graus de gravidade das áreas a-c
(i) Ausente
(ii) Ligeiro: conhecido apenas para alguém que está muito familiarizado com a pessoa.
(iii) Manifesto: dificuldades claramente perceptíveis por todos, mas não interferindo substancialmente com a capacidade da pessoa para desempenhar o seu papel nessa área, tendo em conta o seu contexto sócio-cultural, idade, sexo e nível educacional.
(iv) Marcado: dificuldades que interferem marcadamente com o desempenho nessa área; contudo, a pessoa ainda é capaz de fazer algo sem ajuda profissional ou social, apesar da inadequação e/ou ocasionalmente; se ajudado por alguém, ele/ela poderá ser capaz de atingir o nível de funcionamento prévio.
(v) Grave: dificuldades que tornam a pessoa incapaz para desempenhar qualquer papel nessa área, se não for ajudado profissionalmente, ou conduzem a pessoa a um papel destrutivo, não existindo, no entanto, riscos para a sobrevivência.
(vi) Muito grave: défices e dificuldades de tal intensidade que colocam em risco a sobrevivência da pessoa.

Graus de gravidade das áreas d
(i) Ausente
(ii) Ligeiro: correspondendo a ligeira rudeza, insociabilidade ou litigância
(iii) Manifesto: falar demasiado alto ou falar para os outros de uma forma demasiado familiar ou comer de forma socialmente inaceitável
(iv) Marcado: insultar os outros em público, partir ou destruir objectos, agir frequentemente de forma socialmente inapropriada mas não perigosa (ex. despir-se ou urinar em público)
(v) Grave: ameaças verbais frequentes ou agressões físicas frequentes, sem intenção ou possibilidade de ferimentos graves
(vi) Muito grave: definido como actos agressivos frequentes, destinados a, ou susceptíveis de causar ferimentos graves

3. Avalie a frequência dos comportamentos perturbadores e agressivos (área d) durante o mês anterior.
Se o comportamento agressivo esteve presente apenas uma vez, mas em circunstâncias e/ou com uma história que convença o avaliador que não existe risco de recorrência no futuro próximo, o grau de gravidade poderá ser reduzido em um grau (ex. de grave para marcado).

PSP · Orientações para pontuação

4. Seleccione intervalos de 10 pontos
A selecção dos intervalos de 10 pontos baseia-se nas quatro áreas principais:
(a) actividades socialmente úteis incluindo trabalho e estudo;
(b) relações pessoais e sociais;
(c) auto-cuidado;
(d) comportamento perturbador e agressivo.

100-91 Funcionamento excelente em todas as quatro áreas principais. Ele/ela é tido em alta consideração pelas suas boas qualidades, lida adequadamente com os problemas de vida, envolve-se num vasto leque de interesses e actividades
90-81 Bom funcionamento em todas as quatro áreas principais, presença apenas de problemas ou dificuldades comuns
80-71 Dificuldades ligeiras em uma ou mais das áreas a-c
70-61 Dificuldades manifestas, mas não marcadas em uma ou mais áreas a-c, ou dificuldades ligeiras em d
60-51 Dificuldades marcadas em uma das áreas a-c, ou dificuldades manifestas em d
50-41 Dificuldades marcadas em duas ou mais, ou dificuldades graves em uma das áreas a-c, com ou sem dificuldades manifestas em d
40-31 Dificuldades graves em uma e dificuldades marcadas em pelo menos uma das áreas a-c, ou dificuldades marcadas em d
30-21 Dificuldades graves em duas das áreas a-c, ou dificuldades graves em d, com ou sem défice nas áreas a-c
20-11 Dificuldades graves em todas as áreas a-d, ou muito graves em d, com ou sem défice nas áreas gerais a-c. Se a pessoa reage a solicitações externas, a pontuação sugerida é de 20-16; senão, a pontuação sugerida é 15-11
10-1 Falta de autonomia no funcionamento básico com comportamentos extremos mas sem risco de sobrevivência (pontuação 6-10) ou com risco de sobrevivência, ex. risco de morte por malnutrição, desidratação, infecções, incapacidade para reconhecer situações de perigo manifesto (pontuação 1-5)

5. Faça ajustes dentro de intervalos de 10 pontos

O nível de funcionamento em outras áreas deve ser tido em consideração para ajustar a pontuação ao nível decimal (por exemplo, de 31 a 40), tal como:

· Cuidados de saúde físicos e psicológicos
· Alojamento, área de residência, cuidado pelo espaço habitacional
· Contribuição para as actividades domésticas, participação na vida familiar ou da residência/centro-dia
· Relações íntimas ou sexuais
· Cuidados às crianças
· Rede social, amigos e cuidadores
· Observância das regras sociais
· Interesses gerais
· Gestão financeira
· Utilização de transportes, telefone
· Capacidades de lidar com a crise

O comportamento ou risco de suicídio não são tidos em conta nesta escala.

6. Registe a pontuação final

PONTUAÇÃO

NOME DO DOENTE: _____

DATA: ___ / ___ / ___

Figure 1 - Personal and Social Performance (PSP) scale

Scale for Interpersonal Behavior (see figure 2)
Social skills refer to a set of behaviors displayed in social interactions that allow individuals to cope with the demands of these situations in an adequate and competent manner. What defines the assertive behavior is its social and cultural validity, that is, a given response will be assertive if it is recognized by the group as adequate self-expression and self-affirmation while respecting the other.
The tasks required for social success involve the use of various social skills, including initiating and maintaining conversations, taking the initiative of visiting friends and planning joint activities, managing conflicts and disagreements, sharing thoughts, offering emotional support, and refusing unreasonable requests.
The short version of the Scale for Interpersonal Behavior measures the assertiveness of the affective and behavioral responses in a wide range of social situations, defining assertiveness as a behavior which is often accompanied by low discomfort in interpersonal situations and without anxiety or aggressiveness of unjustified intensity (Vagos & Pereira, 2010, Vagos, Pereira, & Arrindell, 2014).
It consists of four subscales referring to different subcategories of assertiveness: expression of negative feelings; expression of positive feelings; expression and management of personal limitations; and taking initiative.
The authors considered the absolute and incremental fit indices of the recommendations for scale analysis (Diamantopoulos & Siguaw, 2000; Vieira, 2009 as cited in Vagos & Pereira, 2010). As for reliability and construct validity, Cronbach alpha values ranging from α= 0.68 to α= 0.94 were obtained in different variables (Vagos, Pereira, & Arrindell, 2014).
A confirmatory factor analysis showed that internal consistency and homogeneity did not clearly improve with the deletion of any of the items. Thus, the original 25-item structure of the scale was kept, making it equivalent and stable by comparison with its Italian version (Arrindell *et al.*, 2002 as cited in Vagos, Pereira, & Arrindell, 2014).

m10

ESCALA DE COMPORTAMENTO INTERPESSOAL – VERSÃO REDUZIDA
(Paula Vagos & Anabela Pereira, 2010)

Em situações sociais, muitas pessoas acham difícil reagir como gostariam. Por exemplo, podem achar difícil recusar um pedido, pedir ajuda, ou dizer do que gostam ou não gostam. Em baixo encontras uma lista de algumas dessas situações. Regista sempre a primeira resposta que te vier à cabeça. Responde a todas as questões, tão rápido quanto conseguires.
Para cada uma das situações, avalia primeiro, o quanto te sentirias nervoso/a ou tenso/a se te comportasses como é descrito na situação, usando a seguinte escala:

Nada	Um pouco	Até certo ponto	Muito	Extremamente
1	2	3	4	5

Por exemplo: se te sentes **até certo ponto tenso** quando inicias uma conversa com um estranho, escreve um 3 na linha de resposta.
Depois, avalia cada uma das situações em função da frequência com que te comportas da forma descrita.

Nunca	Raramente	Algumas vezes	Normalmente	Sempre
1	2	3	4	5

Por exemplo, se quando estás com um estranho, **normalmente** inicias uma conversa, escreve um 4 na linha de resposta.

SITUAÇÕES SOCIAIS	Sinto-me tenso(a) ou nervoso(a)…					Faço…				
1. Iniciar uma conversa com um estranho	1	2	3	4	5	1	2	3	4	5
2. Contar a grupo de pessoas alguma coisa que te aconteceu	1	2	3	4	5	1	2	3	4	5
3. Pedir a alguém para explicar uma coisa que não compreendeste	1	2	3	4	5	1	2	3	4	5
4. Reconhecer um elogio acerca da tua aparência pessoal	1	2	3	4	5	1	2	3	4	5
5. Dizer a alguém que gostas dele/dela	1	2	3	4	5	1	2	3	4	5
6. Recusar um pedido feito por uma pessoa com autoridade (polícia, professor, patrão, …)	1	2	3	4	5	1	2	3	4	5
7. Dizer a alguém que achas que ele(a) te tratou injustamente	1	2	3	4	5	1	2	3	4	5
8. Dizer a alguém que o(a) estimas	1	2	3	4	5	1	2	3	4	5
9. Dizer a alguém que te criticou justamente que ele(a) tem razão	1	2	3	4	5	1	2	3	4	5
10. Reconhecer um elogio sobre alguma coisa que fizeste	1	2	3	4	5	1	2	3	4	5
11. Dizer que aprecias a experiência de te dizerem que gostam de ti	1	2	3	4	5	1	2	3	4	5
12. Participar da conversa de um grupo de pessoas	1	2	3	4	5	1	2	3	4	5
13. Manter a tua própria opinião face a uma pessoa com uma opinião marcada	1	2	3	4	5	1	2	3	4	5
14. Pedir a uma pessoa que pare de fazer algo que te aborrece (por exemplo, num comboio, num restaurante ou no cinema)	1	2	3	4	5	1	2	3	4	5
15. Perguntar a alguém se tu o(a) magoaste	1	2	3	4	5	1	2	3	4	5
16. Dizer que gostas que as pessoas te digam que te estimam	1	2	3	4	5	1	2	3	4	5
17. Dar a tua opinião a uma pessoa com autoridade	1	2	3	4	5	1	2	3	4	5
18. Recusar produtos ou serviços cuja qualidade não te satisfaz (por exemplo, numa loja ou restaurante)	1	2	3	4	5	1	2	3	4	5
19. Conversar com alguém sobre a tua impressão de que ele(a) te está a tentar evitar	1	2	3	4	5	1	2	3	4	5
20. Pedir desculpa quando cometeste um erro	1	2	3	4	5	1	2	3	4	5
21. Aproximares-te de alguém para te apresentares	1	2	3	4	5	1	2	3	4	5
22. Pedir a alguém que te indique o caminho	1	2	3	4	5	1	2	3	4	5
23. Recusar emprestar alguma coisa a um conhecido próximo	1	2	3	4	5	1	2	3	4	5
24. Admitir que sabes pouco sobre determinado assunto	1	2	3	4	5	1	2	3	4	5
25. Insistir para que alguém faça a sua parte num trabalho de grupo	1	2	3	4	5	1	2	3	4	5

Figure 2 - Scale for Interpersonal Behavior

Data processing and analysis

Data will be analyzed using IBM SPSS, version 24. The absolute and percentage frequencies of the variables for demographic characterization of the participants will be calculated, as well as the summary statistics of the discrete and/or continuous quantitative variables, specifically the measures of central tendency (mean, mode, and median) and dispersion (standard deviation).

The Kolmogorov-Smirnov test and the Shapiro-Wilk test will be used to assess the normality of distribution, enabling the decision on the tests to be used for statistical inference. Bivariate statistics will be used, including tests of correlation between ratio and interval variables (Pearson's correlation coefficient). Univariate analyses will be performed to check for differences between the assessment moments (a paired samples t-test and a repeated measures ANOVA with post hoc test).

m10

50

If distribution is not normal, the corresponding non-parametric tests will be used: Spearman's correlation coefficient, Wilcoxon test, and Friedman Test.

Timeline

TIMELINE: Structured TOA Program of Conversation and Social Interaction for learning and training communication/conversation skills "**Let's Talk!**"

PHASES	Description of each phase	2018 6	7	8	9	10	11	12	2019 1	2	3	4	5	6	7	8	9	10	11	12	2020 1	2	3	4	5	6	7	8	9
Phase 0	Development, internal debates, conceptualization, methodologies and materials, as well as procedures with ethical committees and heads of Institutions and Units	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓																		…
Phase 1 Workshop with the team of clinical nurse specialists	Manuals, operationalization, decisions						▓		▓		▓																		…
Phase A₁ "time protocol"	Control group											▓					▓						▓						…
Phase B "Let's Talk!"	Start of the intervention, experimental group													▓					▓	▓				▓					…
Phase A₂ "time protocol"	Control group															▓				▓	▓				▓				…

CONCLUSIONS

This continuous improvement project, in both of its areas (clinical research and outreach partnership services), intends to translate knowledge and interventions into clinical nursing practice with two purposes: improve patients' communication/conversation skills and assess the effectiveness of the structured TOA program of Conversation and Social Interaction.

In summary, the relevance and innovation of this project will provide patients with the latest Focused Nursing Interventions (FNI) in TOA, as well as give visibility to the impact and effectiveness of autonomous care delivery in Mental Health and Psychiatric Nursing, with emphasis on patients' health gains - in primary (clinical) outcomes, namely in their personal and social performance, social involvement, social interaction skills, personal well-being, interpersonal behavior, mood equilibrium, motivation, self-esteem, and personal autonomy, and in secondary outcomes (production indicators), namely in the % of participation of patients admitted to the UCAERe-T, the % of delivery of full programs, and the % of participation of undergraduate nursing students (3rd and 4th years) as co-therapists in the Let's talk! program.

CONFLICT OF INTERESTS

All authors report no conflict of interest

ACKNOWLEDGEMENTS

REFERENCES

Aguiar, C., Moiteiro, A., Correia, N., & Pimentel, J. (2011). Desenhos de investigação de sujeito único em educação especial. *Análise Psicológica, XXIX*(1), 167-178.

Bellack, A. (2004). Skills Training for people with severe mental illness. *Psychiatric Rehabilitation Journal,* 27, 4.

Briddon, J., Richards, D., & Lovell, K. (2003). *Common Health Mental Health Problems.* Retreived from: http://www.jcn.co.uk/journal.asp?MonthNum=08&YearNum=2003&Type=backissue&ArticleID=614

Brissos, S., Palhavã, F., Marques, J., Mexia, S., Carmo, A., Carvalho, M., & ... Figueira, M. (2011). The Portuguese version of the Personal and Social Performance Scale (PSP): reliability, validity, and relationship with cognitive measures in hospitalized and community schizophrenia patients. *Social Psychiatry and Psychiatric Epidemiology The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services,* 45, 7.

Burgess, P., Harris, M., Coombs, T., & Pirkis, J. (2017). A systematic review of clinician-rated instruments to assess adults' levels of functioning in specialised public sector mental health services. *Aust N Z J Psychiatry, 4*(51), 338-354. doi:10.1177/0004867416688098

Canotilho, C. (2017). *Formação em Habilidades de conversação para interação Social de doente com Esquizofrenia na Unidade de Reabilitação de Doentes Difíceis. Um estudo Pré-Experimental [Dissertação de Mestrado].* Coimbra: ESEnfC – Escola Superior de Enfermagem de Coimbra.

CNRSSM. (2007). *Comissão Nacional para a Reestruturação dos Serviços de Saúde Mental: Proposta do Plano da Acção para a Reestruturação e Desenvolvimento dos Serviços de Saúde Mental em Portugal.* Retrieved from: http://www.hmlemos.min-saude.pt/docs/PNacSM2007.pdf

Coelho, C., Silva, C., Silvério, J., & Palha, A. (2002). Treino de habilidades sociais aplicado a pessoas com esquizofrenia. *Psiquiatria Clínica*, 23(3), *205-215*.

Correia, N., Daniel J., & Aguiar, C. (2014). Desenhos de investigação A-B-A-B: Uma abordagem experimental para a avaliação de intervenções em contextos naturais. *Laboratório de Psicologia, 1*(12), 15-30. doi: 10.14417/lp.619

Corry, M., Clarke, M., While, A., & Lalor, J. (Sep de 2013). Developing complex interventions for nursing: a critical review of key guidelines. *J Clin Nurs*, 22(17-18), 2366-2386. doi:10.1111/jocn.12173

Evans, J., Gast, D., Perdices, M., & Manolov, R. (2014). Single case experimental designs: Introduction to a special issue of Neuropsychological Rehabilitation. *Neuropsychological Rehabilitation,* 3-4(24), 305-314. doi:10.1080/09602011.2014.903198

Kadzin, A. (1983). Single-Case Research Designs in Clinical Child Psychiatry. *Journal of the American Academy of Child Psychiatry,* 5(22), 423-432.

Kratochwill, T., Hitchcock, J., Horner, R., Levin, J., Odom, S., Rindskopf, D., & Shadish, W. (2013). Single-Case Intervention Research Design Standards. *Remedial and Special Education,* 34(1), pp. 26-38. doi:10.1177/0741932512452794

Melo-Dias, C. (2014). Investigar habilidades de conversação em adultos com esquizofrenia. . *In E-book IV Congresso Internacional ASPESM. Sequeira, C.; Carvalho, J.C.; Sá, L. (Eds.) (2014). IV Congresso Internacional ASPESM: Padrões de Qualidade em Saúde Mental*, (pp. 58-69). Porto.

Melo-Dias, C. (2015). *Habilidades de conversação em adultos com esquizofrenia [Tese de Doutoramento].* Porto: Universidade Católica Portuguesa, Instituto de Ciências da Saúde. Retrieved from: http://hdl.handle.net/10400.14/19361

Melo-Dias, C. (2016). Generalização de habilidades de conversação em doentes com esquizofrenia – uma análise crítica. *Revista Investigação em Enfermagem,* 14, 8-17.

Melo-Dias, C. (2019). Melhorar habilidades de conversação em adultos com esquizofrenia [Comunicação livre]. *Livro de Resumos do Congresso internacional de saúde mental e psiquiatria – evidência e práticas na promoção do recovery (equipa de investigação do projeto intercomunicare).* Universidade do Minho - Braga.

Melo-Dias, C., & Silva, C. (2015). Esquizofrenia. *Revista Investigação em Enfermagem,* 10, 69-76. Retrieved from: http://www.sinaisvitais.pt/index.php/revista-de-investiga-publicacoes-80/rie-serie-2/695-rie-10

Melo-Dias, C., & Silva, C. (2015b). Habilidades de conversação em adultos com esquizofrenia [Comunicação livre]. Em Vieira, Araújo, & Deodato (Ed.), *9.º Seminário Internacional de Investigação em Enfermagem, Livro de Atas,, Instituto de Ciências da Saúde – Universidade Católica Portuguesa*, (p. 42). Porto.

Melo-Dias, C., Rosa, A., & Pinto, A. (2014). Atividades de Ocupação Terapêutica – intervenções de enfermagem estruturadas em reabilitação psicossocial. *Revista Portuguesa de Enfermagem de Saúde Mental,* 11,15-23.

Melo-Dias, C., Rosa, A., & Pinto, A. (2016). Reasoning and planning of therapeutic occupation activities. *Revista Portuguesa de Enfermagem de Saúde Mental*, 63-70.

Moorhead, S., Johnson, M., Maas, M., & Swanson, E. (2010). *NOC – Classificação de Resultados de Enfermagem* (4ª edição ed.). Elsevier Editora.

OMS – Organização Mundial de Saúde. (2001). *A saúde mental pelo prisma da saúde pública. Relatório sobre a saúde no mundo 2001: Saúde mental: nova concepção, nova esperança.* Genebra: OPAS/OMS.

Ordem dos Enfermeiros (2011a). Regulamento das Competências Específicas do Enfermeiro Especialista em Enfermagem de Saúde Mental (Regulamento n.º 129/2011). 35, 8669-8673. Diário da República, 2.ª série.

Ordem dos Enfermeiros - Conselho de Enfermagem (2001). *Padrões de qualidade dos cuidados de enfermagem.* Ordem dos Enfermeiros.

Peyroux, E., & Franck, N. (2016). Improving Social Cognition in People with Schizophrenia with RC2S: Two Single-Case Studies. *Front. Psychiatry*, 7(66). doi: 10.3389/fpsyt.2016.00066

Santos, M. (2000). Esquizofrenia: perspectivas actuais de reabilitação psicossocial. *Psicologia,* XIV,91-109.

Smith, J. (2012). Single-case experimental designs: a systematic review of published research and current standards. *Psychol Methods,* 4(17), 10–50. doi:doi:10.1037/a0029312

Stapleton, D., & Hawkins, A. (2015). Single-case research design: an alternative strategy for evidence-based practice. *Athl Train Educ J.,* 10(3), 256–266.

Stuart, G. (2013). Principles and practice of psychiatric nursing. St Louis, Missouri, USA: Mosby-Elsevier.

Tate, R., Perdices, M., Rosenkoetter, U., Shadish, W., Vohra, S., Barlow, D., & … Wilson, B. (2016). The Single-Case Reporting Guideline. In Behavioural Interventions (SCRIBE) 2016 Statement. *Journal of Clinical Epidemiology*, 73, 142-152.

Townsend, M. C. (2011). *Enfermagem de Saúde Mental e Psiquiátrica: Conceitos de Cuidado; a Prática Baseada na Evidência.* Lusociência.

Vagos, P., & Pereira, A. (2010). Escala de Comportamento Interpessoal: Adaptação para a língua portuguesa. *Laboratório de Psicologia,* 8(1), 37-49.

Vagos, P., Pereira, A., & Arrindell, W. (2014). Validação da versão reduzida da Escala de Comportamento Interpessoal para adolescentes portugueses. Psicologia: Reflexão e Crítica, 27(3), 452-461. doi:http://dx.doi.org/10.1590/1678-7153.201427305