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RESEARCH ARTICLE (ORIGINAL)

Psychoeducational intervention to promote mental health literacy among adolescents at school: a focus groups study

Intervenção psicoeducacional promotora da literacia em saúde mental de adolescentes na escola: estudo com grupos focais

Intervención psicoeducativa para promover la alfabetización en salud mental de los adolescentes en la escuela: estudio con grupos focales

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Abstract

Background: National and international studies have revealed low mental health literacy (MHL) on anxiety among adolescents and the need to develop psychoeducational interventions at schools.
Objective: To identify the components of a psychoeducational intervention to promote MHL on anxiety among adolescents in the school context.
Methodology: An exploratory, descriptive, and qualitative study was conducted using 2 focus groups and the content analysis technique. Six health or education professionals participated in the first focus group, and 6 9th-grade adolescents participated in the second focus group.
Results: The components of a psychoeducational intervention to promote MHL on anxiety among adolescents in the school context were identified, contributing to its preliminary design. The intervention consists of 4 90-minute sessions using different pedagogical methods and techniques.
Conclusion: This study contributed to the preliminary design of the "ProLiSMental" psychoeducational intervention, which aims to enable adolescents to access, understand, and use relevant information that helps them to prevent, recognize, and manage anxiety.

Keywords: mental health; health literacy; education; adolescent; schools; focus groups

Resumo

Enquadramento: Estudos nacionais e internacionais evidenciam reduzida literacia em saúde mental (LSM) dos adolescentes sobre a ansiedade e a necessidade de serem desenvolvidas intervenções psicoeducacionais em contexto escolar.
Objetivo: Identificar as componentes de uma intervenção psicoeducacional de promoção da LSM sobre a ansiedade para adolescentes em contexto escolar.
Metodologia: Realizou-se um estudo exploratório, descritivo e de natureza qualitativa, recorrendo a 2 grupos focais e à análise de conteúdo. No primeiro grupo focal, participaram 6 profissionais de saúde ou da educação e, no segundo, 6 adolescentes do 9º ano de escolaridade.
Resultados: Foram identificadas as componentes de uma intervenção psicoeducacional de promoção da LSM sobre a ansiedade para adolescentes em contexto escolar, que contribuíram para o seu desenho preliminar, integrando 4 sessões de 90 minutos, com diferentes métodos e técnicas pedagógicas.
Conclusão: Este estudo contribuiu para o desenho preliminar da intervenção psicoeducacional "ProLiSMental", que pretende capacitar os adolescentes para o acesso, a compreensão e a utilização de informação útil que os ajude na prevenção, no reconhecimento e na gestão da ansiedade.

Palavras-chave: saúde mental; letramento em saúde; educação; adolescente; escolas; grupos focais

Resumen

Marco contextual: Estudios nacionales e internacionales muestran la escasa alfabetización en salud mental de los adolescentes respecto a la ansiedad y la necesidad de desarrollar intervenciones psicoeducativas en entornos escolares.
Objetivo: Identificar los componentes de una intervención psicoeducativa para promover la alfabetización en salud mental (LSM en portugués) sobre la ansiedad de los adolescentes en el contexto escolar.
Metodología: Se llevó a cabo un estudio exploratorio, descriptivo y de naturaleza cualitativa mediante 2 grupos focales y un análisis de contenido. En el primer grupo focal, participaron 6 profesionales de la salud o de la educación y, en el segundo, 6 adolescentes del 9.º grado de escolaridad.
Resultados: Se identificaron los componentes de una intervención psicoeducativa de promoción de la LSM sobre la ansiedad en adolescentes en el contexto escolar, que contribuyeron a su diseño preliminar e incluyeron 4 sesiones de 90 minutos, con diferentes métodos y técnicas pedagógicas.
Conclusión: Este estudio contribuyó al diseño preliminar de la intervención psicoeducativa "ProLiSMental", cuyo objetivo es capacitar a los adolescentes para acceder, comprender y utilizar información útil que les ayude a prevenir, reconocer y gestionar la ansiedad.

Palabras clave: salud mental; alfabetización en salud; educación; adolescente; instituciones académicas; grupos focales

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Introduction

Several international and national health policies have emphasized the need for mental health (MH) and literacy promotion, prevention of mental disorders, and their early identification.
The Mental Health Action Plan 2013-2020 (World Health Organization [WHO], 2013), extending to 2030, highlights the important role governments have in promoting and protecting MH and preventing mental disorders in the early stages of life, considering that up to 50% of mental disorders in adults have their onset before the age of 14. A time of transition between childhood and adulthood, adolescence is a critical life stage for MH. Jorm (2012, 2019) notes that several mental disorders have their incidence peak at this stage. Worldwide, about 16% of children and adolescents suffer from some form of mental illness and 6.5% suffer from some form of anxiety disorder (WHO, 2018).
The Portuguese Health Literacy Action Plan 2019-2021 (Directorate-General of Health - Direção-Geral da Saúde [DGS], 2018) considers Health Literacy (HL) as an opportunity to promote health throughout the life cycle, bearing in mind the specific characteristics of each stage of development, and improve the HL levels of the Portuguese population in different contexts. In the same way that HL is an important strategy for health promotion, Mental Health Literacy (MHL) is considered an effective strategy for MH promotion (Jorm, 2012). The lack of MHL promotion can constitute an obstacle to the search for evidence-based MH care by the population in general and adolescents in particular (Jorm, 2012).
Considering that adolescents spend most of their time at school, it should be noted that the National School Health Program (Programa Nacional de Saúde Escolar 2015 - DGS, 2015) presents HL promotion as a general objective and anxiety as an area of intervention in adolescence.
If, on the one hand, adolescence represents a critical stage of life for MH, on the other hand, due to developmental characteristics, it represents an opportunity for implementing psychoeducational interventions to promote MHL, particularly on anxiety. This study aims to identify the components of a psychoeducational intervention to promote MHL on anxiety among adolescents in the school context, helping to design this psychoeducational intervention.

Background

The term "health literacy" was first used by Scott Simonds in 1973 during an interdisciplinary conference in the state of New York, where the future of health education as social policy in the United States of America was discussed. In the 1990s, based on Don Nutbeam's work, the WHO defined HL as the ability of individuals "to gain access to, understand, and use information in ways which promote and maintain good health" (Nutbeam et al., 1993, p. 151). At the beginning of the 21st century, HL became a widely discussed and researched topic, and the work carried out over the years by Sørensen et al. (2012) should be highlighted. For these authors, HL entails people's knowledge, motivation, and competencies to access, understand, appraise, and apply health information to make judgments and take decisions in everyday life concerning healthcare, disease prevention, and health promotion to maintain or improve the quality of life. They proposed an integrated model of HL based on these three domains (Sørensen et al., 2012).
They point out that the several definitions refer to HL as a multidimensional, complex, and heterogeneous concept and reinforce the close link between the concept of HL and the current concept of health promotion (Sørensen et al., 2012). HL became a topic of interest for interdisciplinary research, reaching its climax in 2016 at the 9th WHO Global Conference on Health Promotion in Shanghai, China.
Jorm et al. (1997) introduced the concept of MHL in 1997. According to these authors, Nutbeam et al. (1993) had established several objectives for HL regarding various physical conditions, without any mention to the role of HL in promoting and maintaining good MH (Jorm, 2019). Prompted by this omission, Jorm et al. (1997) defined MHL as the knowledge and beliefs about mental disorders which aid their recognition, management, or prevention. The author later identified several components in the concept of MHL: 1) knowledge on how to prevent mental disorders, 2) recognition of the onset of a mental disorder, 3) knowledge on help-seeking options and treatments available, 4) knowledge on effective self-help strategies for milder problems, and 5) MH first-aid skills to support others who are developing a mental disorder or undergoing a mental health crisis (Jorm, 2012). The author points out that a key aspect of this definition is that it does not refer to the knowledge about MH or mental disorders but rather to knowledge that is linked to action, that is, knowledge that people can use to take practical action to benefit their own MH or that of others (Jorm, 2019).
More recently, Kutcher et al. (2015) expanded the MHL concept to include four distinct but related components: 1) understanding how to obtain and maintain good MH, 2) understanding mental disorders and their treatments, 3) decreasing stigma, and 4) enhancing help-seeking efficacy. Although consistent with Jorm et al.'s definition (Jorm et al., 1997; Jorm, 2012), the authors point out that this concept of MHL was expanded to facilitate health decision making by addressing the key factors in determining MH outcomes and its application in both individuals and populations (Kutcher et al., 2015).
The concept of MHL was originally developed for adults. However, it has been extended to adolescents because adolescence is a critical stage in the life cycle for the onset of mental disorders, and adolescents may not have the knowledge or experience necessary to cope effectively with their own MH problems or those of their peers (Jorm, 2012; Jorm, 2019).
Several authors highlight that schools are an important setting for implementing MHL promotion interven-

tions among adolescents (Kutcher et al., 2015; Jorm, 2012; Campos et al., 2018). The low MHL levels among adolescents, particularly on anxiety, reinforce the need to develop MHL promotion interventions in the school context. However, although some studies have been identified, these interventions require further research (Morgado & Botelho, 2014).
Mental health and psychiatric professionals, including psychiatrists, child psychiatrists, psychologists, and nurses specialists in Mental Health and Psychiatric Nursing can develop psychoeducational interventions to promote MHL. In Portugal, according to the Regulation of Specific Competencies of the Nurse Specialist in Mental Health and Psychiatric Nursing (Regulamento n.º 515/18, 2018), these nurses specialists develop and implement interventions for MH promotion and protection and mental disorder prevention in the community and groups while using psychotherapeutic, socio-therapeutic, psychosocial, and psychoeducational approaches. According to the Regulation of Quality Standards for Specialized Care in Mental Health and Psychiatric Nursing *(*Regulamento n. º 356/15, 2015), psychoeducation is a specific type of education that increases understanding and insight about MH problems and/or disorders, as well as the learning and training of management and/or resolution strategies. It also promotes the ability to recognize the different aspects related to MH or mental disorders and to search for MH information, increasing the knowledge about risk factors, causes, treatments, available professionals, and attitudes that promote recognition and appropriate help-seeking (Regulamento n. º 356/15, 2015).
Moreover, psychoeducation also facilitates the development of personal skills, which have proven to promote MH and help people gain more control over their lives and the environment in which they live (Regulamento n. º 356/15, 2015).

Research question

What are the components of a psychoeducational intervention to promote MHL on anxiety among adolescents in the school context?

Methodology

According to the Medical Research Council Framework (Craig et al., 2013) for developing complex interventions, in the modeling process and outcomes stage, an exploratory, descriptive, qualitative study was conducted, using two focus groups for data collection and Bardin's content analysis technique (2011).
The focus group is a qualitative data collection method that uses participant interaction and discussion in groups as the data source and recognizes the researcher/moderator's active role in stimulating discussion about a particular topic (Krueger & Casey, 2014; Silva et al., 2014).
The authors mention that the focus group participants should have common relevant characteristics to the topic discussed and suggest four to 12 participants (Krueger & Casey, 2014; Silva et al., 2014).
In this study, the criteria for participants' selection for the first focus group were as follows: 1) to be a health or education professional with at least five years of professional experience, and 2) to have professional experience with adolescents in the school context. The criteria for participants' selection for the second focus group were as follows: 1) to be an adolescent, and 2) to be in the 9th grade. Based on these criteria, a nonprobability convenience sample of 12 participants was selected: six health or education professionals and six 9th grade adolescents.
Moderators are a crucial element in focus groups (Krueger & Casey, 2014) due to their moderation and group dynamics skills. They should 1) create a comfortable, respectful, and non-judgmental environment for the participants to share their opinions and 2) ask questions, listen, keep the conversation on track, and make sure that each participant has the opportunity to participate. To increase the effectiveness of the process, Krueger and Casey (2014) point out the importance of having a team of moderators with 1) a moderator with the primary role of leading and maintaining the discussion, and 2) an assistant moderator or observer who does not participate in the discussion, is responsible for managing the recording equipment, the logistical conditions, and the physical environment, responds to unexpected interruptions, and takes notes throughout the group discussion. In this study, the role of moderator was ensured by the researcher, a nurse specialist in Mental Health and Psychiatric Nursing, and the role of the non-participant observer was assumed by a nurse specialist in Child Health and Pediatric Nursing.
Several authors have recommended a five-stage process for developing focus groups: planning, preparation, moderation, data analysis, and dissemination of results (Krueger & Casey, 2014; Silva et al., 2014). Thus, an activity script was elaborated for each stage: planning, preparation, moderation (introduction, development, and conclusion), data analysis, and dissemination of results (Table 1).

Table 1

Focus group activity script

Stage		Activity
Planning		Setting the objectives of the focus group Defining the structure of the focus group Defining the number of groups, the number of participants, and the length of the focus group
Preparation		Selecting and recruiting participants Obtaining the participants'/legal representatives' informed consent Defining the moderator and non-participant observer Identifying the discussion topics and formulating focus group questions Assessing the logistic conditions (location, required materials)
Moderation	**Introduction**	Thanking the participants for their availability to participate in the focus group Introducing the moderator and the non-participant observer Introducing the other participants Mentioning the ethical issues related to the study Ensuring data confidentiality Providing general information about the nature of the focus group and its importance to the study Showing availability to clarify any doubts
	Development	Explaining the purpose and objectives of the study Contextualizing the research process phase (briefly) Explaining the specific objectives of the focus group Presenting the focus group questions Promoting group discussion
	Conclusion	Thanking all participants for their availability and collaboration Ensuring the confidentiality of the information shared in the focus group by each participant Ensuring that the study results can be disseminated in the scientific community Sharing opinions about the satisfaction with the focus group participation, clarification of doubts, and possible suggestions
Analysis and dissemination of results		Analyzing the results Preparing the focus group report Disseminating the results

Common guiding questions were developed for both focus groups to facilitate the moderation phase (Table 2).

Table 2

Focus group guiding questions

Questions
1. In which situations do adolescents in the school context show higher levels of anxiety that justify the relevance of this topic?
2. What is the priority educational level for developing a psychoeducational intervention to promote MHL about anxiety among adolescents?
3. What is the relevant content for a psychoeducational intervention to promote MHL on anxiety among adolescents in the school context?
4. What is the ideal number of sessions for developing this psychoeducational intervention?
5. What is the ideal length for each of the sessions of this psychoeducational intervention?
6. What are the most appropriate methods, pedagogical techniques, and teaching resources for developing this psychoeducational intervention?
7. What are the most appropriate assessment strategies for this psychoeducational intervention?
8. What are the conditions necessary for implementing this psychoeducational intervention to promote MHL on anxiety among adolescents in the school context?
9. Do you have any other suggestions?

Note. MHL = Mental Health Literacy.

Concerning ethical issues, all health and education professionals, adolescents, and their legal representatives gave their informed consent for participation in the focus groups and audio recording. The following aspects were also ensured: the voluntary nature of participation, anonymity, confidentiality, and the possibility to withdraw from the study at any time without any prejudice. This study was authorized by the board of directors of the school where it was implemented and, as part of a larger research study, approved by the Health Ethics Committee of the Regional Health Administration of the Center, in Portugal (Administração Regional de Saúde do Centro; Study 71/2015).

The first focus group was held on 13 May 2015 and the second one on 29 June 2015, for 90 minutes each, which was in line with the opinion of several authors (Krueger & Casey, 2014; Silva et al., 2014). The participants' audio-recorded answers in both focus groups and the non-participant observer's field notes were transcribed and analyzed based on Bardin's (2011) three-step content analysis technique: 1) pre-analysis, 2) exploration and 3) treatment of results and interpretation.

In this last step of content analysis, the results are treated to become significant and valid so that the researcher can propose inferences and interpretations based on the planned objectives or unexpected discoveries (Bardin, 2011).

Results

This study had 12 participants (Table 3). Six health and education professionals participated in Focus Group 1, with a mean age of 53 years (*SD* = 4.05 years), ranging from 47 to 59 years, and vast professional experience, with a mean of 31.83 years (*SD* = 5.27 years), ranging from 24 to 40 years. Six adolescents attending 9th grade participated in Focus Group 2, with a mean age of 14.33 years (*SD* = 0.52).

Table 3

Absolute and percentage distribution of the characteristics of focus group participants

Characteristics			***N***	**%**
Focus Group 1 (P1 to P6)	**Gender**	Female	5	83.3
		Male	1	16.7
	Academic qualifications	Bachelor's Degree	3	50.0
		Master's Degree	2	33.3
		Doctoral degree	1	16.7
	Main Professional Activity	Basic Education Teachers - 3rd cycle	2	33.3
		Nurses	4	66.7
		Nurse specialist in ESMP	1	16.7
		Nurse specialist in ESC	1	16.7
		Nurse specialist in ESIP	1	16.7
		Nurse specialist in ER	1	16.7
Focus Group 2 (P7 to P12)	**Gender**	Female	3	50.0
		Male	3	50.0

Note. P = Participants; ESMP = Mental Health and Psychiatric Nursing; ESC = Community Nursing; ESIP = Child Health and Pediatric Nursing; ER = Rehabilitation Nursing.

Following Bardin's pre-analysis stage (2011), the transcribed answers and the non-participant observer's field notes were analyzed individually for each focus group and then triangulated.

Then, data were coded and categorized (Bardin, 2011), emerging six categories, 19 subcategories, and 53 registration units (Table 4).

Table 4

Categorization resulting from content analysis

Categories	Subcategories	Registration Units	Context Units
Topic	Types of anxiety	Test-related anxiety	"Before and during tests" (P1; P2; P3; P4; P5; P6) "Before tests" (P7; P8; P9; P10; P11; P12)
		Performance anxiety	"Before presentations to the class; in school performance" (P1; P2; P3; P4; P5; P6) "Before class presentations" (P12) "Before band performances" (P10)
		Social anxiety	"Before presentations to the class" (P1; P2; P3; P4; P5; P6) "Before class presentations" (P12) "Before band performances" (P10)
		Normal anxiety	"I think it can be normal and good" (P8)
	Functions of anxiety	Anxiety as motivation	"It motivates me to study or train" (P8)
		Anxiety as a driving force for action	"To do anything according to our objectives" (P9) "It motivates me to study or train ... it drives me to take action" (P8)
		Anxiety as protection	"It helps me protect myself from danger" (P8)
Target group	Priority educational level	Basic Education - 3rd cycle	"The 3rd cycle, and more specifically the 9th grade, due to the national exams" (P1; P2; P3; P6)
		9th Grade	"The 9th grade is a priority year because of the national exams, and it is more easily compatible with the curriculum" (P4; P5) "The 9th grade is the most important one, also because we already have some maturity to understand things" (P7; P8) "The 9th grade because of national exams" (P10; P11)
Content	Concept of anxiety	Concept of normal and pathological anxiety	"To clarify the concept" (P4; P5) "What is normal anxiety and pathological anxiety (signs and symptoms)" (P6) "You can teach about anxiety" (P7)
	Signs and symptoms of anxiety	Signs and symptoms of anxiety	"What is normal anxiety and pathological anxiety and what are the signs and symptoms" (P6)
	Anxiety prevention strategies	Anxiety prevention strategies	"strategies to prevent ... anxiety" (P4; P5) "You can teach ... strategies to prevent or reduce it" (P7)
	Anxiety management and reduction strategies	Self-help and anxiety reduction strategies	"Anxiety management, self-regulation and self-help strategies..." (P1; P2; P3; P6) "strategies for preventing and reducing anxiety" (P4; P5) "You can teach ... strategies to prevent or reduce it" (P7) "We can learn how to reduce our anxiety" (P10; P11; P12)
		Anxiety management and self-regulation strategies	"Anxiety management, self-regulation and self-help strategies..." (P1; P2; P3; P6) "We can learn strategies that can help us to manage anxiety" (P10; P11)
		Breathing and relaxation techniques	"such as breathing techniques, relaxation techniques" (P1; P2; P3; P6) "Learn about relaxation techniques" (P7; P11)
	First-aid actions	How to help others with anxiety	"We can learn how ... to help colleagues with anxiety" (P10; P11; P12)

	Help-seeking	Seeking informal help	"They can teach where we can find help" (P8; P9) "They can teach us who are the people and the professionals that can help us" (P7; P10; P11)
		Seeking professional help	"They can you teach us where we can find help" (P8; P9) "They can teach us who are the people and the professionals that can help us" (P7; P10; P11
	Psychotherapeutic interventions	Possible psychotherapeutic interventions	"What therapies can be used" (P7; P8)
	Pharmacological interventions	Pharmacological strategies	"If there are safe and non-addictive medications" (P7)
Structure	**Number of sessions**	Four to five sessions	"4 to 5 sessions, preferably 4, lasting 90 minutes, under the '*Projeto de Promoção e Educação para a Saúde*' (PPES)" (P4; P5) "More than 4 sessions lasting more than 90 minutes is difficult for students to remain focused" (P2; P3) "To conduct 4 or 5 sessions of 45 minutes" (P7; P8; P9; P10; P11; P12)
	Length	45 to 90 minutes	"lasting 90 minutes" (P4; P5) "lasting more than 90 minutes is difficult for students to remain focused" (P2; P3) "45-minute sessions" (P7; P8; P9; P10; P11; P12)
	Pedagogical Methods	Expository method	"In addition to the expository method" (P2; P3; P4; P5)
		Interrogative method	"use the interrogative method" (P2; P3; P4; P5)
		Demonstrative method	"explain and show how to relax" (P7; P11)
		Active method	"and especially use active methods" (P2; P3; P4; P5)
	Pedagogical techniques	Lecture through dialogue	"In addition to the expository method ... use the interrogative method" (P2; P3; P4; P5)
		Group dynamics	"and group dynamics" (P2; P3; P4; P5)
		Pedagogical games	"use games" (P7; P8; P9)
		Role-playing/dramatization	"role-playing, dramatization" (P2; P3; P4; P5)
		Handicrafts	"cutting and pasting activities" (P2; P3; P4; P5)
		Group work	"Group work and class sharing activities" (P8)
		Oral presentations to the class	"Group work and class sharing activities" (P8)
	Teaching resources	Computer and projector	"with PowerPoint" (P2; P3; P4; P5)
		Handicraft materials	"cutting and pasting activities" (P2; P3; P4; P5)
		Flyers/pamphlets	"use pamphlets" (P2)
		Bookmarks	"use ... bookmarks" (P2)
		Materials for pedagogical games	"use games" (P7; P8; P9)
		Materials for relaxation activities	"explain and show how to relax" (P7; P11)

	Assessment strategies	Diagnostic, formative, and summative assessment	"use diagnostic, formative and summative assessment" (P4; P5)
		Observation grids	"use observation grids" (P2; P3; P4; P5)
		Questionnaires	"use ... short questionnaires" (P2; P3; P4; P5) "They can ask questions or conduct small surveys" (P7; P8)
		Outcome and process indicators	"have outcome and process indicators" (P1)
Other suggestions	Conditions for the feasibility of the intervention	Effective articulation	"Good articulation between all those involved" (P1; P2; P3; P4; P5; P6)
		Facilitators' training	"Training health professionals to replicate the intervention" (P1; P2; P3)
		Replication	"to replicate the intervention" (P1; P2; P3)
		Effective planning	"Timely planning" (P2; P3; P4; P5; P6)
		Organization	"Good organization" (P6)
		Systematization	"systematization of the psychoeducational intervention" (P6)
		Availability	"everyone's availability, including the school community" (P4; P5)
		Involvement	"Involvement of parents/tutors" (P2; P3; P4; P5; P6) "Attention and involvement of adolescents in the school context" (P2; P3; P4; P5; P6) "They have to catch our attention ... have an engaging speech and develop attractive activities" (P7; P8; P9; P10; P11; P12)
	Training	Training for parents/tutors	"To involve and also develop an intervention about anxiety for parents/tutors" (P1; P2; P3; P4; P5; P6)
		Training for teachers, operational assistants, and school community	"Also provide training about anxiety to teachers, operational assistants and the rest of the school community" (P4; P5) "Sessions about anxiety are really important for teenagers like us ... I have no other suggestions" (P7; P8; P10)

Note. P = Participant; *PPES* = *Projeto de Promoção e Educação para a Saúde* (Health Promotion and Education Project).

In the phase of treatment of results and interpretation (Bardin, 2011), it was possible to identify the components of the psychoeducational intervention to promote MHL on anxiety among adolescents in the school context, helping to design the intervention. More specifically, the following components were identified: 1) the topic, confirming its relevance, 2) the target group, identified as adolescents in the 9th grade, 3) the content, considered relevant by the participants, and 4) the structure, namely the number of sessions, length, pedagogical methods, pedagogical techniques, teaching resources, and assessment strategies. Participants gave other suggestions regarding the conditions for implementing the psychoeducational intervention and the need to provide training to parents/tutors and the school community, from teachers to operating assistants and other staff, who contact with adolescents in their everyday lives in the school contexts. The contents suggested by the participants in these focus groups were organized into the following four 90-minute sessions: "mental health and anxiety in adolescents," "promotion, prevention, management, and self-help strategies," "first-aid actions and seeking professional help," and "from promotion and prevention to seeking professional help." Each session had a session plan, which included the general objective, the specific objectives, the organization and distribution of contents throughout the introduction, development, and conclusion phases with the time schedule, the pedagogical methods and techniques, the teaching resources, and the assessment strategies. The following pedagogical methods were suggested: expository, interrogative, demonstrative, and active, with the latter being highlighted as important in interventions with adolescents. Regarding the teaching techniques, the following suggestions were included: 1) PowerPoint presentations, 2) demonstration and training of breathing and relaxation techniques, 3) group work and oral presentation to the

class, 4) group dynamics, 5) pedagogical games, and 6) role-playing/dramatization. These pedagogical methods and techniques are expected to be implemented through several teaching resources. The planned assessment strategies took into account the diagnostic, formative, and summative functions, creating outcome and process indicators through 1) a questionnaire to assess MHL before and after the intervention, 2) oral questions during the sessions, whose answers are monitored using an observation grid, and 3) short questionnaires applied at the end of each session.

This psychoeducational intervention to promote MHL on anxiety among adolescents in the school context was called "ProLiSMental."

Discussion

This study identified the components of the "ProLiSMental" psychoeducational intervention and contributed to its planning and preliminary design, creating new scientific knowledge.

Despite the lack of consensus among the authors (Krueger & Casey, 2014) and acknowledging that the number of participants in the focus groups may have been a limitation, this study provides relevant and enriching data.

As recommended by several authors (Sermeus, 2015; Bleijenberg et al., 2018) for the modeling process and outcomes stage of complex interventions, adolescents and health and education professionals were involved, making the intervention more specific to the population and the context. The conditions facilitating the implementation of this psychoeducational intervention were identified by thoroughly exploring the context, as Bleijenberg et al. (2018) suggested. The participants' suggestion, in the focus groups, to include parents/tutors and the rest of the school community, namely teachers, is consistent with other authors' work (Campos et al., 2018; Kutcher et al., 2015) and presents itself as an opportunity for further research and intervention.

This study also identified the priority educational level for developing this intervention, which is in line with other studies on promoting MHL in adolescents conducted in Portugal (Campos et al., 2018).

Concerning the intervention contents, this study confirmed, in a real-life context, the needs that had been previously identified by the researchers (Morgado & Botelho, 2014) and the support theory (Jorm et al., 1997; Jorm, 2012; Nutbeam, 1993; Sørensen et al., 2012).

The participants' suggestions regarding the structure and, more specifically, the number of sessions are consistent with the development of brief psychoeducational interventions for promoting MHL that had already been developed by other authors (Campos et al., 2018). Although some studies (Morgado & Botelho, 2014) show that interventions with more than 10 sessions were effective up to three months post intervention and shorter interventions only up to four weeks post intervention, Brown (2018) points out that the topic/subject and the context can influence the number of sessions and their duration. The author reinforces that a 40- to 75-minute period is reasonable for children and adolescents over the age of nine and that sessions longer than 60 minutes should have a wider range of activities to engage the participants' attention (Brown, 2018).

The results of this study suggested 45 to 90 minutes for each session, with the longer period being chosen to facilitate the use of active methods and more dynamic pedagogical techniques. Brown (2018) also alerts to the fact that groups with more than 10 participants should have more than one facilitator.

This study also contributed significantly to the definition of process and outcome indicators, as recommended in the process modeling process and outcomes stage of complex interventions (Sermeus, 2015; Bleijenberg et al., 2018). Moreover, this study provided information on the facilitators' skills and how they should be prepared and trained to develop the "ProLiSMental" psychoeducational intervention as suggested by Bleijenberg et al. (2018).

After the preliminary design of the "ProLiSMental" and while still in the modeling process and outcomes stage of the development of complex interventions, Sermeus (2015) and Bleijenberg et al. (2018) suggest that consensus should be reached, for example, by conducting a Delphi study with experts which, in this case, may facilitate the assessment of the content validity of the "ProLiSMental" psychoeducational intervention.

Conclusion

This study contributed to the preliminary design of the "ProLiSMental" psychoeducational intervention involving adolescents and health or education professionals. This intervention includes four 90-minute weekly sessions, in a school context, with adolescents in the 9th grade, using, throughout the sessions, increasingly active methods and dynamic techniques. The sessions were planned to ensure the adolescents' gradual access to understanding and use of relevant information to facilitate mental health promotion and anxiety prevention and management. Thus, the "ProLiSMental" psychoeducational intervention seeks to increase adolescents' MHL on anxiety in the school context.

Other implications of the "ProLiSMental" psychoeducational intervention to clinical practice include the fact that it provides nurse specialists in Mental Health and Psychiatric Nursing with a systematized and rigorously designed intervention and the possibility of networking with nurses from different specialization areas and other health and education professionals. Moreover, the development of networks between primary health care, school communities, and child psychiatry health care services can facilitate early identification and intervention.

Regarding the implications for research, from the perspective of complex interventions, there is a need to assess the content validity and feasibility of the "ProLiSMental" psychoeducational intervention and proceed with the remaining evaluation and implementation phases. A larger sample of adolescents should be used, and the adaptation

of the "ProLiSMental" to parents/tutors, teachers, and the rest of the school community should be assessed. There is also a need for networking with structures that facilitate research processes such as research units or clusters that provide collaboration and consulting during the effectiveness assessment processes of this psychoeducational intervention. Concerning the implications for education, from a general perspective of the Portuguese education system, the development of this psychoeducational intervention can pose some challenges to the integration of these contents into the curricula and reinforce the importance of the intervention of nurse specialists in Mental Health and Psychiatric Nursing in terms of school health. From the perspective of nursing education, it has implications for the academic and professional training of nurse specialists in Mental Health and Psychiatric Nursing.

Author contributions

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