UNIVERSITAT ROVIRA I VIRGILI

A LITERACIA E A SAÚDE MENTAL POSITIVA DOS ADOLESCENTES

Joana Rita Pimenta Nobre

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UNIVERSITAT ROVIRA i VIRGILI

A Literacia e a Saúde Mental Positiva dos Adolescentes

JOANA RITA PIMENTA NOBRE

TESE DE DOUTORAMENTO
2023

UNIVERSITAT ROVIRA i VIRGILI

I STATE that the present study, entitled “The literacy and the Positiva Mental Health of Adoslecents “, presented by Joana Rita Pimienta Nobre for the award of the degree of Doctor, has been carried out under our supervision at the Department of Nursing of this university.

Tarragona a 6 de febrero de 2023

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A Literacia e a Saúde Mental Positiva dos Adolescentes

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Departamento de Enfermagem

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It always seems impossible until it's done.

(Nelson Mandela)

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LISTA DE ABREVIATURAS

M – Média

MHKQ – Mental Health Knowledge Questionnaire

MM-PMH – Multifactor Model of Positive Mental Health

MHPK-10 – Mental Health-Promoting Knowledge

PMHQ – Positive Mental Health Questionnaire

PVS – Psychological Vulneravility Scale

RCAAP – Repositórios Científicos de Acesso Aberto de Portugal

SGD – Sustainable Development Goals

URV – Universidade de Rovira i Virgili

WHO – World Health Organization

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RESUMO

Introdução: A adolescência é um período marcado por transições relacionadas com o normal desenvolvimento humano, mas que tendem a tornar o adolescente mais vulnerável a potenciais riscos para a sua saúde. A literatura mostra a prevalência significativa de distúrbios de saúde mental na população adolescente a nível mundial, bem como os níveis insuficientes de literacia em saúde mental, sobretudo na sua dimensão mais positiva. As intervenções de enfermagem assumem um papel facilitador dos processos de transição dos adolescentes, através da construção e implementação de programas promotores da sua literacia em saúde mental e, consequentemente, da sua saúde mental.

Objetivo Geral: Esta investigação teve como principal objetivo compreender os níveis de literacia e de saúde mental positiva dos adolescentes para a construção de uma proposta de programa promotor da sua literacia em saúde mental positiva.

Métodos: Foi efetuada uma investigação de natureza quantitativa com uma componente qualitativa, através da realização de quatro estudos sequenciais. O primeiro estudo consistiu numa scoping review, onde se pesquisaram estudos sobre programas/intervenções que promovessem pelo menos uma das componentes da literacia em saúde mental de adolescentes, escritos em inglês, português ou espanhol, publicados entre 2013 e 2020, tendo-se recorrido às bases de dados eletrónicas MEDLINE, CINAHL Plus with Full Text, SciELO, SCOPUS, aos repositórios OpenGrey e RCAAP, e às listas das referências dos artigos incluídos. O segundo e terceiro estudos foram estudos quantitativos, transversais e correlacionais, em que se recorreu a uma amostra intencional de adolescentes do 5.º ao 12.º ano de escolaridade em três escolas de uma região de Portugal. Nestes estudos foram aplicados os seguintes instrumentos: um questionário de caracterização sociodemográfica, o Questionário de Conhecimento de Saúde Mental (MHKQ), o Questionário "O que é importante para uma boa saúde mental?" (MHPK-10), o Questionário de Saúde Mental Positiva (PMHQ) e a Escala de Vulnerabilidade Psicológica (PVS). Os dados foram analisados com recurso à estatística descritiva, com o cálculo de frequências, média e desvio padrão, e à estatística inferencial, com o cálculo de testes não paramétricos, tais como o teste Eta, o coeficiente de correlação de Spearman, o teste Gamma, e o MANOVA. Os testes estatísticos foram executados no software SPSS® v27. O quarto estudo foi de natureza qualitativa, em que foram realizados dois focus group a uma amostra não probabilística intencional de 11 participantes, composta por peritos profissionais e por adolescentes. Utilizou-se o NVivo® 12 para proceder à análise de conteúdo dos dados recolhidos neste estudo.

Resultados: No primeiro estudo, obtiveram-se 29 artigos, que mostraram que a maioria dos programas contemplava uma ou mais das componentes da literacia em saúde mental, com especial enfoque no conhecimento das perturbações mentais e na redução do estigma; eram sobretudo aplicadas pelos professores dos adolescentes, de forma presencial em contexto de sala de aula, possuíam uma duração muito variável e utilizavam maioritariamente instrumentos de avaliação não validados. O segundo estudo mostrou que os adolescentes que compuseram a amostra apresentavam níveis elevados de literacia em saúde mental (MHKQ: M= 60.03; MHPK-10: M= 4.49) e de saúde mental positiva (M= 128.25). Os níveis mais elevados de literacia em saúde mental foram apresentados pelos adolescentes mais velhos, pelas raparigas, pelos que estavam num ano de escolaridade mais avançado, por aqueles cuja mãe tinha emprego, pelos que relatavam hábitos alimentares saudáveis, e os que possuíam uma melhor autoperceção da imagem corporal. Os adolescentes com níveis mais elevados de saúde mental positiva foram os que que passavam menos horas por dia em frente a um ecrã ou online, os que frequentavam um ano de escolaridade inferior, os que possuíam uma melhor autoperceção da saúde mental e física e da imagem corporal, e os que reportavam hábitos adequados

de sono. Foi estabelecida uma relação positiva estatisticamente significativa entre a literacia em saúde mental e a saúde mental positiva. No terceiro estudo, os adolescentes reportaram níveis moderados de vulnerabilidade psicológica, sendo na *late adolescence* que se verificaram níveis mais elevados de vulnerabilidade psicológica, bem como nas raparigas, nos adolescentes que frequentemente recorreram a um serviço de saúde devido a um problema de saúde mental, nos adolescentes com uma pior autoperceção da sua saúde física, mental e imagem corporal, bem como nos adolescentes que frequentavam um ano de escolaridade mais avançado. A relação entre a vulnerabilidade psicológica e os fatores para uma boa saúde mental não foi estatisticamente significativa. No quarto estudo, identificaram-se, com base nas perspetivas dos participantes, os vários componentes que o programa promotor de literacia em saúde mental positiva deve conter, nomeadamente em termos da estrutura, participantes, avaliação e outros componentes que podem aumentar a eficácia do programa.

Conclusões: O estudo 1 permitiu identificar os programas/intervenções promotoras da literacia em saúde mental dos adolescentes que estavam a ser implementados, bem como identificar as lacunas encontradas nesta área da investigação. Os estudos 2 e 3 deram um contributo para o diagnóstico de situação dos adolescentes sobre os níveis de literacia em saúde mental e de saúde mental positiva, sobre o seu índice de vulnerabilidade psicológica, sobre a existência de relação entre a literacia em saúde mental, a saúde mental positiva e algumas variáveis sociodemográficas, e sobre a relação entre a vulnerabilidade psicológica e algumas variáveis de caracterização sociodemográfica dos adolescentes. Tendo, desta forma, evidenciado a necessidade da construção de um programa dirigido aos adolescentes na fase da *early adolescence*. O estudo 4 permitiu identificar os componentes necessários para o design da proposta de um programa promotor da literacia em saúde mental positiva para adolescentes, o qual se pretende implementar num futuro próximo.

Palavras Chave: Adolescentes; Enfermagem; Escolas; Literacia em Saúde; Literacia em Saúde Mental; Literacia em Saúde Mental Positiva; Saúde Mental Positiva.

RESUMEN

Introducción: La adolescencia es un periodo marcado por transiciones relacionadas con el desarrollo humano normal, pero que tienden a hacer a los adolescentes más vulnerables a posibles riesgos para la salud. La literatura muestra la importante prevalencia de los trastornos de salud mental en la población adolescente de todo el mundo, así como los insuficientes niveles de alfabetización en salud mental, especialmente en su dimensión más positiva. Las intervenciones de enfermería asumen un papel facilitador en los procesos de transición de los adolescentes a través de la construcción e implementación de programas que promuevan su alfabetización en salud mental y, en consecuencia, su salud mental.

Objetivo General: Esta investigación pretendía conocer los niveles de alfabetización y salud mental positiva de los adolescentes para la construcción de una propuesta de programa de promoción de su alfabetización en salud mental positiva.

Métodos: Se realizó una investigación cuantitativa con un componente cualitativo a través de cuatro estudios secuenciales. El primer estudio consistió en una scoping review, en la que se buscaron estudios sobre programas/intervenciones que promovieran al menos uno de los componentes de la alfabetización en salud mental adolescente, escritos en inglés, portugués o español, publicados entre 2013 y 2020, utilizando las bases de datos electrónicas MEDLINE, CINAHL Plus with Full Text, SciELO, SCOPUS, los repositorios OpenGrey y RCAAP, y las listas de referencias de los artículos incluidos. El segundo y el tercero fueron estudios cuantitativos, transversales y correlacionales, que utilizaron una muestra intencional de adolescentes de 5º a 12º curso de tres escuelas de una región de Portugal. En estos estudios se utilizaron los siguientes instrumentos: un cuestionario de caracterización sociodemográfica, el Cuestionario de Conocimientos sobre Salud Mental (MHKQ), el Conocimiento Promotor de la Salud Mental (MHPK-10), el Cuestionario de Salud Mental Positiva (PMHQ) y la Escala de Vulnerabilidad Psicológica (PVS). Los datos se analizaron mediante estadística descriptiva, calculando frecuencias, media y desviación estándar, y estadística inferencial, calculando pruebas no paramétricas, como la prueba Eta, el coeficiente de correlación de Spearman, la prueba Gamma y MANOVA. Las pruebas estadísticas se realizaron con el programa SPSS® v27. El cuarto estudio fue de naturaleza cualitativa, en el que se realizaron dos grupos de discusión con una muestra intencionada no probabilística de 11 participantes, compuesta por expertos profesionales y adolescentes. Se utilizó NVivo® 12 para realizar el análisis de contenido de los datos recogidos en este estudio.

Resultados: En el primer estudio se obtuvieron 29 artículos, que mostraron que la mayoría de los programas incluían uno o más componentes de la alfabetización en salud mental, con especial atención al conocimiento de los trastornos mentales y a la reducción del estigma; eran aplicados principalmente por los profesores de los adolescentes, de forma presencial en un contexto de aula, tenían una duración muy variable y utilizaban mayoritariamente instrumentos de evaluación no validados. El segundo estudio mostró que los adolescentes que componían la muestra presentaban niveles elevados de alfabetización en salud mental (MHKQ: M= 60,03; MHPK-10: M= 4,49) y de salud mental positiva (M= 128,25). Los niveles más altos de alfabetización en salud mental los presentaban los adolescentes de más edad, las chicas, los que estaban en un curso escolar más avanzado, aquellos cuya madre tenía trabajo, los que declaraban tener hábitos alimentarios saludables y los que tenían una mejor autopercepción de la imagen corporal. Los adolescentes con mayores niveles de salud mental positiva eran los que pasaban menos horas al día frente a una pantalla o en línea, los que cursaban un año inferior de escolarización, los que tenían una mejor autopercepción de la salud mental y física y de la imagen corporal, y los que declaraban unos hábitos de sueño adecuados. Se estableció una relación

positiva estadísticamente significativa entre alfabetización en salud mental y salud mental positiva. En el tercer estudio, los adolescentes mostraron niveles moderados de vulnerabilidad psicológica, encontrándose los niveles más altos de vulnerabilidad psicológica en la adolescencia tardía, así como en las chicas, los adolescentes que recurrían con frecuencia a un servicio sanitario debido a un problema de salud mental, los adolescentes con una peor autopercepción de su salud física y mental y de su imagen corporal, y los adolescentes que asistían a un curso escolar más avanzado. La relación entre la vulnerabilidad psicológica y los factores de buena salud mental no fue estadísticamente significativa.

Conclusiones: El estudio 1 permitió identificar los programas/intervenciones de promoción de la alfabetización en salud mental entre los adolescentes que estaban siendo implementados, así como identificar las lagunas encontradas en esta área de investigación. Los estudios 2 y 3 contribuyeron al diagnóstico de la situación de los adolescentes con respecto a los niveles de alfabetización en salud mental y salud mental positiva, su índice de vulnerabilidad psicológica, la existencia de relación entre alfabetización en salud mental, salud mental positiva y algunas variables sociodemográficas, y la relación entre vulnerabilidad psicológica y algunas variables sociodemográficas de los adolescentes. Así, se evidenció la necesidad de desarrollar un programa dirigido a adolescentes en la fase inicial de la adolescencia. El estudio 4 permitió identificar los componentes necesarios para el diseño de una propuesta de programa que promueva la alfabetización en salud mental positiva para adolescentes, que se pretende implementar en un futuro próximo.

Palabras Clave: Adolescentes; Alfabetización en salud; Alfabetización en salud mental; Enfermería; Salud mental positiva; Alfabetización en salud mental positiva; Escuelas.

ABSTRACT

Introduction: Adolescence is a period marked by transitions related to normal human development, but which tend to make adolescents more vulnerable to potential health risks. The literature shows the significant prevalence of mental health disorders in the adolescent population worldwide, as well as the insufficient levels of mental health literacy, particularly in its more positive dimension. Nursing interventions assume a facilitating role in adolescents' transition processes through the design and implementation of programs that promote their mental health literacy and, consequently, their mental health.

General Objective: This research aimed to understand the levels of literacy and positive mental health of adolescents for the design of a proposed program promoting their positive mental health literacy.

Methods: A quantitative research with a qualitative component was conducted through four sequential studies. The first study consisted of a scoping review, which searched for studies on programs/interventions that promoted at least one of the components of the adolescents' mental health literacy, written in English, Portuguese or Spanish, published between 2013 and 2020, using the electronic databases MEDLINE, CINAHL Plus with Full Text, SciELO, SCOPUS, the OpenGrey and RCAAP repositories, and the reference lists of the included articles. The second and third studies were quantitative, cross-sectional and correlational studies, using a purposive sample of adolescents from 5th to 12th grade in three schools from one region of Portugal. The following instruments were used in these studies: a questionnaire for sociodemographic characterization, the Mental Health Knowledge Questionnaire (MHKQ), the Mental Health-Promoting Knowledge (MHPK-10), the Positive Mental Health Questionnaire (PMHQ) and the Psychological Vulnerability Scale (PVS). Data were analyzed using descriptive statistics, calculating frequencies, mean, and standard deviation, and inferential statistics, calculating nonparametric tests, such as the Eta test, Spearman's correlation coefficient, Gamma test, and MANOVA. The statistical tests were run on SPSS® v27 software. The fourth study was qualitative in nature, in which two focus group were conducted with a non-probability intentional sample of 11 participants, consisting of professional experts and adolescents. NVivo® 12 was used to perform the content analysis of the data collected in this study.

Results: In the first study, 29 articles were obtained, which showed that most of the programs included one or more components of the mental health literacy, with a special focus on knowledge of mental disorders and stigma reduction; they were mainly applied by the adolescents' teachers, in a face-to-face classroom setting, had a very variable duration, and mostly used non-validated assessment instruments. The second study showed that the adolescents who comprised the sample had high levels of mental health literacy (MHKQ: M= 60.03; MHPK-10: M= 4.49) and positive mental health (M= 128.25). The highest levels of mental health literacy were shown by older adolescents, girls, those who were in a more advanced year of school, those whose mother had a job, those who reported healthy eating habits, and those who had a better self-perception of body image. Adolescents with higher positive mental health levels were those who spent fewer hours per day in front of a screen or online, those who were in a lower year of school, those who had a better self-perception of mental and physical health and body image, and those who reported adequate sleep habits. A statistically significant positive relationship was established between mental health literacy and positive mental health. In the third study, adolescents reported moderate levels of psychological vulnerability, and the highest levels of psychological vulnerability were found in late adolescence, as well as in girls, in adolescents who frequently used a health service due to a mental health problem, in adolescents with a worse self-perception of their physical and mental health and body image, and in adolescents

attending a more advanced year of school. The relationship between psychological vulnerability and factors for good mental health was not statistically significant. In the fourth study, we identified, based on the participants' perspectives, the various components that the program promoting positive mental health literacy should contain, namely in terms of structure, participants, evaluation, and other components that can increase the effectiveness of the program.

Conclusions: Study 1 allowed the identification of the programs/interventions promoting mental health literacy among adolescents that were under development and implementation, as well as the identification of the gaps found in this research area. Studies 2 and 3 contributed to the diagnosis of the situation of adolescents about their levels of mental health literacy and positive mental health, their psychological vulnerability index, the existence of a relationship between mental health literacy, positive mental health and some socio-demographic variables, and the relationship between psychological vulnerability and some socio-demographic variables of adolescents. This has highlighted the need for the development of a program for adolescents in the early adolescence phase. Study 4 allowed the identification of the necessary components for the design of a program promoting positive mental health literacy for adolescents, which is intended to be implemented in the near future.

Keywords: Adolescents; Health literacy; Mental health literacy; Nursing; Positive mental health; Positive mental health literacy; Schools.

INTRODUÇÃO

A saúde mental, a literacia em saúde mental, a saúde mental positiva e a literacia em saúde mental positiva são áreas que constituem atualmente um enorme desafio à Enfermagem, enquanto disciplina e enquanto profissão. Estas áreas tornam-se especialmente desafiantes quando falamos de grupos naturalmente vulneráveis, como é o caso dos adolescentes.

A nível mundial, nas últimas décadas, tem-se verificado uma significativa incidência e prevalência de distúrbios de saúde mental nas crianças e adolescentes, rondando os 10-20% (Patalay & Gage, 2019; World Health Organization, 2020a) antes do período de Pandemia COVID-19. Este problema de saúde pública agrava-se quando se associa os níveis insuficientes de literacia em saúde mental dos adolescentes, os quais têm vindo a ser reportados em vários estudos de investigação (Campos et al., 2014, 2018; Rosa et al., 2014; Tay et al., 2018). Tudo isto concorre para uma pobre saúde mental dos adolescentes, afetando o seu desenvolvimento, predispondo-os de forma exponencialmente alta para a adoção de comportamento de risco, podendo ter um impacto negativo na sua saúde mental ao longo das várias transições que o adolescente vai vivenciando durante a adolescência bem como na transição para a vida adulta (Rosa et al., 2014; World Health Organization, 2020b, 2021a). A literatura alerta, também, para o facto de o início da instalação destes distúrbios de saúde mental ocorrer geralmente antes dos 14 anos de idade (Patalay & Fitzsimons, 2018; World Health Organization, 2020b, 2021a).

Perante este cenário, tem havido uma aposta por parte da World Health Organization (WHO) na elaboração e respetiva publicação de guidelines para a implementação de estratégias de promoção da saúde mental da população a nível mundial (World Health Organization, 2021a), bem como de grupos específicos da comunidade, como é o caso dos adolescentes (World Health Organization, 2020b), estratégias essas que devem abranger todos os cidadãos e não apenas as pessoas com distúrbios de saúde mental. Também as Nações Unidas têm demonstrado preocupação com esta questão, pelo que em 2015 lançaram a Agenda para o Desenvolvimento Sustentável do mundo até 2030, composta por 17 Sustainable Development Goals (SDG), sendo um dos quais relacionado com a saúde dos indivíduos, o *Goal 3 - Good Health and Well-Being* com o qual pretendem "ensure healthy lives and promote well-being for all at all ages" (United Nations, 2020). Se é um facto que, como resultado desta preocupação mundial, têm surgido alguns estudos relacionados com o desenvolvimento de programas de promoção da literacia em saúde mental em adolescentes, parece porém existir ainda escassa evidência científica ao nível da sua dimensão salutogénica.

Numa tentativa de preencher esta lacuna que se identificou na literatura, iniciou-se uma investigação materializada na presente tese de doutoramento, inserida na linha de investigação *Enfermeria de Salud Mental y Adicciones: Instrumentos de Análisis y Medición* do Programa de Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili, com o foco na intervenção comunitária ao

nível dos adolescentes para a obtenção de ganhos em saúde, através da promoção da sua literacia em saúde mental positiva.

Em torno da problemática apresentada, surgem vários conceitos que importa abordar. Um deles é o conceito de saúde mental positiva, que tem as suas fundações na psicologia positiva e no trabalho de Marie Jahoda (1958), o qual despertou interesse a Lluch-Canut, que em 1999 desenvolveu o Multifactor Model of Positive Mental Health (MM-PMH) como um modelo explicativo do construto de saúde mental positiva, composto por seis fatores inter-relacionados: Personal Satisfaction (F1), Pro-Social Attitude (F2), Self-Control (F3), Autonomy (F4), Problem Solving and Self-Actualization (F5), e Interpersonal Relationship Skills (F6) (Lluch-Canut, 1999; Lluch-Canut et al., 2013; Lluch-Canut & Sequeira, 2020), tal como ilustra a Figura 1. Sendo que para avaliar este modelo, Lluch-Canut construiu o PMHQ (Lluch-Canut, 1999), que foi posteriormente traduzido e validado para português por Sequeira et al. (Sequeira et al., 2014). Embora o conceito não possua uma definição universal, ele refere-se à capacidade do indivíduo compreender o seu ambiente e de se adaptar a ele ou modificá-lo para reforçar o seu funcionamento ótimo (Lluch-Canut & Sequeira, 2020), sendo, portanto, uma das dimensões da saúde mental. Neste âmbito da saúde mental positiva, recentemente Teixeira et al. (Teixeira et al., 2020; Teixeira, 2022) efetuaram uma investigação com a criação de um programa de promoção de saúde mental positiva dirigida a adultos, tendo por base o MM-PMH.

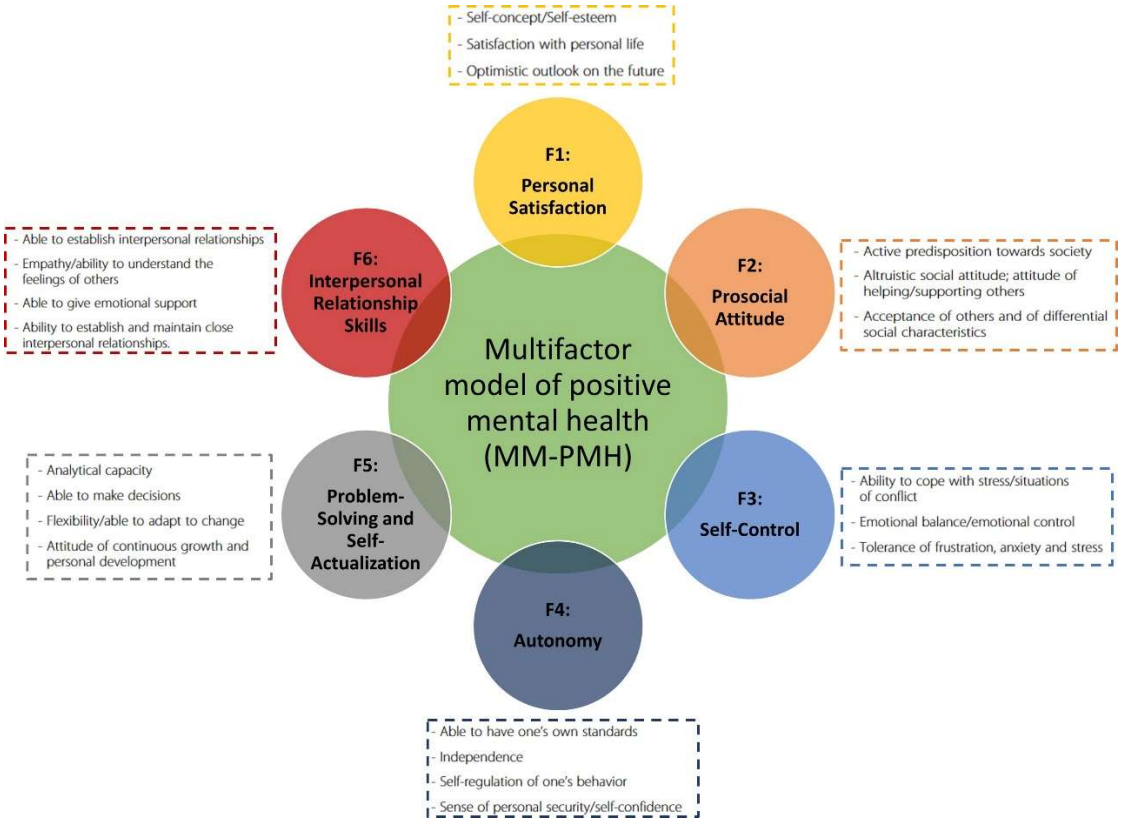

Figura 1. Multifactor Model of Positive Mental Health de Lluch-Canut (Lluch-Canut, 1999; Lluch-Canut et al., 2013; Lluch-Canut & Sequeira, 2020)

O conceito de literacia em saúde mental, emerge, também, como um conceito chave neste trabalho de investigação. Deriva do conceito de literacia em saúde, cuja definição foi evoluindo ao longo do tempo, até que em 2012 Sørensen et al. (2012) o definiram da seguinte forma: "Health literacy is linked to literacy and entails people's knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course" (p. 82).

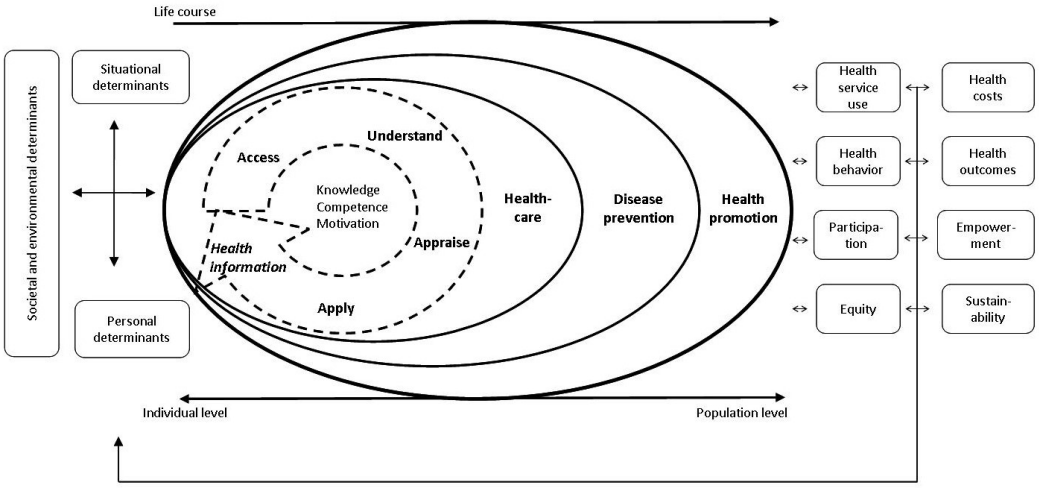

Figura 2. Integrated conceptual model of health literacy (Sørensen et al., 2012)

No integrated conceptual model of health literacy proposto por Sørensen et al. (2012), existem quatro tipo de competências que compõem o seu *core* (Figura 2) e que representam as dimensões cruciais do conceito de literacia em saúde: *Access* – a capacidade de aceder à informação sobre saúde e de atualizar-se sobre os determinantes da saúde; *Understand* – a capacidade de compreender a informação sobre a saúde e sobre os determinantes da saúde; *Appraise* – a capacidade de interpretar e avaliar a informação sobre a saúde e sobre os determinantes da saúde; *Apply* – a capacidade de tomar decisões informadas sobre os determinantes da saúde e de manter e melhorar a saúde (Sørensen et al., 2012).

A literacia em saúde mental, por sua vez, começou por ser definida por Jorm et al. (1997) como o "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (p. 182), e também foi alvo de investigação e evolução, tendo mais recentemente Kutcher et al. (2016) considerado que este conceito, para além do conhecimento, deveria também incluir competências para promover a saúde mental individual e comunitária, sendo composto pelas seguintes componentes: compreender como obter e manter uma boa saúde mental, compreender as

perturbações mentais e os seus tratamentos, diminuir o estigma relacionado com as perturbações mentais, e aumentar a eficácia da procura de ajuda.

Como conceito central desta investigação, surge o conceito de literacia em saúde mental positiva, que recentemente foi alvo de análise e publicação de um artigo por Carvalho et al. (2022). Este conceito é um dos componentes da literacia em saúde mental, é um conceito dinâmico ao longo do ciclo de vida, que pode constituir-se como o resultado de ações de promoção da saúde mental e/ou como um mediador da saúde mental dos indivíduos. De acordo com os autores supramencionados, a pessoa que possui literacia em saúde mental positiva é detentora de alguns atributos, nomeadamente a competência de autoaceitação e de autovalorização, a habilidade em controlar as emoções focando-se em pensamentos positivos, a capacidade de estabelecer ligações positivas com os outros, a habilidade de transformar as deceções da vida em satisfação pessoal, e a competência de resolução de problemas e de autodeterminação na tomada de decisão (Carvalho et al., 2022). É, desta forma, por demais evidente a sua relação intrincada com os fatores do MM-PMH e com as dimensões do integrated conceptual model of health literacy.

Para o desenvolvimento desta investigação, foi adotada a definição de adolescência da WHO, que engloba todos os indivíduos com idades compreendidas entre os 10 e os 19 anos, correspondendo à fase do ciclo de vida entre a infância e a idade adulta (World Health Organization, 2020a). É uma fase caracterizada por grandes alterações a todos os níveis, biológico, mental, emocional e social, em que todas as células do adolescente estão num crescimento evidente, traduzindo-se em termos cerebrais numa manifesta neuroplasticidade provocada pelo desenvolvimento do córtex pré-frontal (World Health Organization, 2021a, 2021b), tornando-se por isso na fase privilegiada do desenvolvimento humano para implementar intervenções de promoção da saúde mental, da literacia em saúde e da literacia em saúde mental (World Health Organization, 2020b, 2021b; Morgado et al., 2021; Naccarella & Guo, 2022). Alguns autores inclusivamente mencionam que a implementação deste tipo de intervenções nesta fase de transição, poderá resultar num impacto positivo a curto e a longo prazo na saúde mental dos adolescentes (Morgado & Botelho, 2014; Santini et al., 2020; World Health Organization, 2020b, 2021a; Morgado et al., 2021).

Atendendo à problemática em análise, ancorou-se a presente investigação na Teoria das Transições de Afaf Meleis, por aludir às *developmental transitions* como fenómenos complexos e dinâmicos que caracterizam o normal desenvolvimento do ser humano (Meleis, 2010), nas quais se engloba a fase da adolescência. Segundo Meleis, este conceito de *transition* assume-se como um conceito central na enfermagem, uma vez que no decurso da sua prática profissional os enfermeiros estão constantemente a contactar com pessoas que estão a viver algum tipo de transição (Meleis, 2010). A autora, alerta para o facto de os indivíduos em processo de transição estarem tendencialmente mais

vulneráveis em termos da sua saúde, pois podem ser afetadas por riscos ou alterações de cariz negativo, caso não consigam fazer a transição de uma forma saudável (Meleis et al., 2000). Considerando os adolescentes como alvo prioritário de intervenção desta investigação, e perspetivando a enfermagem como facilitadora dos processos de transição, cuidar dos adolescentes implica a implementação de *nursing therapeutics* "focused on the prevention of unhealthy transitions, promoting perceived well-being and dealing with the experience of transitions" (Meleis, 2010, p. 68) que facilitem as transições bem sucedidas que este grupo da comunidade se encontra a experienciar.

Face à complexidade tanto dos processos inerentes às transições que os adolescentes vivenciam como da prestação de cuidados que os enfermeiros diariamente assumem a responsabilidade, recorreu-se ao new framework for developing and evaluating complex interventions do UK Medical Research Council (MRC) em colaboração com o National Institute of Health Research (NIHR) (Skivington et al., 2021), para o design de uma proposta de programa de promoção da literacia em saúde mental positiva dirigido a adolescentes. É um framework composto por quatro fases de investigação para o desenvolvimento de intervenções complexas na área da saúde, sendo que em cada uma delas o investigador/profissional de saúde deve ter em conta os *core elements* do framework que se apliquem (Skivington et al., 2021), tal como ilustra a Figura 3. De referir que, as fases do framework não têm uma sequência obrigatória pré-definida, pelo que o investigador pode iniciar a sua investigação na fase que for mais adequada à finalidade do seu estudo ou da intervenção.

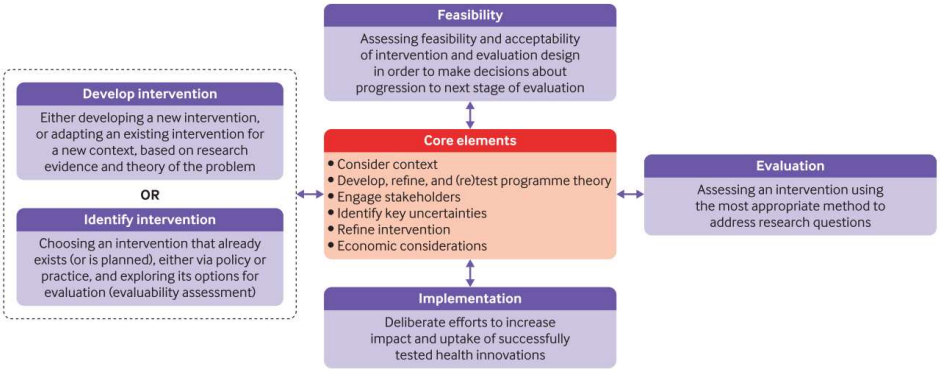

Figura 3. New framework for developing and evaluating complex interventions (Skivington et al., 2021)

Em Portugal, em cada Centro de Saúde existe uma Equipa de Saúde Escolar, que na maioria dos casos da realidade portuguesa é essencialmente constituída por enfermeiros, ainda que a legislação preveja a existência também de outros profissionais de saúde, como por exemplo, médicos, psicólogos, higienistas orais, entre outros (Direção-Geral da Saúde, 2010). Esta equipa tem como missão operacionalizar o Programa Nacional de Saúde Escolar em colaboração com as escolas da sua área de influência. Em 2015, a Direção-Geral da Saúde de Portugal publicou a versão revista do Programa

Nacional de Saúde Escolar (Direção-Geral da Saúde, 2015), na qual se encontra plasmada a importância da promoção da saúde mental das crianças e adolescentes, através da implementação de atividades na área de intervenção da saúde mental e das competências socioemocionais ao nível do Eixo 1 – Capacitação. Ainda que existam estas orientações regulamentadas, no referido documento não consta nenhuma intervenção ou programa definido e devidamente descrito para que as Equipas de Saúde Escolar possam operacionalizar. Umas das dificuldades que a investigadora sentiu na sua prática de cuidados de enfermagem especializados de enfermagem comunitária foi exatamente a falta de um programa nesta área, tendo sido mais um dos motivos que contribuiu para a realização da presente investigação.

Os enfermeiros especialistas em enfermagem comunitária e saúde pública, que desenvolvem a sua atividade nos Cuidados de Saúde Primários, são os profissionais por excelência vocacionados para a promoção da saúde de âmbito comunitário. Estes enfermeiros têm as seguintes competências: "a) Estabelece, com base na metodologia do Planeamento em Saúde, a avaliação do estado de saúde de uma comunidade; b) Contribui para o processo de capacitação de grupos e comunidades; c) Integra a coordenação dos Programas de Saúde de âmbito comunitário e na consecução dos objetivos do Plano Nacional de Saúde; d) Realiza e coopera na vigilância epidemiológica de âmbito geodemográfico" (Ordem dos Enfermeiros, 2018, p. 19354). São, portanto, profissionais de saúde devidamente habilitados para desenvolver e implementar intervenções/programas "com vista à capacitação e "empowerment" das comunidades na consecução de projetos de saúde coletiva e ao exercício da cidadania" (Ordem dos Enfermeiros, 2011, p. 8667).

Face ao exposto, surge a presente tese, que foi elaborada no âmbito do Programa de Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili. Encontra-se redigida em formato de compêndio de artigos, sendo constituída por um total de 4 artigos, dos quais 3 publicados e 1 em fase de *peer review* em revistas internacionais indexadas com arbitragem científica e classificadas no quartil 1 e 2.

Em termos estruturais esta tese de doutoramento encontra-se dividida em cinco capítulos, em que o primeiro diz respeito aos objetivos, o segundo capítulo contempla a metodologia geral utilizada, o terceiro apresenta os resultados, o quarto capítulo apresenta as principais conclusões e as implicações para a prática, e, por fim, o quinto capítulo revela a forma como foi divulgada a investigação e os respetivos resultados. Para além destes capítulos, integram esta tese as referências bibliográficas e os anexos que ilustram o trabalho desenvolvido.

O presente documento segue as guidelines da URV para a elaboração de teses de doutoramento bem como a 7.ª edição das normas de referenciação bibliográfica da American Psychological Association (2020).

OBJETIVOS

O objetivo principal desta tese foi compreender os níveis de literacia e de saúde mental positiva dos adolescentes para a construção de uma proposta de programa promotor da sua literacia em saúde mental positiva.

Nesta sequência, foram traçados os seguintes objetivos específicos:

1. Mapear a evidência disponível sobre programas e/ou intervenções de promoção da literacia em saúde mental dos adolescentes em contexto escolar;

2. Avaliar os níveis de literacia em saúde mental e de saúde mental positiva dos adolescentes;

3. Relacionar o nível de saúde mental positiva dos adolescentes com o seu nível de literacia em saúde mental;

4. Avaliar o índice de vulnerabilidade psicológica dos adolescentes;

5. Relacionar o índice de vulnerabilidade psicológica dos adolescentes com as estratégias de boa saúde mental;

6. Construir uma proposta de programa promotor da literacia em saúde mental positiva dirigido a adolescentes.

METODOLOGIA

Esta investigação científica seguiu um método rigoroso de processos inerentes de sistematização, de organização e de objetividade que permitissem a obtenção de conhecimentos objetivos e verificáveis, de modo a responder às questões de investigação formuladas, o que está de acordo com o preconizado por Vilelas (2020) e por Sequeira & Néné (2022).

Perante a problemática em estudo, foram definidos e implementados procedimentos metodológicos que garantissem a cientificidade da investigação que se pretendia desenvolver, os quais se apresentam neste capítulo.

Atendendo aos objetivos delineados, esta investigação encontra-se inserida no paradigma quantitativo, com uma componente qualitativa, em que foram realizados quatro estudos interligados e sequenciais, inseridos na fase *develop intervention* do new framework for developing and evaluating complex interventions (Skivington et al., 2021), tal como ilustra a Figura 4. Esta fase deve ser cuidadosamente executada de modo a proporcionar a maior eficácia possível à intervenção complexa que se está a desenvolver, pelo que devem ser implementadas várias ações, nomeadamente identificar a evidência disponível sobre o problema em estudo, conhecer o contexto, proceder a uma recolha primária de dados, envolver os stakeholders, entre outras (Richards & Hallberg, 2015; O'Cathain et al., 2019; Skivington et al., 2021).

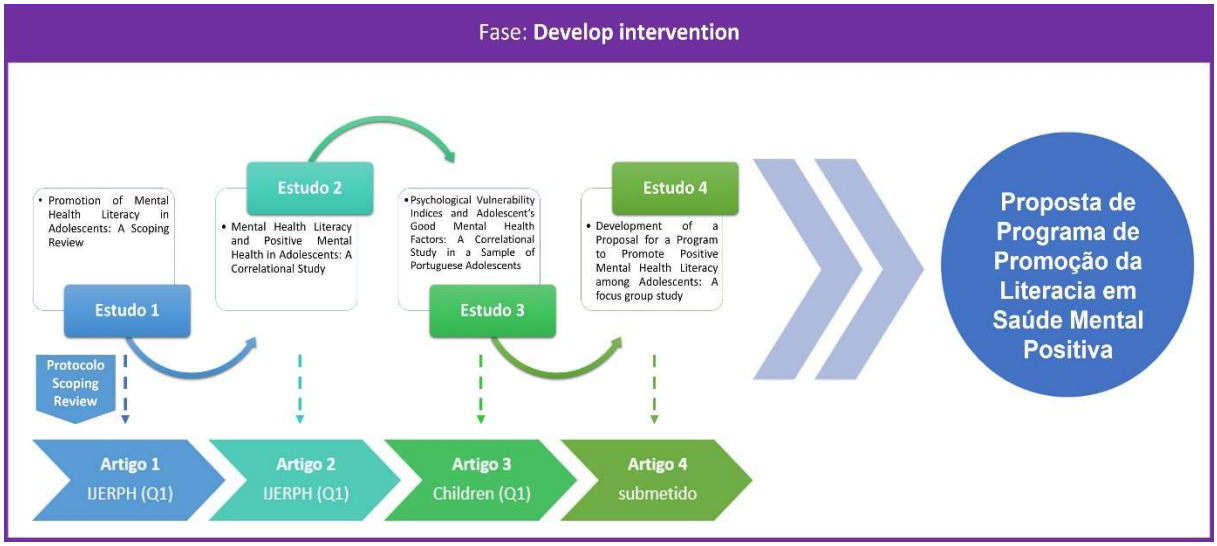

Figura 4. Esquema de ligação entre os estudos sequenciais realizados e os artigos publicados/submetidos

Neste sentido, iniciou-se esta investigação com a identificação da evidência disponível sobre programas promotores da literacia em saúde mental dirigidos a adolescentes, através da realização de uma scoping review no estudo 1, cujo protocolo foi previamente elaborado e registado no Open

Science Framework (Publicação 1). Com esta scoping review, deu-se resposta ao primeiro objetivo específico, ou seja, mapear a evidência disponível sobre programas e/ou intervenções de promoção da literacia em saúde mental dos adolescentes em contexto escolar. Foram seguidas as guidelines do The Joanna Briggs Institute para a realização da scoping review, tendo sido pesquisados artigos nas bases de dados eletrónicas MEDLINE (via EBSCO), CINAHL Plus with Full Text (via EBSCO), SciELO e SCOPUS, bem como nos repositórios eletrónicos OpenGrey (Repositório Europeu) e RCAAP (Repositório Científico de Acesso Aberto de Portugal), e também nas listas de referências de todos os artigos incluídos. Esta scoping review foi realizada em dezembro de 2019 e atualizada em agosto de 2020, tendo dado origem à publicação do artigo 1 no *International Journal of Environmental Research and Public Health*.

Com o intuito de obter dados para começar a conhecer o contexto da problemática em estudo e de fazer um diagnóstico de situação (Imperatori & Giraldes, 1993; Melo, 2020), realizaram-se os estudos 2 e 3, ambos quantitativos, transversais e correlacionais. Recorreu-se a uma amostra não probabilística intencional de adolescentes, do 5.º ao 12.º ano de escolaridade, de três escolas públicas da região Alentejo de Portugal, a quem se aplicou questionários de autopreenchimento online, no período compreendido entre abril e junho de 2020.

No estudo 2, pretendeu-se avaliar os níveis de literacia em saúde mental e de saúde mental positiva dos adolescentes, bem como relacionar o nível de saúde mental positiva dos adolescentes com o seu nível de literacia em saúde mental (objetivos específicos 2 e 3). Para tal, foi aplicado um questionário de caracterização dos adolescentes (anexo I) construído pela equipa de investigadores, foi aplicado o PMHQ traduzido e validado para Portugal por Sequeira et al. (2014) (anexo II), bem como o MHKQ (anexo III) e o MHPK-10 (anexo IV), tendo estes dois últimos sido ambos traduzidos e validados para português por Chaves et al. (2018, 2020). A análise de dados deste estudo realizou-se com recurso não só à estatística descritiva (frequências, média e desvio padrão), mas também à estatística inferencial aplicando testes não paramétricos (teste Eta, coeficiente de correlação de Spearman e teste Gamma), através do software SPSS® v27. Os resultados foram publicados em 2022 no *International Journal of Environmental Research and Public Health* (artigo 2).

Por sua vez, o estudo 3 teve o propósito de avaliar o índice de vulnerabilidade psicológica dos adolescentes e de relacionar este índice de vulnerabilidade psicológica com as estratégias de boa saúde mental dos adolescentes (objetivos específicos 4 e 5). Neste estudo, aplicou-se como instrumento de colheita de dados a PVS (anexo V), cuja tradução e validação para português foi levada a cabo por Nogueira et al. (2017). Os dados provenientes da aplicação deste questionário, e a sua relação com o MHPK-10 e com as variáveis sociodemográficas, foram analisados através do software SPSS® v27, empregando medidas de estatística descritiva (média, desvio padrão, frequências) e testes

de estatística inferencial (teste Eta, coeficiente de correlação de Spearman, MANOVA, regressão multivariada). Este estudo foi realizado no âmbito do estágio internacional de investigação que decorreu em Portugal na Escola Superior de Saúde do Instituto Politécnico de Portalegre (anexo VI), tendo os resultados sido divulgados através da publicação do artigo 3 na revista *Children*, em 2022.
Os resultados destes três estudos permitiram não só aprofundar a problemática em estudo, como também conhecer melhor o contexto e obter um diagnóstico de situação, contribuindo com evidência científica capaz de sustentar a tomada de decisão por parte da investigadora no que concerne, por exemplo, à delimitação do grupo-alvo, à especificação do âmbito da intervenção e à confirmação do contexto de implementação para o programa que se pretende construir.

Com base nisto, avançou-se para o estudo 4, de natureza qualitativa, de modo a explorar as perspetivas dos stakeholders sobre os componentes que devem integrar um programa promotor de literacia em saúde mental positiva dirigido a adolescentes, de modo a recolher contributos para dar resposta ao sexto objetivo específico. Realizaram-se, então, dois focus group a uma amostra não probabilística intencional de 9 peritos profissionais e 2 adolescentes, totalizando 11 participantes, em julho e em setembro de 2022, através de videoconferência. Utilizou-se o software NVivo® 12 para realizar a análise de conteúdo (Bardin, 2022) dos dados colhidos, cujos resultados permitiram a elaboração do artigo 4, o qual foi submetido ao *International Journal of Environmental Research and Public Health* em janeiro de 2023, encontrando-se na fase de *peer review* (anexo VII).

A presente investigação no âmbito do Programa de Doutoramento em Enfermagem e Saúde, culminou com o desenho da proposta de programa promotor da literacia em saúde mental positiva para adolescentes, a partir dos resultados dos quatro estudos realizados, permitindo assim a concretização completa do sexto objetivo específico (Documento 6).

No que diz respeito aos procedimentos éticos, foram respeitadas as diretrizes da Declaração de Helsínquia no que concerne aos estudos de investigação em humanos. Para além disso, a presente investigação mereceu o Parecer Positivo da Comissão de Ética do Instituto Politécnico de Portalegre (Parecer de 29-01-2020; Ref. SC/2020/106) (anexo VIII), e todos os questionários foram registados na Plataforma MIME - Monitorização de Inquéritos em Meio Escolar da Direção-Geral da Educação de Portugal (registo n.º 0730000001), tendo sido aprovado o seu registo por cumprir todos os requisitos (anexo IX). Os autores das escalas/questionários deram autorização para a sua utilização nesta investigação (anexo X). A investigadora deu garantias aos participantes sobre a utilização exclusiva dos dados recolhidos para efeitos de investigação científica, bem como sobre o tratamento dos dados de acordo com o previsto na legislação em vigor em matéria de proteção de dados e no Regulamento Geral sobre a Proteção de Dados (Regulamento UE 2016/679 do Parlamento Europeu e do Conselho, de 27 de abril de 2016). A confidencialidade dos dados foi, também, garantida através do seu

armazenamento no computador da investigadora, que teve acesso exclusivo aos dados, sendo para tal necessário uma palavra-passe. Foram atribuídos códigos aos questionários dos estudos 2 e 3, bem como aos participantes do estudo 4, garantindo-se desta forma o anonimato dos participantes. No sentido de se garantir a participação voluntária e informada da população-alvo nesta investigação, foi obtido o consentimento informado dos encarregados de educação/representantes legais dos adolescentes e de todos os participantes nos estudos (anexos XI e XII), tendo sido também informados do direito a abandonar a investigação a qualquer momento sem qualquer tipo de prejuízo e, também, que não haveria lugar à atribuição de contrapartidas financeiras ou de outra índole aos participantes. A destruição dos questionários aplicados bem como de todo o material audiovisual, após a conclusão da investigação, foi assegurada pela investigadora, assim como a divulgação dos resultados de forma numérica ou codificada impossibilitando a identificação dos participantes na investigação desenvolvida.

RESULTADOS

Publicação 1 – Promotion of Mental Health Literacy: A Scoping Review Protocol

Nobre, J.; Sequeira, C. & Ferré-Grau, C. (2019, November 10). Promotion of Mental Health Literacy in Adolescents: A Scoping Review Protocol. *Open Science Framework*. https://doi.org/10.31219/osf.io/eh9yv

PROMOTION OF MENTAL HEALTH LITERACY IN ADOLESCENTS: A SCOPING REVIEW PROTOCOL

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ABSTRACT

Introduction: Considering the increasing and significant prevalence of mental health problems in today's society and in particular adolescents, as well as the perspectives pointed to the future by the World Health Organization, it is important to know and synthesize the evidence currently available regarding programs/interventions promoters of mental health literacy in adolescents.

Aim: The aim of this review is to map available evidence on programs/interventions to promote mental health literacy in adolescents in school context.

Inclusion criteria: Will be included published and unpublished primary and secondary studies on programs/interventions to promote mental health literacy in adolescents in school context, written in Portuguese, Spanish or English, between 2013 and 2019.

Methods: A scoping review protocol was developed according to the guidelines of the Joanna Briggs Institute and the PRISMA-ScR. From the objective and the questions of the review, the databases and repositories for the research were selected to identify the studies that meet the eligibility criteria. The selection of articles, data extraction and synthesis will be performed by two reviewers independently, using an instrument created by the reviewers based on the Joanna Briggs Institute model.

Keywords: Adolescents, Mental Health, Health Literacy; Nursing.

Introduction

In Portugal, as in the world, there is a huge prevalence of mental disorders in the general population as well as in adolescents and young people [1,2].

Nowadays, it is known that mental disorders account for 12% of diseases worldwide, and in developed countries the figure rises to 23%[3]. According to the World Health Organization[4], it is estimated that by 2020 about 15% of diseases will be behavioral or mental, and one in five adolescents may develop a mental disorder. Also Kelly, Jorm & Right[5] state that 50% of people who will suffer from a mental disorder will experience their first episode before age 18, and according to WHO[6] this may occur even before 14 years.

The literature, so far, tells us that most Portuguese people have a problematic or inadequate health literacy level[7] and that, specifically, adolescent mental health literacy levels are modest [8,9]. The concept of mental health literacy is not recent, having been defined in 1997 by Jorm et al[10] as the knowledge and beliefs about mental disorders that aid their recognition, management and prevention. The low level of literacy in adolescent mental health is a problem in current Portuguese society, which contributes to the lack of adolescent help seeking, affects their development and increases the risk of recurrence of psychiatric disorders[11].

In recent years, researchers in the field of mental health have shown growing interest in the positive dimension of mental health over the disease-centered dimension, arguing that strengthening people's mental health is a protective factor as it promotes their resilience as adaptive capacity[12], entering in the field of positive mental health. This promotion of the salutogenic dimension of mental health should start as early as possible in the life cycle, and adolescence is a vital opportunity period to promote mental health[13], as better literacy at a young age is direct impact on adulthood, enabling adolescents to acquire knowledge and define behaviors that will accompany them in their future life[14], namely the ability to positively manage their thoughts and emotions, to build social relationships and healthy family members, all based on a strong positive sense of identity.

Thus, the WHO defined in the Mental Health Action Plan 2013-2020[13] that one of the objectives worldwide is to implement strategies for the promotion and prevention of mental health, alerting to the importance of intervening not only in needs of people with mental disorders but also in the protection and promotion of the mental health of all citizens.

Given the significant prevalence of adolescent mental health problems as well as the prospects for adolescent mental health problems, it is necessary to know and summarize the evidence currently available regarding adolescent mental health literacy programs / interventions.

To this end, it was specifically decided to conduct a scoping review, as it considered the most appropriate methodology, since this type of review aims to: map existing evidence in relation to a particular area or topic; assess the reliability, relevance and potential costs of performing a systematic literature review; provide a synthesis of research results and disseminate them; and identify potential gaps in existing literature [15,16,17].

A preliminary exploratory research on this subject was carried out, during September of 2019, in the JBI Database of Systematic Reviews and Implementation Reports, Cochrane Database of Systematic Reviews, CINHAL and MEDLINE (via EBSCO), and it was found a systematic review in this area developed by Morgado & Botelho[14], where articles were searched between 2008 and 2013, in the scientific databases CINHAL and MEDLINE, which resulted in 3 articles (one from 2008, one from 2009 and one from 2012). The mentioned systematic review[14] found evidence that mental health literacy interventions are: the cognitive behavioral intervention in the school context, the psychoeducation intervention as well as the mental health education intervention in the school context, all aimed at adolescents without mental disease. In addition, it also found evidence that identifies the school context as a field in this area.

The scoping review proposed in this protocol will differ from the previous review because it will be more comprehensive with respect to the research and will be more up to date, so it was decided to depart from this systematic review and to conduct the research from 2013, in a broader way to include available published and unpublished evidence on this topic.

The scoping review we intend to be carried out, following the methodology proposed by the Joanna Briggs Institute[17], aims to map the available and most recent evidence on programs/interventions to promote mental health literacy in adolescents in a school context.

Review questions

This review aims to answer the primary question:

RQ 1. What is known in the existing literature on programs /interventions to promote mental health literacy in adolescents in a school context?

In addition, some secondary questions were formulated that will guide the review:

RQ 2. What are the characteristics of programs/interventions to promote mental health literacy in adolescents evidenced in the literature?

RQ 3. In which environments/contexts are these programs/interventions carried out?

RQ 4. What are the barriers and facilitators for the implementation of these programs/interventions?

Inclusion criteria

• **Types of participants -** The review will include studies whose participants are adolescents aged 10-19 years, as we adopt the WHO (2012)[6] definition of adolescents. Note that adolescents included in the studies cannot have diagnosed mental illness.

• **Concept -** Regarding the concept, will be included studies on programs/interventions to promote mental health literacy, which meets the objective defined for this review.

• **Context -** Regarding the context, this review will accept studies that include adolescents in the school context (2nd and 3rd cycles of primary education and secondary education).

• **Types of studies -** This review will include published and unpublished primary and secondary studies to gain access to a wider range of available information; in terms of language, studies that are written in Portuguese, Spanish or English, as they are the languages that the reviewers domain; and in temporal terms, studies published between 2013 and 2019, so that only articles with the most recent evidence are included.

Methods

The study is intended to be a scoping review, which will methodologically follow Joanna Briggs Institute guidelines[17] and will also follow the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews checklist (PRISMA-ScR)[18] for the presentation of the review report.

• **Search strategy -** Comprehensive research will be carried out on the MEDLINE with Full Text, CINHAL Plus with Full Text, SciELO and SCOPUS scientific databases, as well as the OpenGrey (European Repository) and RCAAP (Open Access Scientific Repository of Portugal) scientific repositories.

The descriptors selected for the search in these databases are MeSH (Medical Subject Headings) terms and DeCS (Health Science Descriptors) terms: adolescent*, mental health, literacy, health literacy, program*, nursing.

Will be used the research strategy recommended by the Joanna Briggs Institute[17], which consists of three stages: 1) a limited initial search will be performed on two databases (MEDLINE with Full Text e CINHAL Plus with Full Text) with the Boolean phrase 'adolescent*' AND 'mental health'AND 'literacy' AND 'health literacy' AND 'program*' AND 'nursing', followed by an analysis of the terms used in the titles and abstracts of the articles found in order to identify all relevant relevant terms and to determine the final Boelan phrase; 2) in the second step, the search will be performed in all selected databases and repositories, using all relevant terms and keywords identified in the previous step, according to the final bolenus phrase also defined in the previous step; 3) and, finally, in the third step, the reference lists of all included articles will be analyzed, in order to identify possible additional relevant studies.

It is intended to use as bibliographic reference management software Mendeley Desktop® version 1.19.4., to which the articles obtained in the research will be imported.

If necessary, contact will be made with the authors of the primary or secondary studies for further information or clarification.

• **Study selection -** The review process will consist of two levels of screening of the studies obtained: (1) a review of the title and abstract and (2) a review of the full text.

This selection process will be carried out independently by two researchers, where initially they will make the first selection of articles by reading the title and abstract, verifying that they meet the defined eligibility criteria. Any articles that are considered relevant by one or both researchers will be included in the full text review.

In the second screening phase, the two researchers will independently evaluate the full-text articles to determine if they meet the inclusion / exclusion criteria, thereby determining their inclusion in the review.

When disagreement occurs between the two researchers, full text articles will be reviewed again and further discussion will be conducted to ensure consistency between the researchers, and validation by a third researcher may be sought until consensus is reached.

If necessary, contact will be made with the authors of the primary studies to obtain further information or clarification on the data or even to obtain the article in full text format.

As for reference list studies, these will be identified, then the title and abstract will be analyzed, and then the full text will be analyzed. All who meet the eligibility criteria will be included in the review.

• **Data extraction -** Data will be extracted from full-text articles that meet the inclusion criteria, using an instrument created by the reviewers (Appendix I), following the model proposed by the Joanna Briggs Institute[17] and aligned with the objective and the questions of the review. Data to be extracted from the studies include author(s), year of publication, country, study objective(s), study design, participants, characteristics of the programs/interventions implemented, data collection instruments used, main results and barriers/facilitators.

This process of extracting data from full text articles will be carried out by two independent researchers using the instrument created for this purpose (Appendix I). Discrepancies in this process of data extraction will be discussed between the two researchers until consensus is reached and /or with the use of a third researcher if necessary.

• **Presentation of the results -** The *scoping review* we pretend to carried out It aims to aggregate and summarize the results of the literature on programs/interventions to promote mental health literacy in

adolescents in the school context, as well as to present an overview of the research developed in this area, so that the quality analysis of the articles individually is not an objective at this time and as such this assessment will not be made in this review.

The data obtained in the previous step will be compiled into a single table using Microsoft Excel® software for validation and coding.

It is intended to use a PRISMA flowchart to report the final numbers of the study selection process, as well as tables and graphs to present the main results of this review in a more visual way, as appropriate.

The main results of this scoping review will be summarized through a narrative description of the themes that emerge from the extracted data. Data will be discussed in the light of relevant theories, possible gaps found in the literature will be addressed and, consequently, suggestions will be made for future nursing research studies in the areas that require further investigation.

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APPENDIX I: Instrument for Extracting Data from Review Articles

Scoping Review Details	
Title	
Goal(s)	
Review questions	
Inclusion criteria	
Participants	
Concept	
Context	
Types of Studies	
Study and Program/Intervention Details	
Detailed citation of the study (author/s, date, title, journal, volume, issue, pages)	
Country	
Goal(s) of the study	
Types of Study	
Program/intervention name	
Goal(s) of the program/intervention	
Participants of the program/intervention	
Implementation context	
Duration and frequency of the program/intervention	
Description of the program/intervention	
Evaluation instruments used	
Main Outcomes	
Barriers and Facilitators	
Reference List	
Other studies of interest for review indicated in study reference list	

Publicação 2 – Artigo 1: Promotion of Mental Health Literacy in Adolescents: A Scoping Review

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Review

Promotion of Mental Health Literacy in Adolescents: A Scoping Review

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Abstract: In recent years, there has been an important commitment to the development of programs to promote mental health literacy (MHL) among adolescents, due to the prevalence of mental health problems and the low level of MHL that affects this group. The aim of this study was to map the structure and context of programmes/interventions for promoting MHL among adolescents in school settings. A scoping review was conducted following the guidelines of The Joanna Briggs Institute. We searched for studies on programmes/interventions promoting at least one of the components of MHL of adolescents, written in Portuguese, English or Spanish, published from 2013 to 2020, in MEDLINE, CINAHL Plus with Full Text, SciELO, SCOPUS, OpenGrey, RCAAP and in the article reference lists. This review included 29 articles. The majority of programmes/interventions addressed one or more of the four components of MHL, with the knowledge of mental disorders and stigma reduction components being the most covered; were taught by adolescent's regular teachers; used face to face interventions; had a height variable duration; used non-validated instruments; were implemented in a classroom environment; and showed statistically significant improvements in adolescent's MHL levels. More research is needed to implement/construct programmes/interventions promoting adolescents' MHL concerning knowledge on how to obtain and maintain good mental health.

Keywords: adolescent; health literacy; health promotion; mental health; schools

check for updates

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1. Introduction

The world is currently facing a very challenging public health problem: the significant prevalence of mental health problems in the general population and adolescents and young people [1,2], as well as their low/moderate levels of mental health literacy [3–5].

Mental health problems account for 12% of illnesses worldwide, and in developed countries, the figure rises to 23% [6]. As far as children and adolescents are concerned, around 10–20% are affected by these types of problems worldwide [7,8], with most of these problems onsetting during early adulthood and adolescence [9]. The first episode may occur before the age of 14 [8], with about half of the cases that appear throughout life appearing to settle at this age, as reported by Kessler's study in 2005 [10].

The literature so far shows us that the levels of mental health literacy (MHL) of the general population and adolescents have been progressively increasing but are still at low/moderate levels [3–5]. This contributes to the absence of help seeking by adolescents, affects their development and increases the risk of psychiatric disorders recurring [11–13].

The concept of MHL is not recent. It emerged in the late 1990s through the investigations of Jorm and colleagues [14]. They defined it as the knowledge and beliefs about

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mental disorders that aid their recognition, management and prevention. Since then, researchers worldwide have shown a growing interest in this phenomenon (MHL), leading to the evolution of the definition of the concept. Currently, MHL refers to the knowledge and skills needed to foster mental health [15]. MHL has four components: understanding how to achieve and maintain good mental health, understanding mental disorders and their treatments, decreasing the stigma related to mental disorders and increasing the effectiveness of help seeking [16,17].

In this review, we adopted the WHO definition of mental health [18], which conceptualizes it as something more than the absence of disease; rather, it considers that it "is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community" (p. 38). Another concept that is important to define is mental disorders, which encompasses several mental problems "generally characterized by some combination of abnormal thoughts, emotions, behaviour and relationships with others" [18] (p. 38). Regarding stigma, in this review, it is understood as "a mark of shame, disgrace or disapproval which results in an individual being rejected, discriminated against, and excluded from participating in a number of different areas of society" [19] (p. 18). We consider that the concept of help seeking "is an adaptive coping process that is the attempt to obtain external assistance to deal with a mental health concern" [20] (p. 180), including formal (health professionals, etc.) or informal sources (friends, family, etc.), encompassing not only the self-help strategies but also the first aid skills to support others [15]. It is also important to clarify that in this review, the authors consider that knowledge on achieving/maintaining good mental health comprises how to prevent mental disorders and promote mental health, such as having stable friendships and family support, to sleep enough, practice exercise, think in a positive way, avoid substance abuse, to have meaningful and enjoyable activities and relax [15]. According to the World Health Organization [8], adolescence encompasses all individuals aged between 10 and 19 years. It is the period in the life cycle between childhood and adulthood, characterised by profound physical and mental changes, during which attitudes develop and can still be changed [21,22]. Therefore, adolescence is considered a crucial period of opportunity to promote mental health [18]. Better literacy at a young age has a direct and positive impact on adult life. It enables adolescents to acquire the knowledge and define the attitudes and behaviours that will accompany them in their future lives [7,23]. Specifically, it gives adolescents the ability to positively manage their thoughts and emotions to build healthy social and family relationships, all based on a strong, positive sense of identity. Therefore, without a good level of MHL, adolescents will not develop healthily as they grow to adulthood [7,17], because without the knowledge and skills necessary to prevent the onset of mental disorders and to promote good mental health, these disorders are more likely to set in during adolescence and perpetuate themselves chronically. For this reason, adolescents are a primary target population for the promotion of MHL.

The World Health Organization [18] defined in its Mental Health Action Plan 2013–2020 that one of the objectives to attain at a global level is to implement strategies for the promotion and prevention of mental health problems, highlighting the importance of intervening not only on the needs of people with defined mental disorders but also on the protection and promotion of the mental health of all citizens. One such strategy is mental health literacy.

Given the significant prevalence of mental health problems in adolescence and low/modest levels of MHL, there is a need to explore the currently available evidence regarding programmes/interventions to promote MHL among adolescents. To this end, we chose to perform a scoping review which we considered to be the most appropriate methodology, given the objective of this type of review: to map the existing evidence in relation to a particular area or topic; to assess the reliability, relevance and potential costs of conducting a systematic literature review; to provide a synthesis of research findings and disseminate them; and to identify potential gaps in the existing literature [24–27].

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After a preliminary survey was conducted in September 2019 in the JBI Database of Systematic Reviews and Implementation Reports, the Cochrane Database of Systematic Reviews, the CINAHL and in MEDLINE (via EBSCO); two systematic reviews of the literature were found in this area [23,28]. The systematic review by Wei et al. [28] included 27 articles published between 1988 and 2010. The authors concluded that there is little evidence of the effectiveness of programmes promoting MHL in schools. However, the interventions studied seemed promising as they showed positive results in the three outcomes studied (knowledge, attitudes/stigma and help-seeking behaviours). Concerning the systematic review by Morgado and Botelho [23], this included three studies, published between 2008 and 2012, with the authors concluding that cognitive–behavioural intervention, psycho–educational intervention and educational intervention are promoters of MHL and that school is the best means for promoting MHL, leaving as a future recommendation the importance of developing interventions in this area that are previously validated through pilot studies and then implemented more comprehensively.

Because in recent years, investment in developing programmes promoting MHL in adolescents has taken place, we felt the need to carry out this new scoping review to explore the existing evidence, from 2013, regarding adolescents' MHL-promoting programmes/interventions, and to understand the characteristics of these programmes and the barriers/facilitators to their implementation, seeking to include published and unpublished studies.

This scoping review aims to map the structure and context of programmes/interventions for promoting MHL among adolescents in school settings, both at the level of published academic literature and grey literature.

The following primary research question was formulated to guide this study:

- What are the programmes/interventions for promoting MHL among adolescents in school settings?

In addition to this, the following secondary research questions were posed:

- What are the characteristics of the programmes/interventions for promoting MHL among adolescents highlighted in the literature?
- In what settings/contexts are these programmes/interventions carried out?
- What are the barriers and facilitators to the implementation of these programmes/interventions?

2. Materials and Methods

This scoping review follows the guidelines of The Joana Briggs Institute [26,27]. We used the checklist PRISMA-ScR (Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews) for writing the review report [29].

The scoping review protocol was registered in the Open Science Framework on 10 November 2019 and is available for consultation [30].

2.1. Inclusion Criteria

Taking into account the questions formulated to guide this scoping review and using the PCC strategy—Participants, Concept, Context [26,27]—the following inclusion criteria were defined:

- Participants—articles targeting adolescents aged between 10 and 19 years, without diagnosed mental illness;
- Concept—studies on programmes/interventions for promoting MHL, covering at least one of the components of MHL;
- Context—we accepted studies that included adolescents in a school setting (2nd and 3rd cycles of basic education and secondary education, which corresponds to 5–12th grade), including online intervention and/or face to face intervention.

Concerning the types of studies, published and unpublished primary and secondary studies were included in this review to access a wider range of available information. We included studies written in Portuguese, Spanish or English, since these are languages in

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which the reviewers are proficient. We considered studies published from 2013 to 2020 to have only articles with the most recent evidence.

2.2. Search Strategy

As defined in the guidelines of The Joanna Briggs Institute [26,27], this scoping review was conducted in three stages.

In the first stage, an initial search limited to two electronic scientific databases was conducted (MEDLINE and CINAHL Plus with Full Text), using MESH (Medical Subject Headings) descriptors in the following Boolean phrase: (adolescent * AND 'mental health' AND literacy AND 'health literacy' AND program * AND nursing). This search was followed by an analysis of the terms used in the titles and abstracts of the articles found to identify all relevant terms associated, and to define the final Boolean phrase: (adolescent * AND 'mental health' AND (literacy OR 'health literacy' OR 'mental health literacy') AND (program * OR course * OR intervention *) AND promotion AND school *), where all terms are MESH terms except for 'mental health literacy', course*, intervention * and promotion, which are words from the general language.

It should be noted that, at this stage, we needed to introduce two small changes to what we had planned in the protocol of this scoping review. Specifically, we had to remove the term 'nursing' from the search strings since we found in the various search attempts that it could be reductive to the search, since we were exploring the existing programmes/interventions. The other change was to add four natural language terms suggested by the databases consulted (mental health literacy, course, intervention and promotion).

In the second stage, we searched the electronic scientific databases MEDLINE, CINAHL Plus with Full Text, SciELO, and SCOPUS, using the final Boolean phrase defined in the previous step: (adolescent * AND 'mental health' AND (literacy OR 'health literacy' OR 'mental health literacy') AND (program * OR course * OR intervention *) AND promotion AND school *), retrospectively from 1 January 2013 to 31 July 2020. In the electronic repositories OpenGrey (a European repository) and RCAAP (the Open Access Scientific Repository of Portugal), the search was carried out using a shorter Boolean phrase: adolescent * AND 'mental health' AND school *, using the same period, and MESH and DECS (Descriptors in Health Science) terms as descriptors. The search in both databases and repositories was conducted in December 2019 and updated in August 2020 (Tables 1 and 2).

In the third stage, the reference lists of all articles included in the second stage were analysed, and additional relevant articles were identified and included in this scoping review.

Table 1. Studies obtained by search term and electronic database.

Search	CINAHL Plus with Full Text	Medline	SciELO	Scopus
S1: adolescent *	139,077	2,112,677	18,767	2,304,095
S2: "mental health"	145,021	279,261	10,078	331,070
S3: literacy	21,227	23,359	2542	88,214
S4: "health literacy"	7534	10,829	478	15,027
S5: "mental health literacy"	511	776	48	1146
S6: program *	511,350	1,398,162	65,511	3,505,488
S7: course *	122,063	616,864	19,770	1,511,044

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Table 1. *Cont.*

Search	CINAHL Plus with Full Text	Medline	SciELO	Scopus
S8: intervention *	458,783	1,024,234	32,994	1,467,357
S9: promotion	102,071	184,606	10,507	296,991
S10: school	173,702	4,315,891	32,732	1,182,107
S11: (S3 OR S4 OR S5)	21,227	23,359	2542	88,214
S12: (S6 OR S7 OR S8)	971,745	2,791,998	106,869	6,065,802
S13: (S1 AND S2 AND S11 AND S12 AND S9 AND S10)	18	42	34	34
With time limiter 2013–2020	16	36	20	27

* Search term with truncation.

Table 2. Studies obtained by search term and repository.

Search	RCAAP	OpenGrey
S1: adolescent *	13,879	4001
S2: "mental health"	3081	1948
S3: school	13,587	23,518
S4: (S1 AND S2 AND S3)	4	17
With time limiter 2013–2020	4	1

Abbreviations: RCAAP, the Open Access Scientific Repository of Portugal. * Search term with truncation.

2.3. Selection of the Studies

The studies obtained were imported and processed using the bibliographic reference management software Mendeley Desktop® version 1.19.4. (Elsevier, Amsterdam, Netherlands) and Microsoft® Excel 365 (Microsoft Corporation, Redmond, WA, USA).

The selection process consisted of two levels of screening of the articles obtained: (1) a review of the title and abstract and (2) a review of the full text.

The article selection process was carried out independently by two researchers, considering the previously defined eligibility criteria. In situations of disagreement between the researchers, the intervention of a third researcher was requested to reach a consensus. The full text was reviewed in cases in which the title and abstract did not contain sufficient information for an adequate decision.

2.4. Data Extraction

Data were extracted from the articles with a full-text format that met the inclusion criteria, using an instrument created by the reviewers (Appendix A, Table A1), according to the model proposed by The Joanna Briggs Institute [26,27] and aligned with the objectives and questions of the review. Data extracted from the articles were as follows: author(s), year of publication, country, objective(s) of the study, study design, participants, characteristics of the programmes/interventions implemented, data collection instruments used, main outcomes and barriers/facilitators. Any disagreements between the reviewers were resolved through discussion or with the use of a third-party investigator.

3. Results

In the beginning, 104 articles were found in the search in the four databases and the two repositories consulted. After removing the duplicates and applying all the procedures, 29 articles were obtained. The results of the article selection process are summarised in Figure 1 in a PRISMA diagram [31].

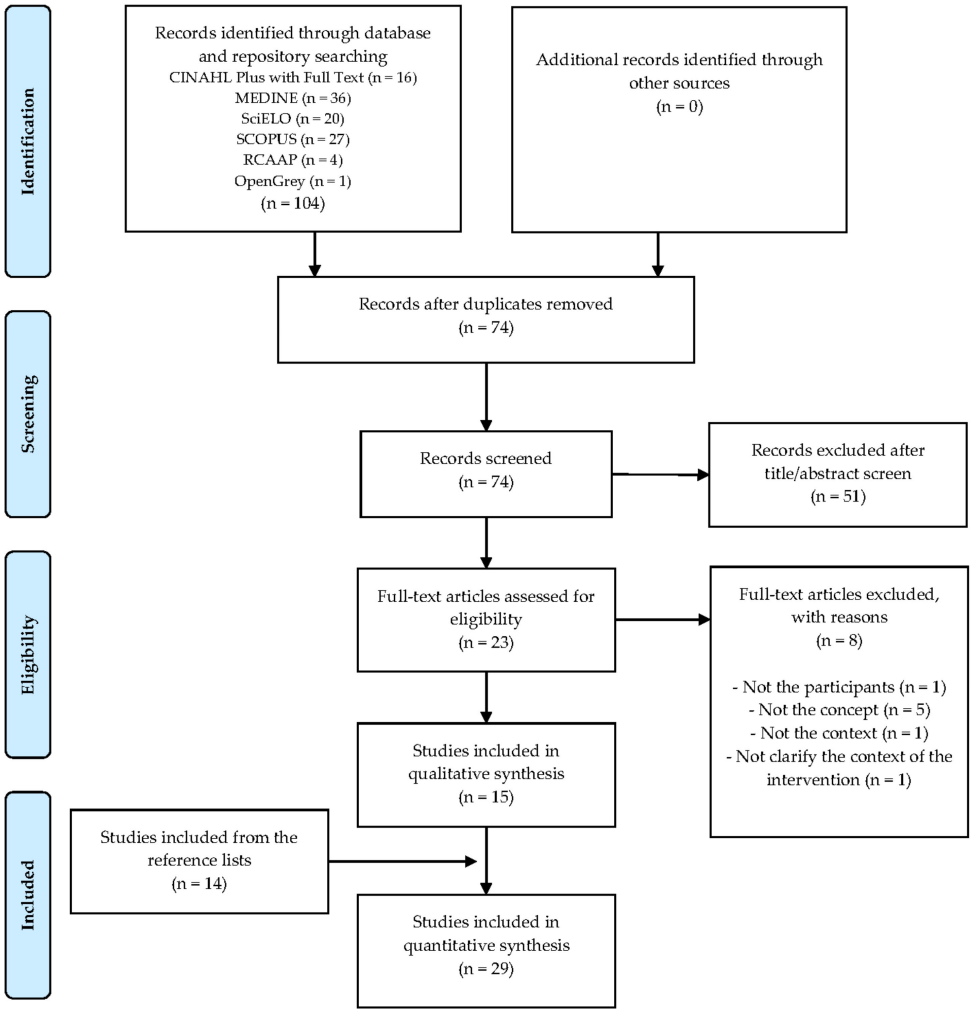

Figure 1. Article search and selection process—PRISMA diagram.

The list of included studies and the description of their characteristics are shown in Table S1 (Supplementary Material). The studies included according to the components of MHL are in Table 3.

The articles included in the review were published from 2013 to 2020. Seven articles were published in 2016, five articles in 2014, five articles in 2018, four articles in 2015, three articles in 2013, two articles in 2019, two articles in 2020 and one article in 2017.

Of the 29 articles included, twelve were experimental studies (of which two were study protocols and two were pilot studies), nine were quasi-experimental studies (two of which were pilot studies), three were descriptive articles, two were secondary analyses, two were systematic reviews of the literature and one was a mixed study (pilot study).

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Table 3. List of studies included in the review according to the components of MHL.

Author (s), Year	Country	Component: Knowledge Good MH	Component: Knowledge MH Disorders	Component: Stigma	Component: Help Seeking
Lubman et al. (2016) [40]	Australia		✓		✓
Yang et al. (2018) [57]	USA			✓	
Campos et al. (2014) [22]	Portugal		✓	✓	✓
Eschenbeck et al. (2019) [41]	Germany		✓		✓
Bella-Awusah et al. (2014) [34]	Nigeria	✓	✓		
Lindow et al. (2020) [48]	USA		✓	✓	✓
Hui et al. (2019) [49]	China		✓	✓	
Perry et al. (2014) [42]	Australia		✓	✓	
Casañas et al. (2018) [32]	Spain	✓	✓	✓	✓
Ojio et al. (2020) [53]	Japan		✓	✓	✓
Kutcher, Bagnell & Wei (2015) [36]	Canada	✓	✓	✓	
Mcluckie et al. (2014) [38]	Canada	✓	✓	✓	
Gonçalves et al. (2016) [55]	Portugal			✓	
Santos et al. (2013) [37]	Portugal	✓	✓	✓	
Campos et al. (2018) [43]	Portugal		✓	✓	✓
Mellor (2014) [59]	UK			✓	
Hart et al. (2016) [50]	Australia		✓	✓	✓
Hart et al. (2018) [44]	Australia		✓	✓	✓
Swartz et al. (2017) [45]	USA		✓	✓	
Schilling et al. (2016) [46]	USA		✓	✓	✓
Kutcher, Wei & Morgan (2015) [39]	Canada	✓	✓	✓	
Milin et al. (2016) [33]	Canada	✓	✓	✓	
Chisholm et al. (2016) [47]	UK		✓	✓	✓
Ojio et al. (2018) [51]	Japan		✓		✓
Ojio et al. (2015) [52]	Japan		✓		✓
Skre et al. (2013) [35]	Norway	✓	✓	✓	✓
Gonçalves et al. (2015) [56]	Portugal			✓	
Salerno (2016) [54]	USA		✓	✓	✓
Martínez-Zambrano et al. (2013) [58]	Spain			✓	

Abbreviations: MH, mental health; MHL, mental health literacy; UK, United Kingdom; USA, United States of America.

3.1. Component—Knowledge on Achieving/Maintaining Good Mental Health

Of the eight articles addressing knowledge on how to obtain/maintain good mental health, two were experimental studies [32,33], two were quasi-experimental [34,35], two were descriptive articles [36,37] and two were secondary analyses [38,39].

The participants in the programmes/interventions were adolescents aged 10 to 18 years. In five of those programmes, the adolescents were aged ≤14 years.

The duration of the programmes/interventions in these eight studies ranged from a single 3 h session to multiple sessions that could run up to a total of approximately 24 h.

The assessment instruments used were mostly developed by the authors of the programmes/interventions (n = 4), followed by the combined use of validated instruments with instruments developed by the authors (n = 2) and the use of validated instruments (n = 1). One of the studies did not mention the instruments used.

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After examining the assessment moments, we found that all the studies assessed the programmes/interventions at baseline (n = 8), five performed the assessment immediately after, one (n = 1) performed the assessment after 2 weeks and one (n = 1) performed the assessment after 3 months. A follow-up stage was mentioned in five studies. Two studies implemented a follow-up at 2 months, two studies at 6 months and one study at 6 and 12 months.

Regarding the results, all studies referred to increased knowledge, but upon close examination, they only assessed knowledge about mental disorders.

It is worth noting that four of these articles referred to the same programme ("The Guide") implemented in the same country (Canada). Still, the samples were different in terms of the ages of the participants or the country's regions.

3.2. Component—Knowledge about Mental Disorders and Their Treatments

Twenty-four articles addressed programmes/interventions that aim to promote knowledge about mental disorders and their treatments, of which ten were experimental studies [32,33,40–47], seven were quasi-experimental studies [34,35,48–52], three were descriptive articles [36,37,53], two were secondary analyses [38,39], one was a mixed study [22] and one was a systematic literature review [54].

The participants in these programmes/interventions were adolescents whose ages ranged from 10 to 18 years, with most studies targeting adolescents aged 14 years or younger.

Regarding the programme/intervention duration, there was wide variability, from a single 45 min session to multiple sessions. Only two studies did not mention the duration of their programmes/interventions.

The programmes/interventions in this component of MHL used mostly assessment tools developed by the authors (n = 10). Other programmes/interventions used validated instruments (n = 7), or combined validated and own instruments (n = 4). Only three studies did not mention the instruments used.

Three studies did not mention any information concerning the assessment moments. Of the remaining twenty-one, all were assessed at baseline, thirteen were assessed immediately after the intervention, three were assessed after 3 months, two studies were assessed after 2 weeks, two studies were assessed after 1 week and one study was assessed after 6 weeks. The follow-up period was included in thirteen studies, of which four studies at 6 months, three studies at 3 months, two studies at 2 months, two studies at 6 and 12 months, one study at 4 months and one study at 12 and 24 months. It should also be noted that most studies present 3 moments of assessment (n = 10), followed by those with 2 moments (n = 8) and with 4 moments (n = 3).

In terms of the results, most programmes/interventions report increased knowledge about mental disorders and their treatments (n = 18), the results of which are statistically significant, and only one study reports that the increase in knowledge was slight, in which the results are not statistically significant [47]. Some studies that contemplate this category did not refer to the related results (n = 5).

3.3. Component—Reducing Stigma Associated with Mental Disorders

Of the 24 articles that address programs/interventions whose objective is to reduce the stigma, ten were experimental studies [32,33,42–47,55,56], six were quasi-experimental [35,48–50,57,58], three were descriptive articles [36,37,53], two were secondary analyses [38,39], two were systematic reviews of the literature [54,59] and one is a mixed study [22].

The participants of the studies encompassed in this MHL category were aged 10 to 18 years, with most of the studies targeting adolescents aged $\leq$14 years.

The duration of these programmes/interventions ranged from a single 10 min session to multiple sessions, up to 4 months. Only two studies did not mention the duration of their programmes/interventions.

Most studies used validated assessment instruments (n = 10) to assess the programmes/interventions. Other studies used their own instruments (n = 8) or a combination

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of validated and their own instruments (n = 3). Only three studies did not mention the instruments used.

In four studies, the time points of intervention assessment were not mentioned. All the remaining twenty studies assessed the programmes/interventions at baseline. Twelve studies assessed the programmes/interventions immediately after the intervention; three assessed after 3 months, two studies after 2 weeks, two studies after 1 week and one study after 6 weeks. A follow-up period was contemplated in eleven studies. Of these, three studies implemented a follow-up at 6 months, two studies at 3 months, two studies at 2 months, two studies at 1 month and one study at 6 and 12 months.

Most of the programmes/interventions (n = 19) achieved a reduction in the stigma associated with mental disorders, and two studies did not register any change after implementing the programme/intervention. Those two studies were also the ones whose results were not statistically significant [45,57]. Three studies did not refer to the results of this component.

3.4. Component—Help-Seeking

Fifteen articles addressed programmes/interventions that aimed to promote help-seeking, of which seven were experimental studies [32,40,41,43,44,46,47], five were quasi-experimental studies [35,48,50–52], one was a descriptive article [53], one was a mixed study [22] and one was a systematic literature review [54].

The participants in the programmes/interventions were adolescents aged 10 to 18, thirteen of which were aged $\leq$14 years.

The duration of the programmes/interventions promoting help-seeking varied from a single session to multiple sessions. Two studies did not mention the duration of their programmes/interventions.

The programmes/interventions in this component of the MHL used mostly assessment tools developed by the authors (n = 7). Others used validated instruments (n = 4) or the combination of validated and own instruments (n = 2). Two studies did not mention the instruments used to assess this component.

Two studies did not mention any information concerning the assessment moments of the programmes/interventions. All the remaining thirteen studies assessed the programmes/interventions at baseline. Six assessed immediately after the intervention, three assessed after 3 months, two studies after 2 weeks and two studies after 1 week. A follow-up period was included in eight studies. Four studies implemented a follow-up at 3 months, two studies at 6 and 12 months, one study at 12 and 24 months and one study at 6 months. It should also be noted that most studies presented two moments of assessment (n = 6), followed by those with three moments (n = 4) and with four moments (n = 3).

Most programmes/interventions reported increased help seeking (n = 11), the results of which were statistically significant, and only one study showed results that were not statistically significant [47]. Some studies that contemplated this component did not have results available (n = 4).

In general, the following aspects were indicated as barriers to the implementation of the programmes/interventions common to all the MHL components in the articles included: the short duration of the intervention (n = 1), the use of English instead of the native language (n = 1), the difficulty in coordinating the implementation of the programme/intervention with the various stakeholders in the school (n = 1), the programme/intervention interrupting the school curricula (n = 1) and the lack of incentives for the participants (n = 1). On the other hand, the following aspects were mentioned as facilitators: not having to resort to staff from outside the school (n = 6), requiring only existing school resources (n = 4), the programme/intervention being administered as part of the school curriculum (n = 3), students being active agents of the intervention (n = 1), the use of staff from outside the school (n = 1), the use of role-playing rather than direct contact with people with mental illness (n = 1), the inclusion of a quiz at the end of the programme/intervention (n = 1), the incorporation of yoga exercises and postures (n = 1),

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being a concise programme/intervention (n = 1), being a short programme/intervention (n = 1) and being a quick programme/intervention without any associated expenses (n = 1).

4. Discussion

This review provides a comprehensive synthesis of the available evidence on the programmes/interventions promoting MHL in adolescents in school settings.

The first research question of this review intended to know what the programmes/interventions are for promoting MHL among adolescents in school settings. The results of this review show that most programmes/interventions address one or more of the four components of MHL defined by Kutcher, Wei and Coniglio [16]; that is, mental health disorders and problems, signs/symptoms and treatments, myths related to mental illness, non-stigmatising attitudes/behaviours and options/sources for help seeking. However, the programmes/interventions that seek to intervene in the component related to knowledge on how to obtain and maintain good mental health fall short of what is required. Therefore, future research should develop programmes/interventions with a more salutogenic and positive perspective regarding the MHL of adolescents. This scoping review highlights this gap, aligning with what is known from previous research [17].

Regarding the second research question, the objective was to discriminate the characteristics of programmes/interventions that promote MHL among adolescents. Most programmes/interventions targeted adolescents aged $\leq$14 years, thus making an important contribution to preventing the onset of mental health problems at an early age [8].

About half of the programmes/interventions were taught by the adolescents' regular teachers. The rest used staff from outside the school, with only a few being taught by health professionals. These results highlight the need for greater intervention from health professionals, particularly those in primary health care and specifically nurses, who play a decisive role in the community's health [5]. Nurses know the needs and specificities of their community like no one else, and this knowledge enables them to intervene holistically. Considering health professionals' competences and level of expertise, we believe that one of the future options in this field may be a more active intervention by nurses and other health professionals, both in the implementation and administration teams of the programmes that promotes adolescents' MHL, as well as in the teachers' education/training on these programmes/interventions.

In terms of the strategies used, the results show the use of expositive, demonstrative, participative methodologies based on contact (direct or indirect) and/or the supply of information material. These strategies were used in isolation or as complements. In most studies, complementarity proved to be an added value in achieving an increase in the MHL of adolescents. However, one study showed that adding contact with patients with mental disorders did not add value to the educational intervention [47].

The variability of the duration of the programmes/interventions analysed indicates that they may be flexible in terms of time, even though a significant proportion of the analysed programmes/interventions state that the fact that they are of short duration is an advantage because they save resources. However, while it is true that when the aim is to intervene at the level of knowledge and help-seeking behaviour, a short-term intervention is effective, it is also true that when the objective is to act on attitudes, it is probably better to opt for a longer intervention, since attitudes cannot be changed easily, and they need time to be internalised and sedimented at a cognitive, emotional and behavioural level [34]. It is also suggested that in the future, programmes/interventions should have follow-up periods not only in terms of assessments of their short- and long-term effects, as occurred in a significant part of the studies included in this review, but also in terms of booster sessions, as in the study carried out by Lubman et al. [40], as the literature indicates their importance in increasing and maintaining the effects of interventions [60].

None of the reviewed studies used instruments to assess outcomes concerning knowledge about achieving and maintaining good mental health, which is in line with the findings of Wei et al. [9]. Future research should use instruments that assess this compo-

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nent of the MHL or, in its absence, should construct a new one. Furthermore, no study used an instrument that assessed the four components of MHL, probably because no instrument is considered a gold standard for assessing these components together, a situation already detected by Wei et al. [9]. The filling of this gap represents a future research area. Although about half of the programmes/interventions used validated instruments, a significant proportion used non-validated instruments, which compromises the appropriate assessment of results and the possibility of comparing them, a situation also mentioned by Wei et al. [28].

The third research question intended to know in which settings/contexts these programmes/interventions were carried out. Most of the programmes/interventions were implemented in a classroom environment. This fact demonstrates the importance of the school setting in promoting the MHL of adolescents and is in line with the research reported in this area [17,23]. It is also important to mention that the most programmes included in this scoping review consist of face to face interventions, only two programmes encompass online interventions ("EspaiJove.net" e "The Guide and MyHealth Magazine") [32,36] and only one compares the same programme in its face to face version with the online version ("StresSOS") [41]. Both "EspaiJove.net" [32] and the "StresSOS" [41] programmes do not have results yet because they are study protocols, but "The Guide and MyHealth Magazine" [36] already has results and they indicate improvements in the adolescents' MHL when combining face to face and online interventions. However, we believe that in the future, more studies will be needed to compare both interventions and gather more evidence.

Finally, regarding the fourth research question, the objective was to know the barriers and facilitators to the implementation of these programmes/interventions. The results obtained indicate that the main barriers to implementing the programmes/interventions are the difficulty of coordination with the various school stakeholders, the interruption of school curricula and the lack of incentives for participants. The main facilitators were the programmes/interventions being part of the school curriculum, not depending on resources outside the school and using interactive methodologies. These aspects should be considered when implementing future interventions so as not to compromise their effectiveness.

Although this scoping review followed The Joanna Briggs Institute guidelines to maintain methodological and scientific rigour and was conducted by two independent researchers, it is possible to identify some limitations. First, the search was limited to articles published in Portuguese, English, or Spanish, which may have meant that important articles written in other languages were not included. Second, the quality of the included articles was not assessed, a situation inherent to the methodology of a scoping review, which prevents the presentation of recommendations for clinical practice. Thirdly, the fact that the original authors were not contacted to obtain information missing from the articles may have led to an inaccurate interpretation of the studies. Fourth, the fact that no studies were included in the scope of other areas (e.g., social sciences, etc.), nor articles with programmes implemented in contexts other than schools, is also a limitation.

5. Conclusions

The results of this review allow us to identify programmes/interventions that promote the MHL of adolescents, as well as to provide clues about some of the characteristics that such programmes/interventions should have, about some of the barriers and facilitators to their implementation and, finally, about the gaps found in this research area.

Although most of the analysed studies have apparently shown positive results in promoting the MHL of adolescents in school settings, these results are difficult to interpret and compare due to the lack of use of validated instruments and the great variability of the assessment instruments used.

Future research should be conducted to harmonise programmes/interventions that aim to promote each of the components of MHL, and MHL holistically in the adolescent population. To this end, further experimental or quasi-experimental studies should be carried out to obtain the best possible evidence, using validated assessment tools and

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including follow-up periods. Interventions should focus on adolescents aged ≤14 years; could be of short duration if the aim is to increase knowledge or help seeking, or of longer duration if the objective is to intervene at the level of adolescents' attitudes/stigma; may include 'booster' sessions to reinforce and maintain the levels of MHL; should take place in the classroom; use complementary expository and interactive strategies; and have a more active intervention from health professionals.

We should focus on the implementation or construction of programmes/interventions that promote knowledge on how to obtain/maintain good mental health and the use or construction of instruments that assess this component of MHL, whose importance is currently being increasingly recognised by research.

Supplementary Materials: The following are available online at https://www.mdpi.com/article/10.3390/ijerph18189500/s1, Table S1: Characteristics of the articles included (n = 29).

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Instrument for extracting data from the reviewed articles.

Scoping Review Details
Title
Aim(s)
Research Questions
Inclusion Criteria
Population
Concept
Context
Study designs
Study and Program/Intervention Details
Detailed study quote (author/s, date, title, journal, volume, number, pages)
Country
Aim(s) of the study
Type of study
Programme/intervention name
Aim(s) of the programme/intervention
Participants of the programe/intervention

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Table A1. *Cont.*

Study and Program/Intervention Details
Implementation setting
Duration and frequency of the programme/intervention
Description of the programme/intervention
Assessment tools
Main outcomes
Barriers and Facilitators
References List
Other studies of interest for the review indicated in the study reference list

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Table S1. Characteristics of the articles included (n = 29).

Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Lubman et al (2016)	Australia	Adolescents aged 14-15 years (Year-9 students)	Study protocol: Cluster Randomized Controlled Trial	*MAKINGtheLINK* is a universal school-based intervention to facilitate help-seeking for substance use and mental health problems, by improving the mental health literacy of young people. Education on recognition when a friend needs help (vignettes), on types of helpers available, on myths and facts about substance use and mental health, on identifying and overcoming barriers to professional help-seeking, assisting a friend to access help and on accessing reliable sources of help. Activities consists in provide information and also videos for skill rehearsal during the classroom. It was delivered by an experienced external facilitator with the assistance of the regular classroom teacher.	5 interactive classroom activities run over 2 school periods (average period is 75 minutes), plus a booster session 1 month later	All students will complete a self-report questionnaire at baseline, immediately post intervention and 6- and 12-months post baseline: - Demographic information - Depression Anxiety Stress Scales (DASS-21) - Australian Secondary School Students Alcohol and Drug (ASSAD) Survey - General Help Seeking Questionnaire (GSHQ-V) - Actual Help Seeking Questionnaire (AHSQ) - 5-point Likert scale to measure the Confidence to seek help and the Confidence to seek help for a peer - Barriers to Adolescents Seeking Help questionnaire (BASH-B)	Not available	Not available
Yang et al (2018)	USA	A cohort of 7th and 8th grade at-risk students (n = 14)	Pilot study: Quasi-experimental	*Integrated Science Education Outreach (InSciEd Out)* is a school-based anti-stigma intervention in mental health to improve attitudes and downstream behaviors toward mental illness through addressing mental health literacy. It is an education curriculum in mental health: biogenetic explanations of mental illness, his social and cultural context; elaboration of mental health research projects; data analysis; and creation of mental health promotion art in the science, math and language arts classes.	20-day anti-stigma classroom experience	Student surveys were administered pre–post intervention: - Westbrook Mental Health Knowledge Test (WMHKT) - Adolescent Attribution Questionnaire (AQ-8-C) - General Help-Seeking Questionnaire Vignette Version (GHSQ-V) - Teacher's exit interviews	- Slight gains in mental health literacy - Moderate improvements in help-seeking intentions - Large decreases in mental health misconceptions - Potential feasibility and acceptability of curricular-based, anti-stigma mental health interventions for at-risk youth	**Facilitators:** - Students are encouraged to be active creators rather than passive consumers of knowledge

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Campos et al (2014)	Portugal	Adolescents aged 12-14 years (7th, 8th and 9th grade students) (n=70)	Pilot study: - Qualitative study - Quasi-experimental	*Finding Space to Mental Health* is a school-based intervention to promote mental health literacy in young people (12-14 years old). Education on knowledge and beliefs about mental health/mental illness; on mental health problems (signs, impact, risk factors); on depression, anxiety, anorexia, schizophrenia (signs and symptoms); on non-stigmatized behaviours towards mental health disorders; on help-seeking options; on first aid skills towards people with mental health problems; and on self-help strategies. In both sessions were adopted interactive methodologies such as group dynamics, videos and music. The intervention was delivered by a trained psychologist.	2 sessions (90 minutes each), implemented with one-week interval	Student surveys were administered pre–post intervention: - Mental Health Literacy questionnaire (MHLq)	- Significant increase on knowledge, First Aid skills and help seeking, and self-help strategies on post-intervention - The intervention showed itself to be adequate to promote mental health literacy in young people.	Unknown
Eschenbeck et al (2019)	Germany	Children and adolescents older than 12 years (6th to 13th grade)	Study protocol: Randomized controlled trial (RCT)	*StresSOS* is an Internet-based version of a universal school-based health promotion program that aims to improve stress management and mental health literacy in children and adolescents. Education on coping skills (problem-solving, cognitive reconstruction, relaxation techniques, seeking support); on the connection between thoughts, feelings, and behaviors, and on concepts about mental health/illness and help-seeking. Compares online intervention with face-to-face intervention: the *StresSOS* face-to-face program (classroom-based intervention), the *StresSOS* online program (from their computer at home) and the online control intervention (program for healthy nutrition).	8 weekly sessions	The surveys were administered at baseline, post intervention and some of them at 12- and 24-months post baseline: - Sociodemographic information - Psychopathology (SDQ; SEED; WCS; PHQ-A) - Alcohol misuse (CRAFFT-d; AUDIT) - Help-seeking (GHSQ; AHSQ; IATSMHS; BASH-B; MRV) - KIDSCREEN-10 - Knowledge about stress/coping, mental health (developed by authors) - Stress symptoms, coping (SSKJ 3-8R) - Self-esteem (SEKJ) - Questionnaire on Social Distance - Standardized Assessment of Personality - Abbreviated Scale (SAPAS) - Program acceptance (developed by authors)	Not available	Not available

Abbreviations: SDQ, Strengths and Difficulties Questionnaire; SEED, Short Evaluation of Eating Disorders; WCS, Weight Concerns Scale; PHQ-A, Patient Health Questionnaire-9 modified for Adolescents; CRAFFT-d, Car, Relax, Alone, Forget, Friends, Trouble questionnaire; AUDIT, Alcohol Use Disorders Identification Test; GHSQ, General Help-Seeking Questionnaire; AHSQ, Actual Help-Seeking Questionnaire; IATSMHS, Inventory of Attitudes Toward Seeking Mental Health Services; BASH-B, Barriers to Adolescents Seeking Help Scale; MRV, Mannheimer Modul zum Ressourcenverbrauch; KIDSCREEN-10, Health-related quality of life; SSKJ 3-8R, Stress and Coping Questionnaire for Children and Adolescents; SEKJ, Self-Esteem for Children and Adolescents.

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Bella-Awusah et al (2014)	Nigeria	Students in junior secondary school 2 (Year 8) and senior secondary 1 (Year 10) aged between 10 and 18 years (n = 154) Intervention Group: n = 78 Control Group: n = 76	Quasi-experimental two group pre-test/post-test control group design	Mental health teaching programme is a school based mental health awareness programme aimed at increasing mental health literacy and reducing negative views about persons with mental illness. Awareness and education on mental health problems (signs and behaviours), on limitations of people with mental health problems, on help-seeking options to support peers, on self-strategies to support their mental health problems and/or to maintain a good mental health. It was used group discussions and brief presentations. The intervention was delivered by the authors of the programme.	A single three-hour session	Students completed a questionnaire before the session started, immediately after the session and at 6 months after: - A modified version of the UK Pinfold questionnaire - 5 factual statements about myths and beliefs surrounding mental illness (developed by authors) - 1 attitude statement (developed by authors)	- An increase in students' knowledge - Slight decrease in attitude scores in post-intervention period, but returned to baseline in the follow-up - Slight increase in social distance scores - This programme produced significant changes only in students' knowledge but not in attitudes and social distance. - Feasibility of the programme in the students	**Barriers:** - The duration of the training which was very short - The use of the English as language of delivery of the sessions (not the native language)
Lindow et al (2020)	USA	Students from 11 schools: 7th, 8th, 9th, 10th, 11th and 12th grades (n = 1,878 in 78 total classes)	An uncontrolled, pre-test/post-test design	*The Youth Aware of Mental Health (YAM)* intervention is a universal, school-based mental health promotion and suicide primary prevention intervention for adolescents. Awareness of mental health about suicide risk and protective factors (depression, anxiety and social support). Education on skills, knowledge and emotion awareness to face stressful life events. Key themes: awareness of mental health, self-help advice, stress and crisis, depression and suicidal thoughts, helping a troubled friend, and information about mental health resources/help seeking. It was used 3 role-play sessions, 2 mental health interactive lectures, an information booklet and 6 posters.	Five 50-minute sessions over the course of 3 or 5 weeks	Students completed surveys before and 3 months post intervention: - Four questions on help seeking behaviors related to depression and suicidal ideation were adapted from the ongoing RCT of YAM being conducted by the YAM originators in Sweden - General Help Seeking Questionnaire (GHSQ) - Two mental health literacy scales, with 17 total items, were adapted from a randomized controlled trial of YAM currently being conducted in Stockholm Sweden - The first four items from the Reported and Intended Behavior Scale - Seven questions based on a vignette depicting an adolescent, "John," experiencing depression with suicidal ideation	- Significantly increase of mental help seeking behaviors - Improve of mental health literacy - Decrease of mental health-related stigma - It did not affect help-seeking intent - YAM is a promising mental health promotion intervention	**Facilitators:** - The use of non-school personnel (certified facilitators and helpers) to deliver de YAM, promoted an openly discuss with students without fear or shame.

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Hui et al (2019)	China	Adolescents aged 12-17 years (7th -12th grade students) (n = 4520)	Quasi experimental pre-test/post-test	*The School Tour* is an interventional programme, developed by the Early Psychosis Foundation (EPISO), to direct young people's attention to the important issue of stigma towards psychosis. Awareness and education on psychosis (symptoms, prognosis and treatment) and self-help strategies to improve student's concentration/interest in learning and also to reduce psychotic symptoms. It was used a drama performance (by professional actors), a presentation/talk and an exercise demonstration (FITMIND dance and yoga gestures)	1hour	Students completed a questionnaire before and after the session: - Knowledge about Schizophrenia Test (KAST) - 8 attitude statements towards the illness (developed by authors)	- Improve of knowledge about psychosis (mental health literacy) - Improve of attitude towards psychosis (stigma) - Effectiveness of The School Tour programme	Facilitators: - The use of drama performance about true patient's stories instead of real contact with psychotic individuals - The inclusion of a quiz after the presentation - The incorporation of exercises and yoga
Perry et al (2014)	Australia	Secondary school students in Year 9 or 10 (aged 13-16 years) (n = 380)	Cluster Randomized Controlled Trial	*HeadStrong* is a universal, curriculum-based educational program. Education on mental health and wellbeing concepts, values, perceptions, the dynamic nature of mental health, stigma, mood disorders, help-seeking, how to support a friend/colleague if he/she is experiencing mental health difficulties, self-strategies to boost mental health and prevent mental health problems (build resilience and exercise the mind) and propose/develop/implement local actions to raise awareness and dispel myths toward adolescent's mental health issues. It was used a booklet, slideshow and activities implemented in the classroom by the teacher (they participated in a program training previously).	10 hours of class time in total, for 5-8 weeks	Students were assessed pre- and post-intervention, and at 6-month follow-up: - Depression Literacy Scale (D-Lit) - Depression Stigma Scale (DSS) - Inventory of Attitudes towards Seeking Mental Health Services (IASMHS) - Depression Anxiety and Stress Scales (DASS-21) - Moods and Feelings Questionnaire (MFQ)	- Improve of mental health literacy - Reduce of stigma toward depression - It did not have impact on attitudes towards help-seeking neither on psychological distress or suicidal ideation - *HeadStrong* is an effective program in improve mental health literacy and reduce stigma	Unknown

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Casañas et al (2018)	Spain	Adolescents aged 11-18 years (secondary school students)	Study protocol: Cluster Randomized Controlled Trial	*EspaiJove.net* (a space for mental health) is a universal school based-intervention programme to promote mental health, prevent mental disorders, facilitate help-seeking behaviours and eradicate related stigma. Education on mental health wellbeing, help-seeking behaviours, consequences of risk behaviours, mental health disorders, prevention and early detection of mental health-related problems, and on mental health-related stigma. It will be use taught classes, training activities (website www.espaijove.net and online consultation) and contact with a person who had experienced mental illness firs-hand. The programme will be delivered by trained mental health nurses through workshops run in the classrooms.	14 hours in total (1 hour/ week) total of 6 modules	Students will be assessed at baseline, and at 2 weeks, 6- and 12-months after the intervention: - Socio-demographic information - EspaiJove Mental Health Literacy Test (EMHLT) (developed by authors) - Reported and Intended Behaviour Scale (RIBS) - The Scaling Community Attitudes toward the Mentally Ill (CAMI) - Short questionnaire to evaluate the acceptability and satisfaction of interventions (developed by authors) - Strengths and Difficulties Scale (SDQ) - States of Change Scale (SCS) - Four yes/no questions to evaluate Bullying and cyber-bullying behaviours (developed by authors) - The EuroQol 5D-5 L questionnaire (EQ-5D-5 L) - Spanish version of the General Help-Seeking Questionnaire (GHSQ) - Health Benefits Questionnaire	Not available	Not available
Ojio et al (2020)	Japan	Adolescents aged 15-18 years (10th -12th grades - High School students)	Descriptive paper	*The new Course of Study* is a school-based mental health education programme to promote the acquiring of the correct knowledge about mental illnesses and the utilization of the knowledge. Education on mental illness (mechanism, prevalence, onset age, risk factors, symptoms, treatment), self-help strategies to prevent/ recover from mental illness, help seeking, helping behaviour and mental health-related stigma. It will be use animated films, videos with filmed social contact with adolescents with mental health problems, and educators' manuals. Will be delivered by teachers of health and physical education.	Unknown. Will be effective from 2022.	Unknown	Not available	Not available

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Kutcher, Bagnell & Wei (2015)	Canada	High School Students and teachers	Descriptive paper	Two complementary mental health literacy approaches: 1) *The Guide (The Mental Health and High School Curriculum)* is a resource to support curricula across Canada. Education on stigma of mental illness, mental health and wellness, specific mental illnesses, experiences of mental illness, seeking help and finding support, and on the importance of positive mental health. It is use animated videos, first voice videos, digital story-telling videos, PowerPoint® slides, in-class handouts, and Web-linked resources. The intervention is delivered by the students' usual teachers. 2) *MyHealth Magazine* is a resource that provides online interactive health and mental health programming and materials for students and educators to increase mental health literacy, improve coping strategies, and facilitate help seeking in young people. Information about health and mental health updated every week. Includes questions and answers (with topic search feature), pop-up quizzes (eg, stress quiz), and how-to sheets (eg, how to talk to your parent about a problem). Was created a phone application version.	Between 8 and 12 hours (Total duration of in-class intervention – 6 modules)	Unknown	Based on 2 quasi-experimental studies and 1 RCT: *The Guide*: - Improve of students and teacher's mental health literacy - Improve of self-reported help-seeking *MyHealth Magazine*: - High percentage of student's access - Might satisfaction rating of Website from students and schools	**Facilitators:** - This approach builds on existing school ecologies with 3 common elements: teachers, students, and curriculum
Mcluckie et al (2014)	Canada	Students in 9th grade in high schools (n=265)	Secondary cross-sectional survey analysis	*The Guide* (The Mental Health and High School Curriculum) is a resource to support curricula across Canada. Education on stigma of mental illness, mental health and wellness, specific mental illnesses, experiences of mental illness, seeking help and finding support, and on the importance of positive mental health. It was used didactic instruction, group discussion, group activities, self-directed learning and video presentations. The intervention was delivered by the students' usual teachers.	Total of 10/12 hours of class time	Students were assessed pre- and post-intervention, and at 2-month follow-up: - Knowledge and attitude survey (developed by authors)	- High improvement in knowledge - Decrease in stigmatizing attitudes toward mental disorders/illness	**Facilitators:** - Such an approach does not require significant amounts of external resources added to schools and is not dependent upon mental health experts

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Gonçalves et al (2016)	Portugal	Adolescents in 7th - 9th grade (n = 207) Intervention Group: n = 115 Control Group: n = 92	Pilot study: Randomized Controlled Trial	*Program for the de-stigmatization of youth mental health* is a video-based intervention. A video administered intervention to reduce stigma related to mental health problems. It was used a video about an adolescent who is experiencing a common mental health problem (tobacco and substance use), in which she describes her problem and barriers, and the positive and the negative aspects of mental health care.	A single 10-minute session	Students were assessed pre- and post-intervention, and at 1-month follow-up: - Self Stigma of Seeking Help Scale (SSOSH) - Social Stigma for Receiving Psychological Help Scale (SSRPH) - Attribution Questionnaire-Children form (AQ-8c)	- Decrease in mental health-related stigma - This program is a promising quick and inexpensive intervention with short-term impact on adolescents' attitudes towards peers with mental health problems	Unknown
Santos et al (2013)	Portugal	Adolescents in the 3rd and secondary cycle (7th – 12th grade)	Descriptive paper	*Projeto +Contigo* is a multilevel network intervention that aims promote mental health and wellbeing in adolescents, prevent suicidal behavior, combat stigma in mental health, and create a mental health care network. Education on stigma, adolescence, self-esteem, problem-solving skills, wellbeing, assertive communication, management of emotions and risky factors. It is use presentations, group discussions, role-play and socio-therapeutic games.	Six 45-minute sessions	Students are assessed pre- and post-intervention, and at 6-month follow-up: - Questionnaire with Socio-demographic information and scales to characterize wellbeing, coping, depression and self-concept	Not available	**Facilitators:** - Involves the existing structures/ resources, creating synergies at the community level
Campos et al (2018)	Portugal	Adolescents aged 12-14 years (7th, 8th and 9th grade students) (n = 543) Intervention Group: n = 259 Control Group: n =2 84	Randomized Controlled Trial	*Finding Space to Mental Health* is a school-based intervention program focused on the promotion of mental health literacy in young people. Education on knowledge and beliefs about mental health/mental illness; on mental health problems (signs, impact, risk factors); on depression, anxiety, anorexia, schizophrenia (signs and symptoms); on non-stigmatized behaviours towards mental health disorders; on help-seeking options; on first aid skills towards people with mental health problems; and on self-help strategies. In both sessions were adopted interactive methodologies such as group dynamics, videos and music. The intervention was delivered by a trained psychologist.	2 sessions (90 minutes each), implemented with one-week interval	Students are assessed pre- and post-intervention, and at 6-month follow-up: - Mental Health Literacy questionnaire (MHLq)	- Increase on knowledge - Decrease on stereotypes - Increase on first aid Skills and help-seeking - Increase on self-help strategies - Showed to be effective on promoting mental health literacy in young people. - Showed the usefulness of short interventions to increase knowledge about mental health problems in young people	Unknown

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Table S1. Cont.

Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Mellor (2014)	UK	Children or adolescents attending primary or secondary school (n = varied from 40 to 616)	Systematic Review	School-based interventions targeting attitudes and stigma about mental illness. The interventions varied in content and delivery methods: Nine were education-only and eight had indirect or direct contact with someone with lived experience. The focus of the interventions was mental illness in 11 studies, schizophrenia in 3 and depression in 3. Five studies investigated the impact of already established interventions. The follow-up time ranged from immediately post intervention only, up to 12 months.	The duration ranged from one-off interventions lasting 30-120 min to multiple sessions over a period of up to 4 months	- A total of 13 of the instruments were designed for the intervention or study; 6 of these had poor (or untested) reliability - Most measures were 'stigma' measures: attitudes, behavioural intentions and in one study an affect measure. No studies measured actual behaviour. - All measurements were self-report Yes/No, True/False or Likert-style questionnaires, except for the Implicit Association Test (IAT)	- 17 studies were included - 7 studies showed some statistically significant positive changes at follow-up; 4 studies report statistically significant positive results at immediate post-test only; 4 studies showed no significant changes at either posttest or follow-up - There is no obvious pattern about what makes a successful intervention - This review shows that there is no strong evidence to support that school-based interventions reduce stigma to mental illness in young people.	Unknown
Hart et al (2016)	Australia	Adolescents aged 14-17 years (n = 988)	Pilot study: an uncontrolled, pre-test/post-test design	*Teen Mental Health First Aid (teen MHFA)* is a classroom- based training program to increase mental health literacy, decrease stigmatising attitudes towards individuals with mental illness, and improve MHFA behaviours. Education on mental health concept, mental health problems (types and impact), stigma, help seeking option, MHFA, mental health crises, teen MHFA action plan ("Look, Ask, Listen, Help, Your Friend"), helping a friend who is developing a mental health problem. It was used didactic PowerPoint® presentation, video presentations, role-plays, group discussion, small group activities and a student booklet. The program was facilitated by an accredited MHFA Instructor .	3 × 75 min classroom based training program across 5–8 school days	Students are assessed at baseline, and at 1 week, and at 3-month after the intervention - A survey questionnaire containing the following was developed by the authors: - items adapted from the Australian National Survey of Youth Mental Health Literacy - Open-ended questions about MHL (problem recognition and beliefs about help) - 7 questions about personal stigma on a Likert scale - Social Distance Scale adapted for young people - Likert scale about confidence providing first aid - Open-ended questions about MHFA intentions - First Aid Experiences Questionnaire (modified)	- Improvement in MHL and in student's mental health - Decrease in stigmatizing attitudes - Increase in confidence in providing MHFA to a peer and in intentions to seek help - *Teen MHFA program* is effective and feasible for delivery to secondary school students	Unknown

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Table S1. Cont.

Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Hart et al (2018)	Australia	Adolescents aged 14-18 years (at 10th grade) (n = 1942) Intervention Group (tMHFA): n = 979 Control Group (PFA): n = 948	A cluster randomized crossover (CRXO) trial	*Teen Mental Health First Aid (tMHFA)* is a classroom-based training programme for students aged 15– 18 years to improve supportive behaviours towards peers, increase mental health literacy and reduce stigma. Education on mental health concept, mental health problems (types and impact), stigma, help seeking option, MHFA, mental health crises, *teen MHFA* action plan, helping a friend who is developing a mental health problem. It was used didactic PowerPoint® presentation, video presentations, role-plays, group discussion, small group activities and a student booklet. The program was facilitated by an MHFA Instructor.	3 × 75 min classroom based training program across 5–8 school days	Students are assessed at baseline and at 1 week after the intervention: - The survey, which was modified from previous national mental health literacy surveys with youth (Yap et al., 2012b) and evaluations of *tMHFA* (Hart et al., 2016), measured quality of MHFA intentions (helpful and harmful intentions, confidence in providing help), mental health literacy (problem recognition, beliefs about helpfulness of adult sources of help) and stigmatizing beliefs (social distance, weak-not sick, dangerous/ unpredictable and would not tell anyone)	- Compared to PFA (Physical First Aid), *tMHFA* resulted in significantly improved supportive first aid intentions and mental health literacy and significantly decreased stigmatizing attitudes among adolescents. - *tMHFA* is an effective and feasible programme for increasing supportive first aid intentions and mental health literacy in adolescents in the short term	Unknown
Swartz et al (2017)	USA	Adolescents in 9th or 10th grade classes (n = 6679) Intervention Group (ADAP) n = 3681 Control Group n = 2998	Cluster Randomized Controlled Trial	Adolescent Depression Awareness Program (ADAP) is a universal school-based depression education program to increase depression literacy as the first step in encouraging depressed youths to seek treatment. Education on knowledge about mood disorders (symptoms of depression, parallels between depression and other medical illnesses, potential consequence of depression – suicide, …) as well as attitudes about treatment. It was used interactive lectures, videos, film assignments, homework, and group activities. The program was delivered by school personnel - trained health education teachers.	Two 90-minute or three 45- to 60-minute class period (3 hours total given in 2–3 class periods)	Students are assessed at baseline, and at 6 weeks, and at 4-month after the intervention: - The Adolescent Depression Knowledge Questionnaire (ADKQ) - A version of the Reported and Intended Behavior Scale (RIBS) - A modified version of the Child and Adolescent Services Assessment was used to access the ADAP's effect on the receipt of mental health services for depression and other conditions	- Increase in depression literacy in both boys and girls. - Did not have effect on mental health stigma - Adding ADAP to the standard high school health education curriculum implemented by health education teachers resulted in significantly higher levels of student depression literacy	**Facilitators:** - Teachers implemented ADAP as part of the standard health education curriculum, which does not compete for academic time and encourages sustainability

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Schilling et al (2016)	USA	Adolescents in 9th grade (n = 1052)	Pre-test post-test randomized control design	*SOS (Signs of Suicide)* is a universal school-based suicide prevention program. Education on warning signs of suicide risk, on differences between major depression disorder and stress or emotional upset; and training to seek-help for themselves and/or for a friend. It was used presentations, group discussions and videos (included dramatizations and also interviews with real people). The program was delivered by school counseling and social work staff (after a 1-day training).	Unknown	Students are assessed at baseline (pre-test) and at 3-month after the intervention (post-test): - Questions/items adapted from the Youth Risk Behavior Survey (YRBS)	- Decrease in self-reported suicide attempts in the 3 months following the program - Increase in knowledge about depression and/or suicidal thoughts - Increase favorable attitudes toward help-seeking for themselves or for friends - No changes on suicidal ideation	Unknown
Kutcher, Wei & Morgan (2015)	Canada	Students in 9th grade (n = 175)	Secondary analysis	*The Guide* (The Mental Health and High School Curriculum) is a web-based Mental Health Literacy (MHL) curriculum resource for use in junior high and secondary schools. Education on stigma of mental illness, mental health and wellness, mental health disorders, experiences of mental illness, seeking help and finding support, and on the importance of positive mental health. It was used written materials, animated videos, PowerPoint® presentations and classroom activities. The intervention was delivered by the students' usual teachers.	Total of 10/12 hours of class time (6 modules)	Students were assessed pre- and post-intervention, and at 2-month follow-up: - Knowledge and attitude Survey (developed by authors)	- Improvement in knowledge (post-intervention and at 2-month follow-up) - Improvement in attitudes toward mental disorders/illness post- intervention and at 2-month follow-up)	**Facilitators:** - Improves both teacher and student MHL with the same activity - It does not require additional investment and it is not dependent of external mental health experts because it is integrated into existing health curriculum

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Milin et al (2016)	Canada	Students in 11th and 12th grade (n=534) Intervention Group (The Guide) n = 362 Control Group (teaching As Usual) n = 172	Randomized Controlled Trial	*The Mental Health and High School Curriculum Guide (The Curriculum Guide)* was required to be integrated within the grade 11 or 12 Ontario Provincial Ministry of Education Healthy Living course. Education on stigma of mental illness, mental health and wellness, mental health disorders, experiences of mental illness, seeking help and finding support, and on the importance of positive mental health. It was used classroom activities, core, and supplementary resources, such as digital stories and video interview of youth with mental illness. The intervention was delivered by the students' teachers of the Healthy Living course.	6 hours of class time (6 modules)	Students were assessed pre- and post-intervention: - Knowledge and attitude survey (developed by the original authors of The Guide)	- Students who received The Curriculum Guide showed significant improvements in mental health knowledge and a reduction in stigma compared to those receiving TAU - It was found that improvement in mental health knowledge predicted a corresponding improvement in attitudes toward mental illness/reduction in stigma	**Facilitators:** - Improves both teacher and student MHL with the same activity - It does not require additional investment and it is not dependent of external mental health experts because it is integrated into existing health curriculum
Chisholm et al (2016)	UK	Students in 8th grade, aged 12–13 years (n = 657)	Cluster Randomized Controlled Trial	The *SchoolSpace* is educational programme combined with intergroup contact to reduce the stigma of mental illness and increase the mental health literacy. Education on stigma, mental health problems and on mental illness. Plus, a Contact Session with a young person who experienced a mental illness. It was used presentations, drama workshop and direct contact with a mentally ill young person. The intervention was delivered by mental health professional staff and contact volunteers.	1 day	Students were assessed at the baseline and at 2-week follow-up: - Reported and Intended Behaviour Scale (RIBS) - Mental Health Knowledge Schedule (MAKS) - Strengths and Difficulties Questionnaire (SDQ) - a 15-item version of the Resilience Scale - Attitudes to help-seeking were assessed by responses on a seven-point scale to one question - Acceptability of the intervention was assessed in one school using two short group interviews	- Attitudinal stigma improved in both conditions with no significant effect of condition. - The education intervention appeared to be successful in reducing stigma, promoting mental health knowledge, and increasing mental health literacy, as well as improving emotional well-being, resilience and help seeking attitudes. - Intergroup contact was not seen to add value.	Unknown

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Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Ojio et al (2018)	Japan	Students in 5th and 6th grade (n = 662)	An uncontrolled, pre-test/post-test design	*The Short MHL Program for Pre-Teens (SMHLP for pre-teens)* is a concise teacher-led program for mental health literacy (MHL). Education on mental health problems (prevalence, risk factors, …) and on help-seeking. It was used a 10-minute animated film. The program was delivered by the school teacher's during the health education classes.	45-min session	Students were assessed at the baseline, at post-intervention and at 3-month follow-up: - Questionnaire (developed by the authors) that evaluate knowledge about mental health/illnesses; Recognition of mental health state of a character in a vignette; recognition of the necessity to seek help; intention to seek help (self); intention to help (peers)	- Improvement in knowledge about mental health/illness, in recognition of a mental health state, and in intention to help (peers)	**Facilitators:** - Program being concise - Program delivered by internal staff
Ojio et al (2015)	Japan	Students in 9th grade aged 14-15 years (n = 102)	An uncontrolled, pre-test/post-test design	A concise, school-staff-led MHL program for adolescents to promote mental health literacy (MHL). Education on mental illness (prevalence, onset age, risk factors, treatability, recovery, symptoms in adolescence); on sources of help; on methods of psychiatric diagnosis and clinical examinations for it. It was used standard instructions, animations and group discussions. The program was delivered by the school teachers during the health education classes.	Two 50-min sessions once a week over a 2-week period	Students were assessed at the baseline, at post-intervention and at 3-month follow-up: - Questionnaire (developed by the authors) that evaluate knowledge about mental health/illnesses; Recognition of mental health problems and selection of desirable behavior; intention of helping peer with mental health problems	- Improvement in knowledge about mental health/illness and about their treatment; in recognition of a mental health problems and correct selection of desirable solution; and in intention of helping peers with mental health problems.	**Facilitators:** - Program delivered by the usual school teachers
Skre et al (2013)	Norway	Adolescents in secondary schools (13–15 years) (n=1070) Intervention Group: n = 520 Control Group: n = 550	Non-randomized cluster controlled trial	*Mental health for everyone* is a universal education programme to promote the mental health literacy. Education on prevention of mental health disease; on attitudes and prejudices against mental health problems and the mentally ill; on openness and confidence about mental health issues; and on mental health services available to help. It was used individual tasks, group tasks and plenary sessions, and illustrating video material. The program was delivered by the school teachers with a small direct/indirect help of the authors of the programme when necessary.	3 days	Students were assessed at the baseline and at 3-month follow-up: - A 66-item questionnaire, of which 7 questions were open ended, was employed (developed by the authors): a) Demographic variables b) Measurement of mental health literacy: Symptom profile recognition; Prejudiced beliefs; Knowledge about where to seek help for mental health problems.	- Improvement in mental health literacy in terms of symptom profile identification, prejudiced beliefs, and knowledge about where to seek help	**Facilitators:** - Program delivered by the usual school teachers - Short programme

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Table S1. Cont.

Author(s), Year	Country	Participants	Type of study	Programme / Interventions	Duration	Data collection instruments	Main outcomes	Barriers / facilitators
Gonçalves et al (2015)	Portugal	Adolescents in 7th, 8th and 9th grades (n = 207) Intervention Group n = 115 Control Group n = 92	Pilot study: Cluster Randomized Controlled Trial	Is a video-based mental health de-stigmatization intervention about the experience of a female adolescent that sought professional help. It was used video watching and group discussion. It is unclear who delivered the intervention.	10-min	Adolescents were accessed at pre, post and 1-month follow-up: - Self Stigma of Seeking Help Scale (SSOSH) - Social Stigma for Receiving Psychological Help Scale (SSRPH) - the Attribution Questionnaire-Children form (AQ-8-C)	- Decrease in self-stigma for seeking help, in social stigma for seeking help and in attribution, at the post-time period but not at 1-month follow-up.	**Facilitators:** - Quick and inexpensive intervention
Salerno (2016)	USA	Students enrolled in US K-12 schools, from 5th to 12th grade (n = varied from 30 to 5949)	Systematic Review	K-12 school-based mental health awareness interventions in the United States to improve mental health/illness knowledge, improve attitudes toward mental health or illness, and increase help-seeking. The interventions varied in content and delivery methods: primarily instructor-led traditional mental health education curriculums, some included one-time presentations or videos. Interventions were delivered by a faculty adviser, counselor, teacher, nurse, researcher, clinician, mental health professional, staff member, or consumer.	The duration ranged from 1-time educational presentation to multiple sessions	Unknown	- 15 studies were included - Only 3 of the 15 studies measured all 3 outcomes: knowledge, attitudes, and help-seeking. - All studies measuring knowledge demonstrated improvements. - Most of the studies measuring attitudes and help-seeking also demonstrated improvements.	**Barriers:** - coordinating with the various stakeholders in schools, disruption of school curriculums, parental consent, and lack of incentives.
Martínez-Zambrano et al (2013)	Spain	Secondary school students, aged 14-16 years (n = 62)	An uncontrolled, pre-test/post-test design	The program consisted in providing information and contact with users of mental health in order to reduce social stigma in the school environment. Education on mental illness (concept, causes, erroneous ideas, hospital and community resources, feelings and social network of mentally ill), and contact with people suffering mental disorders and with mental health professionals. It was used audiovisual techniques (videos), individual tasks and open dialogue/discussion. The program was delivered by 2 psychologists, 1 social worker and 1 nurse during the class.	2 sessions taking place during 2 weeks	Students were assessed before and after the intervention: - Opinions on Mental Illness (OMI) questionnaire	- In all the subscales of the instrument the students improved their perception of mental disorders, reducing their levels of stigma - The intervention was effective in reducing social stigma among young adolescents	Unknown

Publicação 3 – Artigo 2: Mental Health Literacy and Positive Mental Health in Adolescents: A Cross-sectional Study

Nobre, J., Calha, A., Luis, H., Oliveira, A. P., Monteiro, F., Ferré-Grau, C., & Sequeira, C. (2022). Mental Health Literacy and Positive Mental Health in Adolescents: A Correlational Study. *Int. J. Environ. Res. Public Health*, 19(13), 8165. MDPI AG. Retrieved from http://dx.doi.org/10.3390/ijerph19138165

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Mental Health Literacy and Positive Mental Health in Adolescents: A Correlational Study

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Abstract: This study aimed to assess adolescents' Mental Health Literacy (MHL) level, Positive Mental Health (PMH) level, the association between sociodemographic variables and the MHL and PMH levels, and the relationship between adolescent's MHL and PMH levels. A quantitative, cross-sectional, correlational study was conducted with a convenience sample of 260 adolescents studying in the 5th to 12th years of school. The Mental Health Knowledge Questionnaire, the Mental Health-Promoting Knowledge, and the Positive Mental Health Questionnaire were used for data collection. Most of the adolescents were female (55.8%) with a mean age of 14.07 years. The participants showed good levels of MHL (MHKQ). The participants showed good levels of MHL (MHKQ $\bar{x}$ = 60.03; MHPK-10 $\bar{x}$ = 4.49) and high levels of PMH ($\bar{x}$ = 128.25). The adolescents with higher levels of MHL were the oldest, in a higher year of school, female, those whose mothers are employed, those who have healthy eating habits, and those who have a better body image self-perception. Adolescents in a lower year of school, with adequate sleep habits, who spend fewer hours a day in front of a screen or online, and who have a better self-perception of mental and physical health and body image were the ones with higher PMH levels. These findings suggest the need to implement experimental or quasi-experimental studies to ascertain the effectiveness of interventions that promote adolescents' positive mental health literacy.

Keywords: adolescents; mental health; mental health literacy; positive mental health; schools

1. Introduction

In recent years, adolescents' mental health has increased experts' concern, not only due to the significant prevalence of mental health disorders in this population [1], but also due to the early age of onset of the first episode of these disorders—before 14 years of age [2]. If, besides these factors, the profound changes that occur in adolescence at the physical and mental level [3] and this population's low/modest levels of mental health literacy [3–6] are considered, then adolescents' mental health vulnerability becomes evident.

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Adolescence is a phase of life characterized by an important development in many levels: physical, psychological, emotional, and social. Defined by the World Health Organization (WHO) as the phase between childhood and adulthood, adolescence encompasses the period from 10 to 19 years old [7]. This wide range of time can be divided into stages, which may differ according to many authors. In our study, we adopted the division in three stages: early adolescence (10–14 years), middle adolescence (15–16 years), and late adolescence (17–19 years) [8].

Aware of the vulnerability of some groups in society, such as adolescents, the WHO [9] via their Mental Health Action Plan 2013–2020 defined that one of the goals for all nations is to implement strategies for mental health promotion and prevention, targeting all citizens, not just people with diagnosed mental disorders. This Action Plan was extended until 2030 by the WHO [10] and is aligned with the United Nations Sustainable Development Goals (SDG), namely with Goal 3–Good Health and Well-Being to "ensure healthy lives and promote well-being for all at all ages" [11].

In line with the WHO Mental Health Action Plan and the United Nations' SDGs, there has been growing global research interest in the salutogenic dimension of mental health, Positive Mental Health (PMH), and Mental Health Literacy (MHL), both considered protective elements of mental health.

Conceptually speaking, Jorm et al. [12] defined MHL as the "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (p. 182). However, this concept has evolved and has become somewhat broader, encompassing not only knowledge but also skills to promote individual and community mental health [13], consisting of four components: understanding how to obtain and maintain good mental health, understanding mental disorders and their treatments, decreasing the stigma related to mental disorders, and increasing the effectiveness of help-seeking [14]. Therefore, MHL is a concept that implies the empowerment of the individuals to provide themselves with mental care [15] and the consequent empowerment of the community, which is an important strategy for promoting populational health and achieving health gains.

Concerning adolescents, several studies have shown that this population has low/moderate levels of MHL [3–6]. However, many of this research has focused mainly on the knowledge component of mental disorders, the stigma component and the help-seeking component, while few studies have addressed the knowledge component of how to obtain and maintain good mental health in this population [16,17]. Therefore, further studies on this component of MHL are needed to fill this research gap.

The concept of PMH emerges from the concept of mental health and has its origins in Seligman's positive psychology and the work developed by Marie Jahoda in 1958 [18]. Although there is no universal definition, PMH is considered one of the dimensions of mental health and consists of a person's ability to understand his/her environment and to adapt to it or modify it to strengthen his/her optimal functioning [19].

Based on this concept, Lluch-Canut developed the Multifactor Model of Positive Mental Health (MM-PMH) as an explanatory model of the PMH construct, composed of six interrelated factors: Personal Satisfaction (F1), Pro-Social Attitude (F2), Self-Control (F3), Autonomy (F4), Problem Solving and Self-Actualization (F5), and Interpersonal Relationship Skills (F6) [19,20]. In the MM-SMP, the indicators of F1–Personal Satisfaction are self-concept, self-esteem, satisfaction with personal life, and optimistic outlook on the future; the indicators of F2–Pro-Social Attitude are sensitivity of the person to the social environment, altruistic attitude of support for others, and acceptance of others and of different social facts; the indicators of F3–Self-Control are ability to cope with stress and problematic situations, emotional balance/control, and tolerance to stress, anxiety, and frustration; the indicators of F4–Autonomy are independence, the ability to self-regulate behavior, and self-confidence/personal security; the indicators of F5–Problem Solving and Self-Actualization are the ability to make decisions, analytical skills, adaptation to change, and an attitude of continuous personal development; finally, the indicators of F6–

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Interpersonal Relationship Skills are empathy, the ability to emotionally support others, and the capacity to establish interpersonal relationships globally and more intimately [19,20].

It is possible to assess PMH based on the six factors of the MM-PMH using the Positive Mental Health Questionnaire, also created by Lluch-Canut [18]. According to the score obtained in this questionnaire, a person is considered to be at a low, intermediate, or high level of PMH. The high level of PMH corresponds to a flourishing state, that is, a state in which the person has positive feelings and high levels of emotional, psychological, and social well-being combined with the absence of psychopathology [21], and the low level of PMH corresponds to a state of languishing, that is, to a state of absence of mental health [21].

PMH has been assessed in various settings using the Positive Mental Health Questionnaire, namely in people with chronic problems [22,23], persons with schizophrenia [24], university students [25,26], caregivers of people with schizophrenia [27], health professionals working in mental health services [28], and university teachers [29]. However, there is a gap in research in this area: the study of PMH in adolescents. As PMH is considered a catalyst of positive functioning and psychological well-being, there is a clear need to know the levels of PMH in adolescents due to its impact on this population′s current and future mental health.

To the best of the authors′ knowledge, the relationship between MHL and PMH in adolescents has not yet been studied. Therefore, carrying out such an investigation is critical.

Considering the above, the following research questions were formulated:

(1) What is adolescents′ level of MHL?
(2) What is adolescents′ level of PMH?
(3) What is the association between sociodemographic variables and adolescents′ levels of MHL and PMH?
(4) What is the relationship between adolescents′ level of MHL and their level of PMH?

2. Materials and Methods

2.1. Aims

This study is part of a broader research project on Literacy and Positive Mental Health of Adolescents, conducted by researchers J.N., C.S., and C.F.-G. In this article, the objectives were to assess adolescents′ level of mental health literacy; assess adolescents′ level of positive mental health; evaluate the relationship between variables of sociodemographic characterization and MHL and PMH levels; and correlate the level of PMH with adolescents′ level of MHL.

2.2. Study Design

A descriptive, cross-sectional, and correlational study was conducted from April to June 2020 using an online questionnaire available to the participants in the Google® Forms platform (Google LLC, Mountain View, CA, USA). All collected data are confidential. Informed consent was obtained. The STROBE Statement checklist [30] was used to write this article.

2.3. Participants and Setting

The convenience sample included adolescents from the 2nd cycle, 3rd cycle, and secondary education (5th–12th year of school), from three urban public schools in a district of the North Alentejo region in Portugal.

Adolescents were eligible to answer the questionnaires if they were attending a school whose principal had authorized participation in the study, if their parents/legal representatives had given their permission via written informed consent, and if the adolescents were 10 to 19 years old. The exclusion criteria were adolescents with cognitive disorders, adolescents without informed consent given by their parents/legal representatives, and adolescents who refused to participate in the study.

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The sample was obtained by the non-probability convenience sampling method. We calculated our sample for a margin of error of 5% and a reliability of 90%, which would result in a necessary sample of 242 participants. However, we accepted 18 more in case there were some null questionnaires. Therefore, from a population of 2125 adolescents, a total of 260 participants were recruited, after 13 duplicates were eliminated. With this number of adolescents in our sample, the probability was 90% that the study would detect a relationship between the independent and the dependent variables at a two-sided 0.05 significance level, if the true change in the dependent variables was 0.202 standard deviations per one standard deviation change in the independent variable, according to the MGH Biostatistics Center Sample Size Calculator [31]. All the participants who voluntarily completed the online questionnaires made the convenience sample.

The data collection took place from 17 April to 30 June 2020, in the 2nd cycle, 3rd cycle, and secondary schools (5th to 12th year of school) that agreed to participate in the study. An initial meeting was held with the schools′ principals to explain the research purpose and the data collection procedures. Initially, the plan was that parents/legal representatives fill in hard copies of the informed consent, and adolescents fill in hard copies of the questionnaires provided by a research team member in a classroom environment. However, due to the COVID-19 pandemic, the Portuguese Government suspended face-to-face teaching activities in schools on 16 March 2020. This change implied redefining the data collection procedure to be online. A member of the research team (J.N.) emailed the link of the informed consent to the principals of the schools, who in turn forwarded it to the adolescents′ parents/legal representatives. The link for the adolescents to complete the questionnaires was sent to the email provided by the parents/legal representatives who gave consent. The informed consent and the questionnaires were created in Google® Forms (Google LLC, Mountain View, CA, USA). A document about the research study was attached to the email sent to the parents/legal representatives and the adolescents, explaining the methodology, the conditions and funding, the potential risks, the potential advantages, the confidentiality and anonymity of data, the way of disseminating the results, and the members of the research team and their contacts.

2.4. Data Sources and Measurement

The instruments used to evaluate the adolescents at a single time-point were the following: (1) Questionnaire for the Characterization of the Adolescents, (2) The Mental Health Knowledge Questionnaire [15,32], (3) The Mental Health-Promoting Knowledge [15,32], and (4) Positive Mental Health Questionnaire [33].

2.4.1. Characterization of the Sample

The Questionnaire for the Characterization of the Adolescents was used in the sociodemographic characterization of the adolescents. This questionnaire was developed by the study′s research team and is composed of 29 self-report items: age; gender; year of school education; employment status and occupation of father and mother; history of mental health problems; previous contact with people with mental health problems; sleep habits; medication consumption; leisure and exercise activities; eating habits; internet and gadget use; interpersonal relationships; alcohol and tobacco consumption; self-perception of mental and physical health and body image; and self-perception of mental and physical health during confinement due to the COVID-19 pandemic. A pre-test of this questionnaire was conducted with 10 adolescents aged 10 to 17 years old. Minor changes were made according to their suggestions to make the characterization questionnaire more understandable and easier to complete for all adolescents.

2.4.2. Mental Health Literacy

The researchers used two scales to assess all components of MHL: The Mental Health Knowledge Questionnaire (MHKQ) and The Mental Health-Promoting Knowledge (MHPK-10).

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The MHKQ scale assesses the knowledge and awareness of mental health. This scale was translated and validated into Portuguese by Chaves et al. [15,32] based on the instrument developed by the Chinese Ministry of Health in 2009 [34]. The scale is composed of 20 self-report items, in which items 1–16 assess knowledge about the characteristics of mental health and mental disorders and belief in their epidemiology, while items 17–20 assess awareness of mental health promotion activities. Responses to items 1–16 are on a Likert scale of 1 to 5 points (1 = strongly disagree; 5 = strongly agree), and answers to items 17–20 are on a dichotomous scale of "yes" or "no" (yes = 1 point; no = 0 points). The MHKQ scale is divided into three MHL dimensions: dimension 1–knowledge of the characteristics of mental health and mental disorders (items 1, 2, 3, 5, 7, 8, 11, 12, 15, and 16), dimension 2–belief in the epidemiology of mental disorders (items 4, 6, 9, 10, 13, and 14), and dimension 3–awareness-raising on mental health promotion activities (items 17–20). Higher scores correspond to higher levels of mental health knowledge.

The Mental Health-Promoting Knowledge (MHPK-10) instrument was developed by Bjørnsen et al. [16] and translated to and validated for Portuguese by Chaves et al. [15,32]. This instrument presents the α Cronbach of 0,87 in the Portuguese version. The MHPK-10 evaluates the positive component of the MHL, that is, the level of knowledge about the factors that help obtain and maintain good mental health in the autonomy, relationship, and competence dimensions [17]. This scale consists of 10 self-report items, each rated on a Likert scale from 1 to 5 points (1 = strongly disagree to 5 = strongly agree; there is also the option "N/A" = not applicable, which corresponds to zero points). The higher the mean score, the higher the level of knowledge on the factors that help obtain and maintain good mental health. It should be noted that a mean score < 4 corresponds to an insufficient level of knowledge since values 4 and 5 correspond to the correct answers for each item [16].

2.4.3. Positive Mental Health

The Positive Mental Health Questionnaire (PMHQ) was used to assess the participants' levels of positive mental health. This questionnaire was developed by Lluch-Canut [18] and translated to and validated for the Portuguese population by Sequeira et al. [33] with a 0.92 α Cronbach. This questionnaire consists of 39 self-reported items, unevenly distributed by six factors: F1–Personal Satisfaction (items 4, 6, 7, 12, 14, 31, 38, and 39), F2–Pro-Social Attitude (items 1, 3, 23, 25, and 37), F3–Self-Control (items 2, 5, 21, 22, and 26), F4–Autonomy (items 10, 13, 19, 33, and 34), F5–Problem Solving and Self-Actualization (items 15, 16, 17, 27, 28, 29, 32, 35, and 36), F6–Interpersonal Relationship Skills (items 8, 9, 11, 18, 20, 24, and 30). The items of the PMHQ are stated in a positive or negative way. The answers to the statements are presented on a Likert-type scale from 1 to 4 points according to the frequency with which a given behavior occurs (1 = always or almost always; 2 = most of the time; 3 = sometimes; 4 = rarely or never). In the PMHQ, a score is obtained for each factor, and then a total score is measured that corresponds to the sum of all items. The score of the PMHQ ranges from 39 to 156 points (low level or languishing state–39 to 78 points; intermediate level–79 to 117 points; high level or flourishing state–118 to 156 points). The items that are positively worded were inverted so that both the total score and the score of each factor are directly proportional to the positive mental health [20].

2.5. Statistical Analysis

The statistical analysis was carried out using the software IBM® SPSS® version 27 (Statistical Package for the Social Sciences–IBM Corp, Armonk, NY, USA) for Windows.

Descriptive statistics were used to characterize the adolescent's sample. Mean and standard deviation were calculated to describe quantitative variables, and absolute and relative frequencies were calculated to describe qualitative variables. Regarding the inferential statistics, after verifying that the distribution of the mean was not normal (Shapiro Wilks test $p < 0.001$), the Eta test was used to access the association between the sociodemographic nominal variables and the MHKQ, MHPK-10, and the PMHQ. The Spearman's correlation coefficient was calculated to access the relation between the sociodemographic

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quantitative variables and the MHKQ, MHPK-10, and the PMHQ; to access the relationship between MHKQ, MHPK-10, and the PMHQ; and to access the relationship between MHKQ, MHPK-10, and each factor of the PMHQ. The Gamma test was calculated to access the association between MHKQ, MHPK-10, PMHQ, and the three stages of adolescence. A level of $p < 0.05$ was considered as the basis for statistical significance.

3. Results

3.1. Sample Characteristics

The convenience sample of our study consisted of 260 adolescents, aged 10 to 19 years old ($\bar{x}$ = 14.07, SD = 1.95). Of those, 13.5% were studying in the second cycle of basic education (10.8% in 5th year, 2.7% in 6th year), 59.6% were attending the third cycle of basic education (16.2% in 7th year, 19.2% in 8th year, 24.2% in 9th year), 27% were attending secondary education (10.4% in 10th year, 10.8% in 11th year, 5.8% in 12th year of school), and most of them were female (55.8%). Regarding the parents' professional situation, most were reported as employed (father 95.8%; mother 90.8%).

Regarding mental health, most adolescents reported having no mental health problems (98.5%), not having used a health service in the last three months due to a mental health problem (97.7%), not having been followed up by a psychologist/psychiatrist (69.6%), and not taking medication for a mental health problem (98.1%). When asked whether they had ever met someone with a mental health problem, most answered affirmatively (51.5%).

Concerning lifestyles, the adolescents in our sample reported to eat on average about four meals a day ($\bar{x}$ = 4.33, SD = 0.94). Most of the participants reported that they eat fruit and vegetables daily (84.2%), and the majority reported practicing physical exercise regularly (73.1%) and sleeping on average about 8.5 h a day ($\bar{x}$ = 8.45, SD = 1.19). In terms of substance use, the majority stated that they do not consume alcoholic drinks (90.8%) or smoke (96.5%). When asked about the number of hours in front of a screen, the participants reported an average of about 5.75 h a day (SD = 3.63) and about 5.60 h online per day (SD = 4.50).

Regarding social relationships, most adolescents said they had friends both at school (99.6%) and outside school (99.2%). When asked about violence, most adolescents replied that they had never been victims of violence (81.9%).

The adolescents in our sample self-perceived both their mental health ($\bar{x}$ = 4.25, SD = 0.89) and their physical health ($\bar{x}$ = 4.13, SD = 0.82) as "Good" and their body image as "Normal" ($\bar{x}$ = 3.73, SD = 0.96). During the first confinement due to the COVID-19 pandemic, adolescents considered their physical health to be "Worse" ($\bar{x}$ = 2.99, SD = 0.87) when compared to the period before the confinement and their mental health to be "The same" ($\bar{x}$ = 3.07, SD = 0.67). The results related to the characterization of our sample are provided in Table S1 (Supplementary Materials).

3.2. Descriptive Statistics for Mental Health Literacy

The mean score of the MHL–knowledge (measured with the MHKQ) of the adolescent's sample was 62.03 (SD = 6.27, Minimum = 16, Maximum = 80), corresponding to a good level of MHL, as shown in Table 1. It should be noted that the items related to the beliefs in epidemiology of mental health problems were the ones with the lowest scores (Supplementary Materials Table S2). Regarding the rate of awareness of mental health promotion activities, we found that most adolescents knew about "World Mental Health Day" (64.6%), but less than half knew about the "International Day for Suicide Prevention" (48.1%), the "International Day against Drug Abuse and Illicit Drug Trafficking" (37.7%), and "World Sleep Day" (29.6%) (Supplementary Materials Table S2).

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Table 1. Mental Health Literacy descriptive statistics (n = 260).

	N	Min.	Max.	Mean	SD
MHKQ–Knowledge	260	16	80	62.03	6.27
MHPK-10	260	0	5	4.49	0.66

Abbreviations: Max., maximum; Min., minimum; n, number of cases; SD, standard deviation.

The results obtained with the MHPK-10 about the level of knowledge on the factors that help obtain and maintain good mental health revealed an overall mean value of 4.49 (SD = 0.66, Minimum = 0, Maximum = 5), with 15.8% of the adolescents showing an insufficient level of knowledge about these factors (i.e., they had a mean score < 4).

In a more detailed analysis by stage of adolescence, we found that the participants in early adolescence showed a lower level of MHL in MHKQ ($\bar{x}$ = 61.5, SD = 6.08) compared with the other participants. We also found that the middle adolescence participants presented a lower level of MHL in MHPK-10 compared with the other stages (Table 2).

Table 2. Levels of MHL according to the stage of adolescence (n = 260).

Stages of Adolescence	*n*	MHKQ				MHPK-10			
		Min.	Max.	Mean	SD	Min.	Max.	Mean	SD
Early adolescence	153	43	73	61.5	6.08	1.30	5	4.49	0.64
Middle adolescence	75	45	78	62.42	6.86	0	5	4.43	0.77
Late adolescence	32	44	72	63.59	5.48	3.20	50	4.55	0.51

Abbreviations: Max., maximum; Min., minimum; MHL, mental health literacy; n, number of cases; SD, standard deviation.

3.3. Descriptive Statistics for Positive Mental Health

As shown in Table 3, most of the adolescents presented a high level of PMH (78,5%), and the overall PMHQ mean score was 128.25 (SD = 14.71), placing the adolescents of our sample in the flourishing stage. In a more detailed analysis by factor of the PMHQ, F3–Self-Control and F4–Autonomy were the factors with the lowest mean values, at the intermediate level of positive mental health, indicating that adolescents have difficulty in the emotional control/emotional balance of negative emotions and thoughts and also indicating a low self-confidence level (Supplementary Materials Table S3). On the other hand, F5–Problem-solving and Self-Actualization and F1–Personal Satisfaction presented the highest mean values, indicating that our adolescent sample reported the abilities to make decisions, to adapt to change, and to continuous growth/development and also reported self-esteem, satisfaction with personal life, and optimistic outlook on the future (Supplementary Materials Table S3).

In a more detailed analysis by stage of adolescence, we found that the participants of the three stages showed a high level of PMH; however in the late adolescence group, the participants were the ones who presented the lowest level of PMH. By analyzing each factor of PMH, we found that, in late adolescence, the participants had the lowest level of PMH in F1–Personal Satisfaction, F2–Pro-Social Attitude, F3–Self-Control and in F4–Autonomy; in middle adolescence, the F5–Problem Solving and Self-Actualization was the group with the lowest level of PMH, and in early adolescence, the F6–Interpersonal Relationship Skills had the lowest level of PMH (Table 4).

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Table 3. Positive Mental Health Levels, global and per factor (n = 260).

	n	%	Mean	SD	Levels of PMH		
					Low	Middle	High
PMHQ Global Score			128.25	14.71	39–78	79–117	117–156
PMHQ Factors:							
F1. Personal Satisfaction			27.45	4.22	8–16	17–24	25–32
F2. Pro-social Attitude			17.87	2.21	5–10	11–15	16–20
F3. Self-Control			14.96	3.20	5–10	11–15	16–20
F4. Autonomy			15.69	3.01	5–10	11–15	16–20
F5. Problem-Solving and Self-Actualization			29.32	4.46	8–18	19–27	28–36
F6. Interpersonal Relationship Skills			22.97	3.58	7–14	15–21	22–28
PMH Global Levels:							
Low level (languishing)	1	0.4					
Intermediate level	55	21.2					
High level (flourishing)	204	78.5					
Total	260	100					

Abbreviations: *n*, number of cases; PMH, positive mental health; SD, standard deviation.

Table 4. Levels of PHL according to the stage of adolescence (n = 260).

Stages of Adolescence	*n*	PMHQ Total Score		PMHQ F1		PMHQ F2		PMHQ F3		PMHQ F4		PMHQ F5		PMHQ F6	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Early adolescence	153	129.26	14.55	28.05	3.99	17.89	2.09	15.05	3.12	15.93	2.93	29.46	4.26	22.89	3.68
Middle adolescence	75	127.24	14.89	26.96	4.23	17.95	2.40	15.08	3.19	15.37	3.08	28.96	4.99	22.92	3.54
Late adolescence	32	125.75	15.07	25.69	4.69	17.60	2.34	14.25	3.55	15.28	3.17	29.50	4.19	23.44	3.30

Abbreviations: *n*, number of cases; PML, positive mental health; SD, standard deviation.

3.4. Relationship between MHL and Sociodemographic Data

Table 5 shows the inferential statistics performed to investigate the relationship between the sociodemographic variables and MHL. As previously mentioned, to assess MHL, we used two scales (the MHKQ and the MHPK-10), and we determined the relationship between the sociodemographic variables and both scales.

Using the Eta test, it was possible to identify a statistically significant association with a weak negative Spearman correlation between MHL and mother having a job (Eta = 0.028, r_s (260) = −0.046, p = 0.465), recourse to a health service due to a mental problem in the last three months (Eta < 001, r_s (260) = −0.005, p = 0.932), daily fruit/vegetables intake (Eta = 0.022, r_s (260) = 0.047, p = 0.450), consumption of alcoholic beverages (Eta = 0.012, r_s (260) = −0.009, p = 0.879), and tobacco consumption (MHKQ: Eta = 0.046, r_s (260) = −0.057, p = 0.364; MHPK-10: Eta = 0.029, r_s (260) = −0.057, p = 0.357). We also identified a statistically significant association with a weak positive Spearman correlation between MHL and sex (Eta = 0.041, r_s (260) = 0.021, p = 0.731), psychologist or psychiatrist monitoring (Eta = 0.022, r_s (260) = 0.067, p = 0.283), previous contact with someone with a mental health problem (Eta = 0.006, r_s (260) = 0.027, p = 0.664), and taking medication for a mental health problem (MHKQ: Eta = 0.010, r_s (260) = 0.024, p = 0.703; MHPK-10: Eta = 0.040, r_s (260) = 0.064, p = 0.301)). It should be noted that, regarding the variable having a mental health problem, we identified a statistically significant association with MHL; however, it presented a weak negative correlation with MHL in the MHKQ (Eta = 0.019, r_s (260) = −0.016, p = 0.794) and a weak positive correlation in the MHPK-10 (Eta = 0.040, r_s (260) = 0.073, p = 0.239).

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Table 5. Relationship between the sociodemographic characteristics and MHKQ, MHPK-10, and PMHQ (*n* = 260).

Sociodemographic Characteristics	*n*	MHKQ			MHPK-10			PMHQ		
		Eta	r_s	*p*	Eta	r_s	*p*	Eta	r_s	*p*
Age	260		0.187	0.003		−0.002	0.975		−0.117	0.057
Sex	260	0.082			0.041 *	0.021	0.731	0.073		
Year of school	260		0.198	0.001		−0.039	0.530		−0.126	0.043
Employed father	260	0.093			0.111			0.053		
Employed mother	260	0.139			0.028 *	−0.046	0.465	0.017 *	−0.020	0.751
MH problem	260	0.019 *	−0.016	0.794	0.040 *	0.073	0.239	0.062		
Recourse to a health service due to MH problem (last 3 months)	260	<0.001	−0.005	0.932	0.071			0.123		
Psychologist or psychiatrist monitoring	260	0.083			0.022 *	0.067	0.283	0.257		
Contact with someone with a MH problem	260	0.169			0.006 *	0.027	0.664	0.115		
Hours of sleep/day	260		−0.050	0.419		0.082	0.188		0.226	<0.001
Taking medication for MH	260	0.010 *	0.024	0.703	0.044	0.064	0.301	0.060		
Regular exercise	260	0.084			0.101			0.291		
No. of meals/day	260		0.133	0.032		0.159	0.010		0.106	0.087
Daily fruit/vegetable intake	260	0.054			0.022 *	−0.047	0.450	0.193		
Hours online/day	260		0.015	0.805		0.020	0.746		−0.122	0.049
Hours in front of a screen/day	260		0.063	0.309		0.052	0.401		−0.137	0.027
Victim of violence	260	0.078			0.071			0.228		
Consumption of alcoholic beverages	260	0.012 *	−0.009	0.879	0.054			0.080		
Tobacco consumption	260	0.046 *	−0.057	0.364	0.029 *	−0.057	0.357	0.151		
MH self-perception	260		−0.028	0.652		0.106	0.087		0.414	<0.001
PH self-perception	260		0.052	0.406		0.096	0.122		0.398	<0.001
Body image self-perception	260		−0.035	0.579		0.124	0.045		0.411	<0.001
PH self-perception in outbreak	260		−0.044	0.478		−0.079	0.205		0.027	0.663
MH self-perception in outbreak	260		−0.053	0.398		−0.035	0.580		0.164	0.008

Abbreviations: MH, mental health; MHPK-10, Mental Health-Promoting Knowledge; MHKQ, Mental Health Knowledge Questionnaire; *n*, number of cases; No., number; *p*, significance value; PH, physical health; PMHQ, Positive Mental Health Questionnaire; r_s, Spearman correlation value; *, significance statistic *p* value < 0.05.

By performing the Spearman's coefficient test, we identified a statistically significant positive yet weak relationship between MHL and age (r_s (260) = 0.187, *p* = 0.003), year of school (r_s (260) = 0.198, *p* = 0.001), number of meals a day (MHKQ: r_s (260) = 0.133, *p* = 0.032; MHPK-10: r_s (260) = 0.159, *p* = 0.010), and body image self-perception (r_s (260) = 0.124, *p* = 0.045).

Using the Gamma test, we found that there was a statistically significant association between the MHKQ and the stage of adolescence (Gamma = 0.143, *p* = 0.029), with a weak positive Spearman's correlation (r_s (260) = 0.130, *p* = 0.036); however, there was no association between MHPK-10 and the stages of adolescence (Gamma = −0.018, *p* = 0.799), as shown in Table 6.

Table 6. Association between MHL and PML and the stage of adolescence (*n* = 260).

	n	MHKQ				MHPK-10				PMHQ			
		Gamma	*p*	r_s	*p*	Gamma	*p*	r_s	*p*	Gamma	*p*	r_s	*p*
Stages of Adolescence	260	0.143	0.024 *	0.130	0.036	−0.018	0.799			−0.111	0.101		

Abbreviations: MHL, mental health literacy; *n*, number of cases; PML, positive mental health; *p*, significance value; r_s, Spearman correlation value; SD, standard deviation; *, significance statistic *p* value < 0.05.

There were no significant differences or relationships between MHL and the other sociodemographic variables.

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3.5. Relationship between PMH and Sociodemographic Data

Table 5 also shows the inferential statistics obtained from the comparisons between PMH and the sociodemographic variables. The evaluation using the Eta test identified a statistically significant association, with a negative weak Spearman's correlation between PMH and mother having a job (Eta = 0.017, r_s (260) = −0.020, p = 0.751).

With Spearman's coefficient test, it was possible to identify a statistically significant negative weak relationship between PMH and year of school (r_s (260) = −0.126, p = 0.043), number of online hours a day (r_s (260) = −0.122, p = 0.049), and number of hours in front of a screen per day (r_s (260) = −0.137, p = 0.027). Using the same nonparametric test, we identified a statistically significant positive weak relationship between PMH and number of hours of daily sleep (r_s (260) = 0.226, p <0.001), self-perception of physical health (r_s (260) = 0.398, p < 0.001), and self-perception of mental health during the first outbreak in the COVID-19 pandemic (r_s (260) = 0.164, p = 0.048). We also identified a moderate positive statistically significant relationship between PMH and self-perception of mental health (r_s (260) = 0.414, p < 0.001) and self-perception of body image (r_s (260) = 0.411, p < 0.001).

As shown in Table 6, using the Gamma test, we found that there was no association between PMHQ and the stages of adolescence (Gamma = −0.111, p = 0.101).

No significant differences or relationships were identified between the level of PMH and the other sociodemographic variables.

3.6. Correlations between PMH and MHL

The results of the relationship between MHL and PMH are presented in Table 7.

Table 7. Correlation between MHKQ, MHPK-10, and PMHQ (n = 260).

	PMHQ Total Score		**PMHQ F1**		**PMHQ F2**		**PMHQ F3**		**PMHQ F4**		**PMHQ F5**		**PMHQ F6**	
	r_s	***p***	**r_s**	***p***	**r_s**	***p***	**r_s**	***p***	**r_s**	***p***	**r_s**	***p***	**r_s**	***p***
MHKQ Total Score	0.157	0.011	0.063	0.314	0.153	0.016	0.031	0.622	0.005	0.939	0.205	0.001	0.195	0.002
MHPK-10 Total Score	0.292	<0.001	0.201	0.001	0.163	0.008	0.161	0.009	0.233	<0.001	0.232	<0.001	0.255	<0.001

Abbreviations: p, significance value; r_s, Spearman correlation value; SD, standard deviation.

The relationship between mental health knowledge (measured with the MHKQ) and positive mental health (measured with the PMHQ) was investigated using Spearman's correlation coefficient. We identified a significant and positive but weak relationship between the two variables (r_s (260) = 0.157, p = 0.011), with high MHL levels associated with high PMH levels. In a more detailed analysis per factor of the PMH scale, we found a weak positive significant relationship between the mental health knowledge and F2–Pro-Social (r_s (260) = 0.153, p = 0.016), F5–Problem-Solving and Self-Actualization (r_s (260) = 0.205, p = 0.001), and F6–Interpersonal Relationship Skills (r_s (260) = 0.195, p = 0.002).

The relationship between knowledge about the factors that help obtain and maintain good mental health (measured with the MHPK-10) and positive mental health (measured with the PMHQ) was also assessed using Spearman's correlation coefficient. We identified a significant positive relationship, albeit weak but almost moderate, between the two variables (r_s (260) = 0.292, p < 0.001), with high levels of knowledge associated with high levels of PMH. By performing a more detailed analysis per factor of the PMH scale, we found a significant positive but weak relationship between knowledge about the factors that help obtain and maintain good mental health and all the factors of the PMH scale.

4. Discussion

The first research question of this study aimed to assess the adolescents' level of MHL. The results obtained show that the adolescents had a good overall level of MHL, which

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is in line with some previous studies [3,5,16]. These results may be associated with the progressive focus on mental health that has existed worldwide in recent years [9–11]. It was interesting to note that the components of the MHL with the best results were those related to help-seeking and knowledge about how to obtain and maintain good mental health, which is in line with the results obtained by other researchers [3,5,16,34]. On the other hand, the component related to knowledge about mental disorders, their etiology, and their treatments was the one that presented the lowest scores [34]. In addition, we also found that, similar to the study by Yu et al. [34], adolescents showed a lack of awareness of mental health-promoting activities, in the case of our research specifically about "World Sleep Day" and the "International Day against Drug Abuse and Illicit Drug Trafficking". This lack of awareness can be attributed to the fact that, in recent years, the Portuguese Government has focused on raising the overall awareness of Mental Health and not so much on specific problems. It became evident that the results arising from the MHKQ and the MHPK-10 suggest the need to focus on interventions promoting MHL both at the level of knowledge of mental disorders, their etiology, and their treatments and the level of awareness of mental health-promoting activities to avoid misconceptions about mental health and the consequent possible negative attitudes towards people with mental health problems. The results also suggests that it is important to begin the promotion of MHL in the early stages of adolescence because those adolescents had the lowest levels. This way, we are contributing to reducing the appearance of mental health disorder episodes before the age of 14 [2].

The second research question aimed to assess the adolescents' levels of positive mental health. The results obtained indicate a high level of PMH of the adolescents in our sample, positioning them in the flourishing state. These results are higher than those of the study by Alves [35], with adolescents in the third cycle of basic education (7th to 9th years of school), and the study by Sequeira et al. [26], with nursing university students, that obtained intermediate levels of PMH, but they are in line with the results of Garcia's study [36] and the Teixeira et al. study [37]. In our study sample and by considering the various and rapid physical, psychological, and social changes that occur at this stage of the life cycle, we obtained a higher level of PMH than we expected. We believe that this high level of PMH may be because the adolescents in our sample belong to schools that have had projects in partnership with the Primary Health Centre to develop socio-emotional skills since 2015, implemented by teams composed of nurses and psychologists.

Through a more detailed analysis per factor of the scale, we found that adolescents had intermediate levels of PMH regarding Self-Control (Factor 3) and Autonomy (Factor 4) and have difficulties in emotional control/emotional balance, especially because of negative emotions and thoughts and a low level of self-confidence. On the other hand, we found that the adolescents in our sample had higher levels of PMH in Problem-Solving and Self-Actualization (Factor 5) and also in Personal Satisfaction (Factor 1), showing capacity for decision-making, problem-solving, adaptation to change, as well as satisfaction with themselves, their personal life, and optimism for the future. Despite the good results in both factors (Factor 5 and Factor 1), the adolescents in our sample can still improve their personal development attitudes and self-esteem. These results differ somewhat from those obtained by Garcia [36], Alves [35], and Sequeira et al. [26] but are perfectly aligned with the specific characteristics of adolescents widely described in the literature. That is, the adolescents in our sample had a mean age of 14.07 years old, which places them in the end of early adolescence [8,38]; thus, it makes sense that our sample has not yet demonstrated high levels of self-control and autonomy, since at this stage of adolescent development they still resort to concrete thinking in stressful situations and have a vision of life and the world based on impossible dreams and illusion [8,38]. Thus, it is during this stage of the life cycle that adolescents learn to deal with impulses and emotions, that they begin to know their *self*, and that they start to gain the self-confidence necessary to be more autonomous [8,38]. It also makes sense that the adolescents in our sample had high levels of Personal Satisfaction and Problem-Solving and Self-Actualization skills, since they are

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in a period characterized by the brain growth [8,38], which provides, at this stage, that the development of new cognitive skills takes place, abstract reasoning and more realistic decision-making come together, and more stable emotional, sexual, and social bonds are established [8,38].

The third research question of our study sought to determine the relationship between sociodemographic variables and the levels of MHL and PMH. The results of our study indicate that the adolescents who had higher levels of MHL were the oldest; those who were in a higher year of school; those whose mothers were employed; those who ate a greater number of meals a day; the girls; those who ate fruit and vegetables daily; those who had a better self-perception of their body image; those who had no previous contact with someone with a mental health problem; and those who had not been monitored by a psychologist or a psychiatrist. Therefore, we found that, as age increased, the level of MHL also increased, being the adolescents who were in the stage of late adolescence had higher levels of MHL, which is in line with the results of Campos et al. [4] but contradicts those of Yu et al. [34]. This points to the importance of implementing, in the future, interventions that promote MHL in the early stages of adolescence. We also found that the higher the year of school, the higher the level of MHL, which may be attributed to the rapid changes in cognitive and emotional development that occur during adolescence, which is in line with the findings of Campos et al. [5]. The relationship between the adolescents' MHL and the fact that the mother had a job may be associated with the adolescents' perception of a good financial situation, enabling them to use mental health services and participate in mental health-promoting activities, which often have restricted access because they require payment. Other studies have also found a positive relationship between MHL and perceived good financial position [17] or a good socio-economic status [3] and a negative relationship between MHL and financial disadvantage [39]. Interestingly, in our sample of adolescents, we found a positive relationship between MHL and the number of meals per day and the daily consumption of fruit and vegetables. The explanation we found is the fact that these two variables are usually associated with healthier eating habits and, consequently, with healthier lifestyles, and in the existing literature, other studies have also shown that people with high levels of MHL enjoy better physical and social health, since they have a high sense of seeking information about health and well-being, as well as the ability to understand and use this information to change unhealthy behaviors or to maintain a healthy lifestyle, which logically can lead to good general health outcomes [39,40]. The same justification can be applied to explain the positive relationship between MHL and the self-perception of body image, since it is during adolescence that the creation and development of the body image occurs [8,38]. As shown in previous studies of other researchers, the results of our study indicate that girls presented higher levels of MHL [4,5,17]. The relationship found between the highest levels of MHL among adolescents and those who had not been monitored by a psychologist or a psychiatrist can be explained by the fact that a person usually turns to those health professionals when he/she have a mental health problem and do not know how to deal with/solve it. In this case, apparently the person is literate when it comes to seeking help but is not literate about how to obtain or maintain good mental health. These results require further clarification to gain a better understanding of the relationship between MHL and having therapist sessions. In our study, we obtained a negative influence of the variable contact with someone with a mental health problem on MHL, which contradicted the results of the studies of Campus et al. [3] and Campus et al. [4].

Concerning PMH, the results of our study showed that the adolescents with the highest levels of PMH were those who sleep the most hours a day, those who spend fewer hours a day in front of a screen, those who spend the fewest hours online each day, those studying in the lower years of school, those who seem to have a better self-perception of both their MH, PH and body image, and lastly, and those who seem to have had a better self-perception of their MH during the confinement due to the COVID-19 pandemic. The positive relationship between the number of hours of sleep per day and PMH is in line with the results of Guo

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et al. [41] and is explained by the association between sleeping the recommended number of hours and improved memory, attention, learning, behavior, emotional regulation, quality of life, and, therefore, better mental and physical health [36,42]. We also found that the number of daily hours in front of a screen and the number of hours online per day had a negative relationship with the levels of PMH, which confirms what some existing literature had already told us, that is, that the use of screens for a moderate or long time throughout the day is associated with low psychological well-being, namely low self-control, less emotional stability, less concentration, inability to finish tasks, and less ability to make friends [36,43,44]. This situation is particularly worrying in adolescents, as they are at a stage of important cognitive, psychological, emotional, and social development [8,38], and the harmful effects of excessive screen use may leave negative marks that will last into adulthood [45]. However, as we currently live in a digital age, it is necessary to find strategies, together with adolescents, that minimize these negative consequences and turn them into opportunities for their development. It was also interesting to note that, as the year of school increased, the PMH of the adolescents in our sample decreased. This relation can be attributed to the increasing academic demands placed on adolescents as they approach the end of secondary school, to making increasingly difficult decisions related to the future (in academic, professional, emotional, and social terms), to a greater identification with the peer group, and, possibly, to the consequent greater predisposition to peer group influence/pressure in adolescents' lives [8,38]; all this is very characteristic of this stage of development [8,38]. For all these reasons, it is important that, in future studies, this possible relationship continues to be investigated to obtain a more solid basis of scientific evidence. Finally, the results obtained show the existence of a positive relationship between PMH and self-perception of PH, MH and body image, possibly associated with the fact that our sample consists of adolescents who mostly adopt healthy lifestyles (such as regular physical activity, low consumption of tobacco and alcohol, eating healthy food five to six times a day, in line with the definition of the World Health Organization [46]), which leads to increased feelings of psychological well-being [47] and better mental health [48], consequently leading to a better self-perception of their health, which produces very beneficial effects on the adolescents' levels of PMH.

Finally, the fourth research question of our study aimed to correlate the level of PMH with the adolescents' level of MHL. The results in our study showed that MHL levels had a positive relationship with PMH levels, showing that, as literacy increased, so did PMH. In this regard, it is worth noting the significant and positive relationship between knowledge about obtaining and maintaining good mental health and all the PMH factors, confirming the research team's expectations. As the present study was the first to correlate MHL and PMH among adolescents, our results cannot be compared with other studies, although we can mention that our results are in line with those obtained in the recently published study by Teixeira et al. [37] among University students. The finding of this relationship provides a huge motivation for implementing interventions that improve adolescents' MHL levels to simultaneously obtain high levels of PMH in adolescents.

Despite this study's scientific and methodological rigor, some limitations should be reported and taken into consideration when interpreting the results. First, as it is an investigation involving the participants' self-report, we should consider the risk of bias in the responses influenced by social desirability, making it very difficult to interpret the adolescents' behavior from their self-reports. Second, the limitation related to the type of study carried out (cross-sectional study) did not allow for the assessment over time of the levels of MHL or PMH, so the causes and effects of the relationships between the variables could not be determined. Lastly, we had a convenience sample, which does not allow the generalization of the results obtained.

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5. Conclusions

This correlational cross-sectional study assessed the level of adolescents′ MHL, PMH, and their relationship with sociodemographic variables and explored the relationship between MHL and PMH.

The adolescents in our study showed good levels of MHL and high levels of PMH. Positive significant associations/relationships were observed between MHL and age, year of school, number of daily meals, mother′s employment status, female sex, daily intake of fruit and vegetables, and good self-perception of body image. Significant positive associations/relationships were also observed between PMH and number of hours of sleep and self-perception of PH, MH, and body image. In addition, significant negative associations/relationships were found between PMH and adolescents′ years of school and the number of daily hours online and in front of a screen. Finally, a positive correlation was found between the MHL and PMH of the adolescents.

We believe that, in the future, we should focus on carrying out longitudinal studies to understand if the levels of MHL and PMH are maintained over time. In addition, we should carry out more studies to determine if there are differences between the stages of adolescence and carry out quasi-experimental or experimental community studies of interventions promoting adolescents′ positive mental health literacy, especially targeting the early adolescence stage. These studies will make a huge contribution so that in the future we may have positive, mentally healthy adults.

Supplementary Materials: The following are available online at https://www.mdpi.com/article/10.3390/ijerph19138165/s1, Table S1: Sample Characteristics (n = 260), Table S2: MHKQ–descriptive statistics (n = 260), Table S3: PMHQ–descriptive statistics (n = 260).

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Table S1. Sample Characteristics (n = 260).

	n	**%**	**Min.**	**Max.**	**Mean (SD)**
Age			10	19	14.07 (1.96)
Sex					
Female	145	55.8			
Male	115	44.2			
Year of School					
5th	28	10.8			
6th	7	2.7			
7th	42	16.2			
8th	50	19.2			
9th	62	24.2			
10th	27	10.4			
11th	28	10.8			
12th	15	5.8			
Employed Father					
Yes	249	95.8			
No	11	4.2			
Employed Mother					
Yes	236	90.8			
No	24	9.2			
MH problem					
Yes	4	1.5			
No	256	98.5			
Recourse to a Health Service due to MH problem (last 3 months)					
Yes	6	2.3			
No	254	97.7			
Psychologist or psychiatrist monitoring	79	30.4			
Yes	181	69.6			
No					
Contact with someone with a MH problem					
Yes	126	48.5			
No	134	51.5			
Hours of sleep/day					8.46 (1.19)
Taking medication for MH					
Yes	5	1.9			
No	255	98.1			
Regular exercise					
Yes	190	73.1			
No	70	26.9			
No. of meals/day					4.33 (0.94)
Daily fruit/vegetable intake					
Yes	219	84.2			
No	41	15.8			
Hours online/day					5.60 (4.50)
Hours in front of a screen/day					5.75 (3.63)
Victim of violence					
Yes	47	18.1			
No	213	81.9			
Friends at school					
Yes	259	99.6			
No	1	0.4			

Table S1. (cont.)

	n	**%**	**Min.**	**Max.**	**Mean (SD)**
Friends out of school					
Yes	258	99.2			
No	2	0.8			
Consumption of alcoholic drinks					
Yes	24	9.2			
No	236	90.8			
Tobacco consumption					
Yes	9	3.5			
No	251	96.5			
MH self-perception			1	5	4.25 (0.89)
PH self-perception			1	5	4.13 (0.82)
Body image self-perception			1	5	3.73 (0.96)
PH self-perception during confinement			1	5	2.95 (0.87)
MH self-perception during confinement			1	5	3.07 (0.67)

Abbreviations: Max., maximum; Min., minimum; MH, mental health; *n*, number of cases; No., number; PH, physical health; %, percent; SD, standard deviation.

Table S2. MHKQ – descriptive statistics (*n* = 260).

Item	n	%	Min.	Max.	Mean	SD
Knowledge about the characteristics of mental health and mental disorders						
1. Mental health is a component of health	260		1	5	4.80	0.67
2. Mental disorders are caused by incorrect thoughts	260		1	5	2.57	1.22
3. Many people have mental problems, but they don't realize it	260		1	5	4.17	0.93
4. All mental disorders are caused by external stressors	260		1	5	3.12	1.16
5. Components of mental health include normal intelligence, stable mood, a positive attitude, quality interpersonal relationships, and adaptability	260		1	5	4.15	1.05
6. Most mental disorders cannot be cured	260		1	5	3.24	1.18
7. Psychological or psychiatric services should be sought if you suspect the presence of mental problems or disorders	260		1	5	4.64	0.77
8. Psychological problems can occur at any age	260		1	5	4.66	0.78
9. Mental disorders and psychological problems cannot be avoided	260		1	5	3.13	1.32
10. In severe mental disorders (eg, schizophrenia), medications should only be taken for a certain period of time	260		1	5	3.43	1.14
11. Positive attitudes, good interpersonal relationships and a healthy lifestyle can help maintain mental health	260		1	5	4.68	0.77
12. Individuals with a family history of mental disorders are at increased risk for psychological and mental disorders	260		1	5	3.70	1.13
13. Psychological problems in adolescents do not influence academic results	260		1	5	4.22	1.15
14. Middle-aged or elderly individuals are unlikely to develop psychological problems and mental disorders	260		1	5	3.89	1.24
15. Individuals with weak temperaments are more likely to have mental problems	260		1	5	3.39	1.08
16. Mental problems or disorders can occur when an individual is under psychological stress or faces a significant situation in their life	260		1	5	4.30	0.96
Total Score			16	80	62.03	6.27
Awareness of mental health promotion activities						
17. Have you ever heard about World Mental Health Day?						
Yes	168	64.6				
No	92	35.4				
18. Have you heard about the International Day against Drug Abuse and Illicit Drug Trafficking?						
Yes	98	37.7				
No	162	62.3				
19. Have you ever heard about the International Day for the Prevention of Suicide?						
Yes	125	48.1				
No	135	51.9				
20. Have you ever heard about the World Sleep Day?						
Yes	77	29.6				
No	183	70.4				

Abbreviations: Max., maximum; Min., minimum; *n*, number of cases; SD, standard deviation; %, percent.

Table S3. PMHQ – descriptive statistics (n = 260).

Factor/Item	*n*	Min.	Max.	Mean	SD
F1. Personal satisfaction				27.45	4.22
4. I like me the way I am*	260	1	4	3.19	0.91
6. I feel able to explode	260	1	4	3.22	0.90
7. For me life is boring and monotonous	260	1	4	3.49	0.74
12. I see my future with pessimism	260	1	4	3.59	0.78
14. I consider myself a less important person than the other people around me	260	1	4	3.53	0.74
31. I think I'm useless	260	1	4	3.61	0.71
38. I feel dissatisfied with myself	260	1	4	3.43	0.81
39. I feel dissatisfied with my physical appearance	260	1	4	3.38	0.80
F2. Pro-social attitude				17.87	2.21
1. It's hard for me to accept others when they have different attitudes from mine	260	1	4	3.48	0.73
3. It's hard for me to listen to people's problems	260	1	4	3.70	0.62
23. I think I'm a trustworthy person*	260	1	4	3.71	0.62
25. I think about the needs of others*	260	1	4	3.27	0.86
37. I like to help others*	260	1	4	3.70	0.63
F3. Self-control				14.96	3.20
2. Problems block me easily	260	1	4	3.18	0.75
5. I can control myself when I have negative emotions*	260	1	4	2.77	0.91
21. I am able to control myself when I have negative thoughts*	260	1	4	2.99	0.86
22. I am able to maintain good self-control in conflict situations that arise in my life*	260	1	4	3.00	0.84
26. In the presence of unfavourable pressures from outside I am able to maintain my personal balance*	260	1	4	3.02	0.84
F4. Autonomy				15.69	3.01
10. I'm very concerned about what people think of me	260	1	4	3.04	0.90
13. The opinions of others influence me a lot when making my decisions	260	1	4	3.19	0.80
19. I worry that people criticize me	260	1	4	3.06	0.92
33. I have difficulties in having personal opinions	260	1	4	3.53	0.80
34. When I have to make important decisions, I feel very insecure	260	1	4	2.87	0.91
F5. Problem-solving and self-actualization				29.32	4.46
15. I am able to make the decisions for myself*	260	1	4	3.36	0.83
16. I try to remove the positive aspects of the "bad" things that happen to me*	260	1	4	2.87	0.98
17. I try to improve myself*	260	1	4	3.57	0.77
27. When there are changes in my life, I try to adapt*	260	1	4	3.42	0.72
28. Faced with a problem, I am able to request information*	260	1	4	3.16	0.83
29. The changes that usually occur in my daily life stimulate me*	260	1	4	2.75	0.90
32. I try to develop and enhance my good attitudes*	260	1	4	3.55	0.68
35. I can say no when I want to say it*	260	1	4	3.21	0.87
36. When I have a problem, I try to find possible solutions*	260	1	4	3.45	0.74
F6. Interpersonal relationship skills				22.97	3.58
8. It's hard for me to give emotional support	260	1	4	3.50	0.79
9. I have difficulties establishing satisfactory interpersonal relationships with some people	260	1	4	3.52	0.69
11. I believe that I have a lot of capacity to put myself in the shoes of others and understand their responses*	260	1	4	2.95	0.94
18. I consider myself a good advisor*	260	1	4	3.13	0.86
20. I consider myself a sociable person*	260	1	4	3.20	0.92
24. It's hard for me to understand the feelings of others	260	1	4	3.43	0.77
30. I have difficulties in relating openly with my teachers/boss	260	1	4	3.23	0.95

Abbreviations: Max., maximum; Min., minimum; *n*, number of cases; SD, standard deviation; *, inverted items.

Publicação 4 – Artigo 3: Psychological Vulnerability Indices and Adolescent's Good Mental Health Factors: a correlational study in a sample of Portuguese adolescents

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Psychological Vulnerability Indices and the Adolescent's Good Mental Health Factors: A Correlational Study in a Sample of Portuguese Adolescents

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Abstract: Background: Psychological vulnerability (PV) indicates the individual's inability to adapt to stressful situations. Adolescents experience negative impacts on their future mental health if they do not acquire the skills and knowledge necessary to have good mental health during their developmental stage. Aim: To compare the PV index among the three stages of adolescence and to explore the factors involved in good mental health, including the relationship between adolescents' PV indices and sociodemographic variables, and the relationship between adolescents' PV index and their knowledge of the factors that characterize good mental health. Method: An exploratory, cross-sectional, correlational study was carried out in three public schools in a region of Portugal, using online self-completed questionnaires: the Psychological Vulnerability Scale (PVS) and the Mental Health-Promoting Knowledge (MHPK-10). Results: Our convenience sample consisted of 260 adolescents, with a mean age of 14.07 years who were students between 5th and 12th grades, mostly female. Moderate PV indexes were obtained that were higher in late adolescence, i.e., in older adolescents, who were females in a more advanced school year, with worse self-perceptions of their physical and mental health and body image, and who frequently used a health service due to mental health problems. The association between the PV index and the level of knowledge about the factors involved in good mental health did not reach a statistical significance ($p = 0.06$). Conclusions: These results suggest a need for a design of personalized interventions that promote adolescents' mental health literacy, that prevent PV, and that should be initiated in early adolescence.

Keywords: adolescents; mental health; psychological vulnerability; schools

1. Introduction

Adolescents are a potentially vulnerable group in the community when it comes to mental health, mainly due to the profound and rapid changes that occur in this life cycle stage, both physically and mentally [1,2]. The rapid growth and development of the body and brain that occurs during this transitional phase between childhood and adulthood

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cause adolescents to undergo physical changes as well as changes in the way they think and solve problems, changes in the way they deal with emotions, and changes in social relationships [2,3]. These changes will have positive or negative impacts on adult life, depending on how effectively they are processed during adolescence, thus determining the evident vulnerability that adolescents are naturally prone to.

This vulnerability becomes visible when we look at the prevalence of mental health problems in around 14% of the global adolescent population [4]. It becomes worrisome when we see that the literature contends that more than 50% of cases of mental health problems in adults begin before the age of 14 [5].

According to the World Health Organization [6], adolescence is the period of an individual's life cycle between the ages of 10 and 19. This period of life, characterized by profound biological, psychological/mental, and social transformations, is quite long; for this reason, several authors have divided it into stages. In our study, we adopted a classification system for adolescence consisting of three stages: early adolescence (10–14 years), middle adolescence (15–16 years) and late adolescence (17–19 years) [3,7,8].

Early adolescence is characterized by concrete thinking; the need for parental and peer approval; a strong identification and dependence on the best friend; the compelling influence of peer group standards on moral reasoning; therefore, there is a strong and widespread need for belonging [2,3,7].

Middle adolescence is characterized by the development of abstract thinking, although there is recourse to concrete thinking in stressful situations; the creation of body self-image; a great need to find his/her own skills and identity; more competitiveness with oneself and others; the beginnings of establishing more stable interpersonal relationships; thus, it is a stage marked by competence and uniqueness [3,7].

Late adolescence is a stage in which abstract thinking predominates; there is greater competence in problem solving; there is an intense search for the meaning of life on a personal level and for one's own standards of morality and integrity; the adolescent displays the ability to make plans for the future and to set long-term goals; there is less interference from the opinions of others in one's own decisions and choices; the adolescent feels comfortable with his/her body image; the individual demonstrates self-esteem and more skills in interpersonal relationships; thus, it is a stage in which worthiness is evident [2,3,7].

Conceptually, psychological vulnerability (PV) is defined as "a pattern of cognitive beliefs reflecting a dependence on achievement or external sources of affirmation for one's sense of self-worth" [9] (p. 120), which translates into a tendency for the individual to have a negative perception of himself and the world where he interfaces with others, when faced with events considered stressful, reflecting the individual's inability to adapt functionally to stress and becoming more fragile to it [9–11]. The literature in this context shows that perceived dependence, perfectionism, generalized negative attributions, and the need for external sources of approval are related to PV. Therefore, PV can be considered an indicator of individual's deficit in coping behaviors [9–11].

In recent years, some studies have been published on PV showing that adolescents and young adults have moderate levels of PV [11–14], that there is a negative association between PV and adaptive constructs [15] and a positive relationship between PV and negative health outcomes [11,12], that female individuals have higher levels of PV [11,12,14], and that there is a negative relationship between resource literacy for good mental health and PV [16], all of which use the Psychological Vulnerability Scale [9], although it should be noted that most of these studies targeted higher education students.

Knowledge about the factors for obtaining and maintaining good mental health is one of the components of mental health literacy [17] and the one that has a salutogenic dimension; it is linked to mental health promotion. Regarding mental health literacy (MHL), in our study we adopted as a theoretical reference the concept of MHL defined by Jorm et al. [18] and its evolution over time [17,19], as well as the conceptual model of health literacy developed by Sørensen et al. [20], which involves "the knowledge, motivation and competencies of accessing, understanding, appraising and applying health-related

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information within the healthcare, disease prevention and health promotion setting, respectively" (p. 80). Research so far shows that adolescents have a good level of knowledge about the factors that promote good mental health [21], that girls have slightly higher levels of knowledge than boys, and that higher levels of knowledge of the factors that promote good mental health are associated with higher levels of well-being [22]. Some very recent studies in this area, but in the population of higher education students, show a good level of knowledge among the students [14], that female students and older students have higher levels of knowledge [14,23], and that a negative relationship exists between the PV index and the level of knowledge about the factors for obtaining and maintaining good mental health [16].

Given this global scenario, in an attempt to promote the mental well-being of all citizens and prevent the onset of mental health problems, in accordance with Goal 3, "Good Health and Well-Being" of the Sustainable Development Goals [24], the World Health Organization defends in the Comprehensive Mental Health Action Plan 2013–2030 [5] the need to continue to focus on strategies to promote mental health by implementing interventions in the early stages of the life cycle (childhood and adolescence) [5,25,26].

The relationship between the PV and knowledge about the factors for obtaining and maintaining good mental health was assessed in a sample of Portuguese university students by Teixeira et al. [16]. However, no studies were found in adolescents, so it is important to carry out this research because it offers the opportunity to promote future research studies that effectively personalize interventions to increase the adolescent's mental health.

The primary objective of our study was to explore the relationship between adolescents' PV index and their knowledge about the factors for good mental health, with the purpose of obtaining information to design an intervention to promote literacy on positive mental health among adolescents. Therefore, we outlined the following research questions:

1. What is the PV index in early, middle, and late adolescence?
2. What is the relationship between sociodemographic variables and adolescents' PV?
3. What is the level of knowledge about the factors for obtaining and maintaining good mental health in early, middle, and late adolescence?
4. What is the relationship between PV and knowledge about the factors for obtaining and maintaining good mental health among adolescents?

2. Materials and Methods

2.1. Study Design

A descriptive, exploratory, cross-sectional, and correlational study was carried out, included in the quantitative research paradigm. The STROBE Statement checklist [27] was used as a guide for writing this article.

2.2. Setting

This study used, to collect the data, online questionnaires via Google® Forms applied through a link that was emailed to participants from three public schools (5th to 12nd school year) belonging to a district in the Alentejo region of Portugal. Data collection was conducted between 17 April 2020 and 30 June 2020.

2.3. Participants

For the development of the study, we determined that we would need a sample made up of participants who cumulatively meet the following inclusion criteria: (a) being adolescents aged between 10 and 19 years old; (b) attend one of three public schools (5th to 12th grade) located in a district of the Alentejo region of Portugal, whose directors authorized the study; (c) have permission to participate in the study by their guardians/legal representatives provided through an informed consent form online; (d) agree to participate voluntarily in the study.

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Participants were selected using a non-probabilistic and intentional sampling method. Thus, adolescents who met the inclusion criteria mentioned above and to whom the team of researchers had access constituted the convenience sample of this study.

We calculated the required size for our sample using the MGH Biostatistics Center Sample Size Calculator [28] for a margin of error of 5% and reliability of 90%, verifying that we would need at least 242 participants for our study. From a population of 2125 adolescents, we obtained 273 completed online questionnaires, of which 13 were eliminated because they were repeated, resulting in a total of 260 adolescents with questionnaires completely answered in our convenience sample.

To collect data from the participants, an email was sent to the school directors with a link to the informed consent form available on Google® Forms to be sent to the parents/legal representatives. A document explaining the study in terms of methodology, possible risks/benefits, and ethical aspects was attached to this email. Subsequently, the link to the questionnaires to be completed by the adolescents on the Google® Forms platform was sent to the email address that the parents/legal representatives had indicated when completing the informed consent forms. Participants were guaranteed the anonymity of the data collected.

2.4. Data Sources/Measurement

To provide answers to the research questions outlined, adolescents were evaluated in a single moment in relation to their sociodemographic characteristics, the value of their psychological vulnerability index, and their level of knowledge of factors that promote good mental health.

Sociodemographic characteristics were evaluated through a questionnaire constructed by the team of researchers, which was pre-tested. It is a questionnaire composed of 29 items that allowed the collection of the following data: age, gender, school year, employment and occupation situations of the father and mother; previous and current mental health problems, psychological monitoring, medication use; self-perception of mental health, physical health, and body image.

To assess the PV index of adolescents, we used **the Psychological Vulnerability Scale** [PVS] [11]. The PVS is an instrument originally developed by Sinclair & Wallston [9], which assesses PV by identifying inadequate cognitive patterns (perfectionism, dependence, need for external sources of approval, widespread negative attributions). The PVS has a one-dimensional structure and consists of 6 self-filling items, on a Likert scale of 1 to 5 points (1 = does not describe anything about me; 5 = describes me very well). The total score corresponds to the sum of all items and ranges between 6 and 39 points, where the highest scores correspond to the highest PV. The PVS was translated into Portuguese and validated for the Portuguese population by Nogueira et al. [11] and has good internal consistency, with a Cronbach $\alpha = 0.73$. In the current study, the α Cronbach was 0.78.

We applied the questionnaire **the Mental Health-Promoting Knowledge** [MHPK-10] [29] to evaluate the level of knowledge about the factors that promote the attainment and maintenance of good mental health, in the dimensions of autonomy, relationship, and competence [22]. It was created by Bjørnsen et al. [21], and was translated into Portuguese and validated for the Portuguese population by Chaves et al. [29]. The MHPK-10 is a one-dimensional questionnaire composed of 10 self-filling items quoted on a Likert scale from 1 to 5 (1 = totally disagree, 5 = fully agree; option "N/A" = not applicable and equals zero points). In terms of score, the highest values correspond to a higher level of knowledge of the factors that promote the attainment and maintenance of good mental health, and a score with a mean of less than 4 reveals an insufficient level of knowledge, considering that the authors of the scale determined that the correct answers for each item would correspond to values 4 and 5 [21]. The MHPK-10 showed good internal validity, with a α Cronbach of 0.87 in the Portuguese version and 0.85 in our study.

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2.5. Data Analysis

The SPSS® version 27 (IBM Corp, Armonk, NY, USA) for Windows was used to perform statistical analysis. All results with $p < 0.05$ were considered statistically significant. We used descriptive statistics (absolute and relative frequencies, mean and standard deviation) to describe the variables according to their typology (qualitative/quantitative). We performed a prior test of the distribution of the variables and verified that our sample does not present normality (Shapiro Wilks test $p < 0.001$). Therefore, in terms of inferential statistics, we used non-parametric tests, specifically the Eta test to evaluate the association between nominal variables and PVS, and the Spearman correlation coefficient to verify the relationships between quantitative variables and PVS and between PVS and MHPK-10.

3. Results

3.1. Participant's Characteristics

Our sample consisted of 260 adolescents, more girls than boys (55.8% versus 44.2%), and a mean age of 14.07 years (SD = 1.96), with a minimum age of 10 years and a maximum age of 19 years, the majority (59.6%) of whom attended 7th–9th grade, 27% attended 10th–12th grade, and 13.5% attended 5th–6th grade, and whose parents represented an active professional situation (father employed in 95.8% of cases and mother employed in 90.8% of cases). Most adolescents reported having good mental health, i.e., 98.5% did not have a diagnosed mental health problem; 69.6% reported not currently having psychological monitoring, 98.1% reported not taking medication on a regular basis for a mental disorder, and 97.7% reported not having used a health service in the past three months for changes in their mental health. The adolescents in our sample reported a mean score of 4.13 (SD = 0.82) related to the self-perception of their physical health and a mean score of 4.25 (SD = 0.89) of their mental health self-perception, both corresponding to a "Good" level. They also reported their body image self-perception as "Normal", with a mean score of 3.73 (SD = 0.96).

3.2. Psychological Vulnerability Indices

The mean of the PV index (assessed by the PVS) of the adolescents in our sample was 14.71 (SD = 5.43), on a scale of 6 to 39 points, where 39 corresponds to the highest value of PV. The value found in this study was approximately in the middle of the scale, so we considered it to be at a moderate level (Table 1). The item "*6. I often feel resentful when others take advantage of me*" is the one in which adolescents have the highest vulnerability value (M = 3.34, SD = 1.44).

Table 1. PVS according to the adolescence stage (n = 260).

PVS Item	Total			Early Adolescence			Middle Adolescence			Late Adolescence		
	n	Mean	SD	*n*	Mean	SD	*n*	Mean	SD	*n*	Mean	SD
1. When I can't achieve my goals, I feel like a failure as a person.	260	2.45	1.33	153	2.25	1.22	75	2.64	1.38	32	2.97	1.51
2. I feel I deserve better treatment than I normally get from others	260	2.41	1.28	153	2.25	1.26	75	2.55	1.27	32	2.84	1.32
3. I am well aware that I often feel inferior to others.	260	2.01	1.34	153	1.84	1.21	75	2.17	1.42	32	2.47	1.59
4. I need approval from others to feel good about myself.	260	1.90	1.17	153	1.75	1.08	75	2.03	1.23	32	2.31	1.35
5. I tend to set goals that are too high and then feel frustrated trying to achieve them.	260	2.60	1.33	153	2.54	1.31	75	2.49	1.30	32	3.09	1.42
6. I often feel resentful when others take advantage of me.	260	3.34	1.44	153	3.36	1.49	75	3.21	1.37	32	3.56	1.37
PVS Total Score	260	14.71	5.43	153	13.99	5.14	75	15.09	5.24	32	17.25	6.47

Abbreviations: *n*, number of cases; PVS, Psychological Vulnerability Scale; SD, standard deviation.

In a more detailed analysis, we found that it is in late adolescence that the PV index value is highest (M = 17.25, SD = 6.47), followed by middle adolescence (M = 15.09,

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SD = 5.24) and early adolescence (M = 13.99, SD = 5.14). Across all stages of adolescence in our sample, the item "*6. I often feel resentful when others take advantage of me*" has the highest values of the PV index, noting that in late adolescence also the item "*5. I tend to set goals that are too high and then feel frustrated trying to achieve them*" has high values of PV (Table 1).

To investigate the relationship between the sociodemographic variables and the PV indexes of adolescents, we used inferential statistical analysis. The Eta test showed a statistically significant association between PV and the use of a health service in the past three months for changes in the mental health of the adolescents (Eta = 0.046) although with a weak negative Spearman correlation (r_s (260) = −0.008, p = 0.902), indicating that adolescents who used a health service the least because of a mental health problem had a lower PV index. On the other hand, Spearman's correlation coefficient revealed a moderately negative relationship between PV and mental health self-perception (r_s (260) = −0.355, $p < 0.001$) and body image self-perception (r_s (260) = −0.382, $p < 0.001$); a weak negative relationship between PV and physical health self-perception (r_s (260) = −0.289, $p < 0.001$); and a weak positive relationship between PV and age (r_s (260) = 0.195, p = 0.002) and school year (r_s (260) = 0.200, p = 0.001). We also calculated the mean of PV according to the variable sex, and the results showed that girls have a higher PV index (M = 15.65; SD = 5.59) than boys (M = 13.55; SD = 5.02). However, we did not find a statistically significant association between the variable sex and the PVS index. The analysis did not reveal other statistically significant relationships between the PV and the remaining sociodemographic variables.

3.3. Knowledge of the Factors for Good Mental Health

According to the analysis that Table 2 shows, we found that, overall, in our sample the adolescents reported a mean score of 4.49 (SD = 0.66) in MHPK-10, which reveals a sufficient level of knowledge of factors that promote good mental health, since the mean score is higher than 4. The MHPK-10 item in which adolescents had, in general, the lowest value was "*1. Handling stressful situations in a good manner*" (M = 4.31, SD = 1.17).

Table 2. MHPK-10 according to the adolescence stage (n = 260).

MHPK-10 Item	Total			Early Adolescence			Middle Adolescence			Late Adolescence		
	n	Mean	SD	*n*	Mean	SD	*n*	Mean	SD	*n*	Mean	SD
1. Handling stressful situations in a good manner	260	4.31	1.17	153	4.28	1.19	75	4.25	1.24	32	4.59	0.87
2. Believing in yourself	260	4.69	0.86	153	4.65	0.95	75	4.69	0.80	32	4.88	0.42
3. Having good sleep routines	260	4.65	0.91	153	4.67	0.87	75	4.59	1.05	32	4.69	0.78
4. Making decisions based on own will	260	4.35	0.95	153	4.46	0.83	75	4.17	1.10	32	4.22	1.04
5. Setting limits for your own action	260	4.41	1.07	153	4.45	1.00	75	4.36	1.13	32	4.31	1.26
6. Feeling that you belong in a community	260	4.41	1.14	153	4.44	1.10	75	4.27	1.32	32	4.59	0.84
7. Mastering your own negative thoughts	260	4.62	0.91	153	4.53	1.03	75	4.73	0.74	32	4.78	0.61
8. Setting limits for what is OK for me	260	4.49	1.06	153	4.45	1.08	75	4.60	0.94	32	4.41	1.19
9. Feeling valuable regardless of your own accomplishments	260	4.42	1.11	153	4.50	1.03	75	4.21	1.33	32	4.47	0.84
10. Experiencing school mastery	260	4.53	1.03	153	4.56	0.97	75	4.45	1.15	32	4.59	0.98
MHPK-10 Total Score	260	4.49	0.66	153	4.49	0.64	75	4.43	0.77	32	4.55	0.51

Abbreviations: *n*, number of cases; MHPK-10, Mental Health Positive Knowledge; SD, standard deviation.

We also found that participants who are in middle adolescence reported the lowest mean score of knowledge about the factors that promote the attainment and maintenance of good mental health (M = 4.43, SD = 0.77), followed by those who are in early adolescence (M = 4.49, SD = 0.64) and then those in late adolescence (M = 4.55, SD = 0.51), although in all three stages of adolescence the mean is always higher than four. If we look at all items assessed by MHPK-10, we find that it is also in middle adolescence that the items have slightly lower values, except for items "*2. Believing in yourself*" and "*7. Mastering your own negative thoughts*" which show lower values in early adolescence, and items "*5. Setting limits for your own action*" and "*8. Setting limits for what is OK for me*" that have lower values in late adolescence.

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3.4. Correlation between PVS and MHPK-10

To assess the relationship between PV and knowledge about the factors that promote good mental health we used the Spearman correlation coefficient. A statistically significant but weak negative relationship (r_s (260) = −0.181, p = 0.003) was found, meaning that a higher rate of PV is associated with a lower level of knowledge about the factors that promote good mental health.

A one-way Multivariate Analysis of Variance (MANOVA) was performed to examine whether differences existed in scores on the PVS and on the MHPK-10 between adolescents. Results of the evaluation of the assumptions of normality and homogeneity of variance-covariance matrices indicate that the homogeneity of covariance matrices across groups is not assumed ($p < 0.01$); linearity and multicollinearity were not satisfactory. With the use of Wilks' criterion, results showed no statistical differences for sex (p = 0.564), age (p = 0.231), and mental health status (p = 0.591).

After a multivariable regression analysis to examine a relationship between PVS and knowledge when the other variables are statistically controlled, it is possible to see that, PVS accounts for 2% of the knowledge variable variance with statistical significance (p = 0.023). When the other variables are added to the model (age, sex, school year, employment and occupation situation of the father and mother; previous and current mental health problems, psychological monitoring, medication use; self-perception of mental health and physical health), PVS accounts for 10.5% of the knowledge variable. This second block of variables is responsible for 8.5% of the variance of the knowledge variable, but it is not statistically significant (p = 0.508). Individually we can see that when the other variables are added to the model, the PVS is not statistically significant anymore (p = 0.060), with the same happening to all the other variables.

4. Discussion

One of the research questions of our study sought to compare the PV index between the three stages of adolescence. The results demonstrate that in general the adolescents in our sample showed a moderate level of PV, which is in agreement with the results of the Alves study [13]. When comparing the three stages of adolescence, it was detected that in our sample PV is higher in late adolescence. We also found that, at this stage, adolescents reported feelings of disappointment, frustration, and helplessness in social relations (evidenced by the results of item 6 of the PVS), as well as a certain tendency towards perfectionism (evidenced by the results of item 5 of the PVS). Since we did not find any other studies in this field, we cannot compare the results. However, it should be noted that these negative feelings and expectations reported by adolescents can contribute to the development of feelings of hopelessness and failure in this target group [9], since it is at this stage that adolescents are developing the cognitive ability to make plans and outline goals for the future, to develop their morality and integrity, and the capacity for personal appreciation (self-esteem) [3,7], which can be compromised if adolescents do not handle their own expectations well, making them psychologically vulnerable [30] to the onset of mental health problems. These results make evident the need to invest in mental health promotion interventions in early adolescence, to reduce PV in late adolescence.

With the second research question we wanted to explore the relationship between sociodemographic variables and the PV index. The results showed that in our sample the adolescents who presented the highest levels of PV were those who reported worse self-perception of their mental health, body image and physical health, and were those who had attended a health service more frequently in the past three months for changes in their mental health, which indicates that PV is associated with negative health outcomes, fitting with the findings of Nogueira et al. [11], although in a sample of higher education students. In addition, older adolescents and those who were in a more advanced school year were those who also had higher levels of PV, suggesting signs of unadapted cognitive reactions to stressful events [9,11] that in late adolescence can be experienced in relation to future plans/expectations and to increasing pressure for academic, professional, and

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social success [2,3,7]. We also found that girls reported higher levels of PV than boys, which agrees with the findings from studies on PV in other populations [11,12,14,31,32]. However, in our sample of adolescents, this association was not statistically significant, in line with the studies by Nogueira [12], Nogueira et al. [11], and Nogueira et al. [31], but in disagreement with the studies by Sequeira et al. [14] and Yamaguchi et al. [32].

The third research question was intended to compare the level of knowledge about the factors for good mental health in the three stages of adolescence. The results of our study show a sufficient level of knowledge among the adolescents in our sample overall, which is in line with the results of the studies by Bjørnsen [21,22]. The totality of the participants in our sample revealed a low level of knowledge on how to adequately cope with stressful events, pointing to a need to improve skills in this context. When analyzing by adolescence stage, we found that participants in middle adolescence reported the lowest levels of knowledge, despite being at the sufficient level in this area, and participants in late adolescence were the ones who had the highest levels of knowledge about the factors for good mental health. Since there are no other studies so far that have done this comparative analysis, it is not possible to compare the results. Looking at these results in light of the specific aspects of adolescence highlighted in the literature, it makes perfect sense that in late adolescence, knowledge about the factors for good mental health is greater, due to the neuroplasticity of the adolescent's brain [25], which allows for the development of abstract thinking at this stage.

The fourth research question was intended to investigate the relationship between adolescents' PV index and their level of knowledge about the factors for obtaining and maintaining good mental health. The results show that the participants in our sample presented a negative—marginally and not statistically significant—relationship between PVS and knowledge; that is, adolescents who presented a higher PV index reported lower levels of knowledge about the factors that promote good mental health. This relationship had not yet been explored in adolescents, but the results of a study in this area on a sample of higher education students [16] were recently published, in which this negative relationship was also evidenced between PV and knowledge about factors promoting good mental health. However, it is important to mention that we have detected a certain incongruence in the results presented here by our study, because given this negative relationship and given that we previously identified that in late adolescence the level of knowledge about the factors promoting good mental health is higher, this should imply that in late adolescence the PV index should be lower, but that is not what we verified in the results we obtained. Therefore, this fact points to the need to implement interventions promoting mental health literacy [33–35], specifically at the level of knowledge utilization, because apparently adolescents have had access to information and have the knowledge, but lack the ability to apply it [20]. Such interventions should aim to prevent reactions revealing PV in the transitions that adolescents face, which may compromise future transitions in the life cycle [36].

When interpreting the results of our study, it should be considered that it has some limitations. One of these limitations is that a non-probabilistic sampling method was used with a convenience sample, making it impossible to generalize the results obtained. Another limitation concerns the type of study conducted, a cross-sectional study, because this type does not admit the establishment of causality between the variables under study. Another potential limitation is related to data collection that is based on adolescents' self-reporting, so the risk of bias should be considered due to the possibility that the responses were given according to social desirability. Finally, it is important to take into consideration that the data collection took place during the beginning of the COVID-19 pandemic, more specifically during the first confinement in Portugal, so this factor may have influenced the adolescents' answers and the results obtained.

Despite the limitations, it is also important to mention the strengths of this study. One strength is that the data collection instruments used have good psychometric properties,

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which provide robust data. Another strength is that the results highlight the importance of promoting the mental health of adolescents.

5. Conclusions

Our study results show that adolescents in our sample are moderately psychologically vulnerable, especially those in late adolescence. They also show that being older and in a more advanced school year, being a female, attending health services more frequently in relation to a mental health problem, having worse self-perceptions of body image and both physical and mental health, are all characteristics associated with higher rates of PV in our sample. Furthermore, the results of the present study indicate that adolescents in general report a good level of knowledge about the factors for obtaining and maintaining good mental health, with middle adolescence being the stage at which the level of knowledge is lowest and late adolescence being the stage at which it is highest. Finally, this study did not find a statistically significant relationship between PV and knowledge about the factors for good mental health. This clearly suggests the need to focus on individual and/or community personalization of early-stage adolescent mental health interventions, based on a prior assessment.

Future research is needed on adolescents in other geographical locations and larger samples, using longitudinal studies to see if these results continue over time, as well as experimental or quasi-experimental studies to test the effectiveness of interventions that promote the mental health of adolescents and, thus, prevent their PV.

This study has implications for clinical practice, since it provides a diagnosis of the situation of the PV index of adolescents, alerting health professionals, teachers of adolescents, and researchers to the need to implement interventions/programs that promote the mental health of adolescents and their mental health literacy—across all adolescents, especially the most psychologically vulnerable ones. These interventions/programs should start as early as possible to reduce psychological vulnerability throughout the various stages of adolescence and in the transition to adulthood.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

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Publicação 5 – Artigo 4: Development of a Proposal for a Program to Promote Positive Mental Health Literacy among Adolescents: A focus group study

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Original Article:

Development of a Proposal for a Program to Promote Positive Mental Health Literacy among Adolescents: A focus group study

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Abstract:
Over the last years, there have been several studies that have shown insufficient levels of adolescents' mental health literacy (MHL). Knowledge about intervention programs that promote positive mental health literacy (PMeHL) among adolescents is still very scarce. In this sense, we defined as objectives to identify and describe the necessary components to design a program proposal that promotes adolescents' PMeHL. We conducted an exploratory, descriptive, qualitative study using 2 focus groups in July and September 2022 with an intentional non-probability sample of 11 participants (9 professional experts and 2 adolescents). Data were analyzed using content analysis, using NVivo® 12 software. We obtained a total of 4 categories and 18 subcategories: structure (context; format; contents; length and frequency; pedagogical methods; pedagogical techniques; resources; denomination), participants (target group; program facilitators), assessment (timings; evaluation instruments), other components (planning, articulation and adaptation; involvement; training; special situations; partnerships; referral). The perspectives of the professional experts and of the adolescents that we obtained from this study contributed to the design of a proposal for a program to promote adolescents' PMeHL.

Keywords: adolescents, mental health literacy, positive mental health, qualitative research.

1. Introduction

The mental health of adolescents has been the subject of interest in recent years, not always for the best of reasons. The high prevalence of mental disorders is a reality [1,2], but above all, the insufficient level of mental health and mental health literacy among adolescents is a cause for concern [3,4,5].
We are aware that adolescence is a turbulent transactional period in the life of a human being, because it is full of marked and rapid changes in biological terms, which are also reflected in mental, psychological and emotional terms, and where brain neuroplasticity is high [2,6]. This is why adolescence is considered a privileged stage of human development for investment in the implementation of interventions to promote mental health, MHL, but especially to promote PMeHL [2,7,8,9].
These concepts of health literacy (HL) and MHL, in the last decades, have been gaining more expression and interest, not only by health and education professionals, but also by researchers. HL, according to the integrated model proposed by Sørensen et al.[10], refers to the "the knowledge, motivation and

competencies of accessing, understanding, appraising and applying health-related information within the healthcare, disease prevention and health promotion setting, respectivelly" (p.80), strongly based on the dimensions of access, understanding and apply of health-related information and health services [11]. In turn, the concept of MHL was initially defined by Jorm et al.[12], but which has been updated, currently involves four dimensions: understanding how to achieve and maintain good mental health, understanding mental disorders and their treatments, decreasing the stigma related to mental disorders and increasing the effectiveness of help seeking [13,14].

The concept of positive mental health (PMH) has also clearly emerged in recent years in the health field, due to its salutogenic dimension, and although it does not have a universal definition, it is related to the individual's ability to understand himself and his environment in order to optimize his daily functioning in relation to himself and others [15]. Associated with this concept is the Multifactor Model of Positive Mental Health developed by Lluch-Canut and consisting of six interrelated factors, which are personal satisfaction (Factor 1), pro-social attitude (Factor 2), self-control (Factor 3), autonomy (Factor 4), problem solving and self-actualization (Factor 5), and interpersonal relationship skills (Factor 6) [15].

Recently Carvalho et al.[16] published a study on the conceptual analysis of PMeHL, in which they concluded that it is a dynamic concept, that it is one of the components of mental health literacy, and that it has the following attributes: competence in problem-solving and self-actualization; personal satisfaction; autonomy; relatedness and interpersonal relationship skills; self-control; and prosocial attitude [16]. So, it is evident the relationship between the concept of PMH and PMeHL.

School has been recognized by several researchers as a privileged context for the promotion of HL and MHL in children and adolescents [2,7,9,17–20], for being the environment where adolescents spend more time [19,21], for being a place where adolescents come into contact with a huge diversity of people with diverse characteristics and ages [2,7], where they are more available and more curious to develop knowledge and competencies [9,17].

Therefore, we must invest in interventions that promote the adolescents' PMeHL, so that they acquire competencies that allow them to deal with and experience all the normal changes of this stage of human development in a healthy way, thus making a huge contribution to the future of having mentally healthy and resilient adults [2,6,22]. This is a wake-up call for health professionals and education professionals to implement interventions with adolescents, but also for researchers to build those interventions.

In this sense, and continuing our research to date in this area, we gathered a group of experts and sought to explore their perspectives on a PMeHL program for adolescents, using the focus group technique in order to obtain information to design an intervention proposal.

In order to identify and describe the components necessary to design a program proposal to promote adolescents' PMeHL, we use the new framework for developing and evaluating complex interventions [23] from the UK Medical Research Council (MRC) in collaboration with the National Institute of Health Research (NIHR). This framework consists of four research phases that can be carried out in the context of complex interventions (development or identification of the intervention, feasibility, evaluation, and implementation) and contemplates core elements in each phase (considering context, developing and refining program theory, engaging stakeholders, identifying key uncertainties, refining the intervention, and economic considerations)[23]. In the case of our study, we are in the *development intervention* phase, and we tried to take special consideration to the *core elements*: *considering context*, in our case the school context, and *engaging stakeholders*, so we included in the focus group not only health and education professionals who are the potential facilitators of the intervention, but also adolescents who are the target group.

The research question that guided the present study was the following: What are the necessary components for designing a program to promote PMeHL among adolescents?

2. Material and Methods

2.1. Study design

A qualitative, descriptive, and exploratory study was conducted using focus group [24] and content analysis technique [25]. The *Consolidated criteria for reporting qualitative research* (COREQ) checklist [26] was used as a guide for writing this paper.

2.2. Participant selection

The participants in this study were professional experts with experience in the field of positive mental health and adolescence, and were also included in the panel adolescents in the early adolescent phase (10 - 14 years) as one of the *core elements* within the new framework for developing and evaluating complex interventions [23].

In this study, we used the non-profit sampling method to select the experts in the field of PMH, HL, MHL and adolescence for the sample constitution.

One of the researchers (J.N.) sent an email to the professional experts inviting them to participate in the study, which contained the link to the online informed consent form and an explanation about the study. The professional experts were invited after discussion and consensus of the research team, based on their expertise, experience, and work done. The selected professional experts met the mandatory inclusion criterion of wanting to participate voluntarily in the study, and at least two more of the following inclusion criteria: (a) have professional experience of at least 5 years; (b) be a health professional or a researcher or teacher in basic education; (c) have a master's or doctoral degree; (d) have experience working/researching with adolescents; (e) be familiar with the concepts of PMH, HL, and MHL.

Regarding the adolescents, the research team had access to their names and contacts by e-mail through the teachers of one of the schools in the Alentejo region of Portugal, who had previously contacted the adolescents and their parents/legal representatives, explained the objectives of the study and asked for their participation. An e-mail was sent to the adolescents' parents/legal representatives by one of the researchers of the team (J.N.) with the formalization of the invitation to participate in the study and with the link to fill out the online informed consent form. The adolescents who were selected for participation in this study met cumulatively the following inclusion criteria: (a) be between the ages of 10 and 14 years; (b) be the representative of their class at school; (c) not know any of the selected professional experts; (d) have informed consent authorized by parents/legal representatives; (e) want to participate voluntarily in the study. Given that the literature indicates that the panel of participants in a focus group can range from four to twelve members [24], and in order to ensure a sufficient number of experts in our sample, fifteen potential experts were invited (twelve professional experts and three adolescents), of which three declined (two professional experts and one adolescent), twelve accepted, and eleven actually participated in the study (one professional expert was absent - P5). Participants who refused or dropped out cited personal reasons as justification. Participation by experts and adolescents was voluntary, and there were no monetary compensations or other offers as incentives for participation.

2.3. Setting

Two focus groups were conducted by videoconference, through the Zoom platform, in order to facilitate the presence of participants, since they came from different regions of Portugal. In the first focus group 11 participants were present and in the second focus group 8 of the 11 participants. Following the methodological guidelines of Krueger and Casey [24], in addition to the participants, two members of the research team were also present, where one of the researchers played the role of moderator (J.N.) and the other researcher played the role of assistant moderator (H.A.).

2.4. Data collection

The data collection, for this study, was performed through two focus groups, both directed to the same participants, using a semi-structured interview guide, in order to allow a greater degree of freedom in the participants' answers, and the questions were constructed according to the objectives of the study: 1) What is the relevant content for a program to promote positive mental health literacy among adolescents in the stage of early adolescence (10-14 years) in a school setting?, 2) What length (total and per session) and frequency should the program have?, 3) What strategies do you think are relevant to use (methods, pedagogical techniques, and teaching resources)?, 4) What is the specific school context in which this program should be implemented?, 5) What requirements must participants have to be targeted by the program?, 6) What are the characteristics/requirements that facilitators must possess to implement the program?, 7) How should the program assessment be done?, 8) When should the program assessment be done?, 9) What name do you suggest for the program?, 10) Do you have any other suggestions that you think are pertinent?. To assess sociodemographic characteristics, the researchers created an ad hoc form, through which it was possible to collect the following data: age, gender, academic qualifications, main professional activity, number of years of professional experience, number of years of experience working/researching with adolescents.

The first focus group was held in July 2022 and the second in September 2022, with a duration ranging from 90 to 120 minutes. During the focus groups, the moderator (J.N.) was responsible for presenting the objectives of the study and conducting the interviews, encouraging the intervention of all participants, especially the adolescents, in order to prevent them from feeling inhibited among the professionals; the assistant moderator (H.A.) was responsible for observing the focus group dynamics and taking supporting notes.

We used audio and video recordings of each focus group, duly authorized by the participants, and written supporting notes. Transcripts of the focus groups were made after the focus groups ended and were not returned to the participants for possible corrections or feedback.

After the second focus group, the authors considered that data saturation was achieved as the response pattern of the participants was consistent and no new relevant information was obtained, which is consistent with what the literature says, i.e. that two to three focus groups are sufficient to capture about 80% of the main themes/categories [27].

2.5. Data analysis

The verbatim transcription of each focus group was done by the first author (J.N.) and checked by the second author (H.A.). The data were then analyzed using content analysis according to Bardin [25in its different phases: 1) pre-analysis, 2) exploration of the material, and 3) treatment of results, inference and interpretation. In the pre-analysis phase, the transcripts and the assistant moderator's notes were subjected to "*floating*" reading and editing procedures. In the material exploration phase, the first and second authors proceeded to the coding of the data and the researchers' triangulation to minimize biases, and deductively coded four categories (structure; participants; assessment; others) and twelve subcategories (context, format, contents, length and frequency, pedagogical methods, pedagogical techniques, resources, denomination; target group, program facilitators; timings, evaluation instruments). Finally, in the results treatment phase, the name of the category "others" was changed to "other components" and six more subcategories emerged inductively (planning, articulation and adaptation; involvement; training; special situations; partnerships; referral).

The context units selected to illustrate the results obtained were identified by the code that was assigned to each participant in order to ensure anonymity, e.g. P1_SpNurs1_F1 means that the context unit comes from participant 1 who is a specialist nurse and participated in the first focus group.

Throughout the analysis procedure, the two authors (J.N.) and (H.A.), were concerned with the observation of the objectivity and pertinence of the categories, allowing this process to systematize them, in a reconfiguration procedure until reaching the final "Tree of Nodes". We also observed

validity, linking the objectives of the work, the emerging categories, and the content included. We checked for exhaustiveness, ensuring the inclusion of input from a variety of data sources. The rigor was always a concern, in relation to the theme, the use of various informants and experts was a resource to ensure credibility, also the transferability was observed, making rigorous reports in order to allow the transfer of knowledge supported by the results, also emphasize the discussions between researchers, not only around the findings, as on the methodological route in an attempt to avoid distortions and once again make the control of reliability [28].

NVivo® 12 software (QSR International, Ltd, United Kingdom) was used to perform the data analysis and treatment. The participants gave favorable feedback on their results after their analysis was returned to them.

3. Results

3.1. Characteristics of Participants

In focus group 1, eleven participants were present (P1-P12), of which nine were professionals (P1-P9, P12) and two were adolescents (P10-P11). Focus group 2 was attended by eight of the eleven participants (P1-P2 and P7-P12). Participant P5 was absent from both focus groups, but the professional area he represented, the research, was taken care of by another participant from the same area who agreed to participate in this study from the beginning.

Of the total of eleven participants who took part in the focus groups, the majority were female (88,9%). The group of professional experts was composed of 5 specialist nurses in mental health nursing and psychiatry, 1 researcher, 1 psychologist, 1 child psychiatrist and 1 teacher in basic education; their ages ranged from 26 to 57 years; most of them had a master's degree (66.7%); their professional experience ranged from 5 to 28 years; and their experience in research/work with adolescents ranged from 0 to 27 years. The adolescent group consisted of 2 adolescents, both 14 years old and attending the 9th grade.

3.2. Categories and Subcategories

With the two focus groups we obtained in total 4 categories and 18 subcategories, as shown in Figure 1. While performing phase 3 of the content analysis process, according to Bardin [25], the phase of treatment of results, inference and interpretation, the following 6 subcategories emerged inductively: planning, articulation and adaptation; involvement; training; special situations; partnerships; referral. All other subcategories had been deductively identified before the focus groups were conducted. A detailed view of the Tree Nodes showing all categories and subcategories as well as the number of references included in each can be found in Supplementary Materials S1.

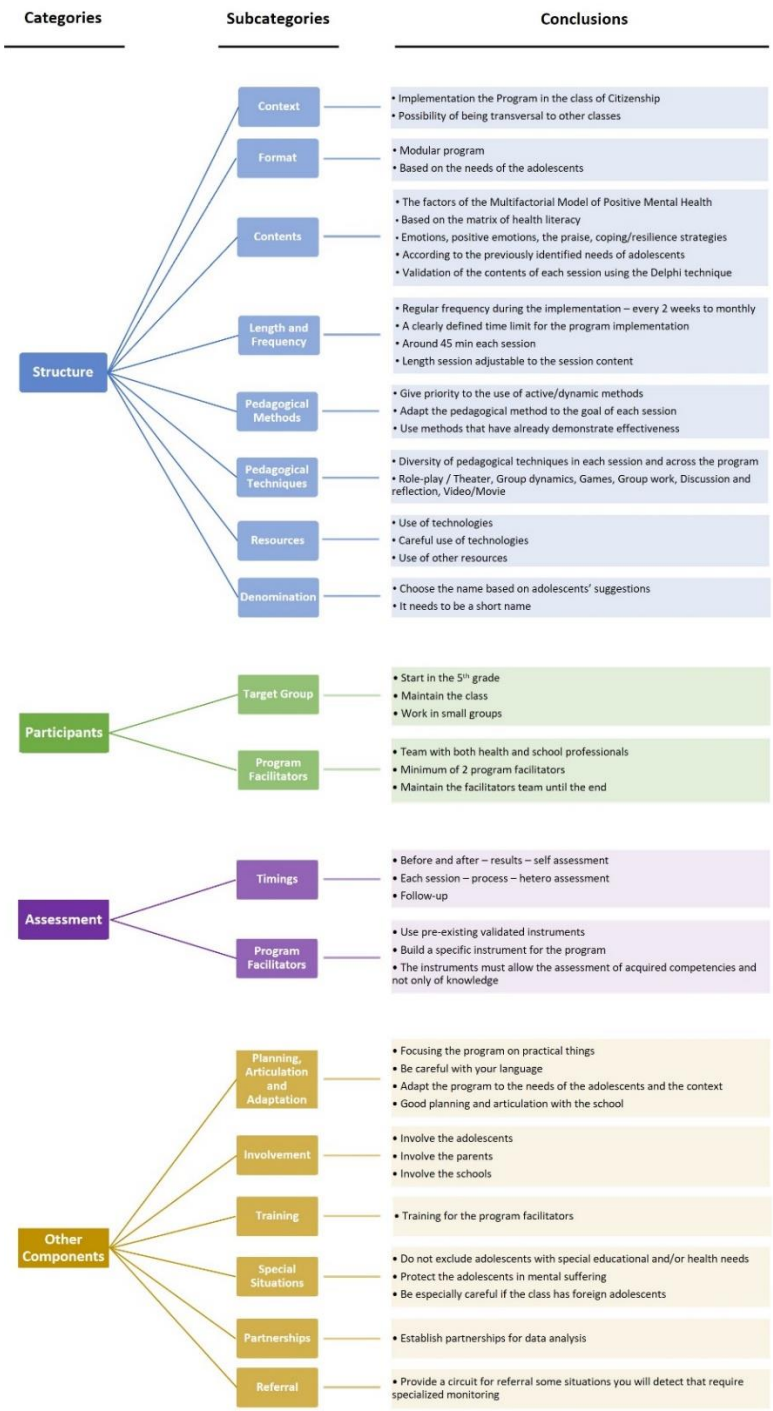

Figure 1. Categories and sub-categories resulting from the content analysis.

3.2.1. Structure

Context. The participants suggested that the implementation of the program should take place mainly in citizenship classes, as this is the subject whose contents are best suited to the theme of the program we are designing (P4_Teach_F1, P9_SpNurs5_F1, P10_Ad1_F1, P11_Ad2_F1, P2_Psy_F2, P11_Ad2_F2), however, they also suggested the possibility of this program covering other subjects in the curriculum plan (P4_Teach_F1, P6_ChildPsy_F1):

> *We have some disciplines in schools that can collaborate a lot with this* [program]*, such as citizenship*. (P4_Teach_F1)
>
> *Should ideally be a transversal intervention, not in a particular discipline, it could be included in the content of several disciplines*. (P6_ChildPsy_F1)

Format. It was considered by the participants that the program should have a modular format (P1_SpNurs1_F1, P7_SpNurs3_F1), organized by sessions (P7_SpNurs3_F2, P8_SpNurs4_F2), and highlighted the importance of being based on the adolescents' needs (P7_SpNurs3_F1, P1_SpNurs1_F2, P2_Psy_F2):

> *It can be more modular*. (P1_SpNurs1_F1)
>
> *I think that being organized by sessions is perfect, there has to be a logical following.* (P7_SpNurs3_F2)
>
> *It doesn't make sense to me to do a comprehensive promotion or prevention program for everyone, maybe more targeted and more individualized to the needs of each one*. (P7_SpNurs3_F1)

Contents. There was consensus among the participants that the contents should be based on the factors of the Multifactor Model of positive mental health, i.e., personal satisfaction, pro-social attitude, self-control, autonomy, problem-solving and self-actualization, and interpersonal relationship skills (P1_SpNurs1_F1, P2_Psy_F1, P4_Teach_F1, P8_SpNurs4_F1, P10_Ad1_F1), and should have as background the health literacy matrix, especially the dimension of apply (P1_SpNurs1_F1, P2_Psy_F1, P3_SpNurs2_F1, P8_SpNurs4_F1, P12_Res_F1, P1_SpNurs1_F2, P8_SpNurs4_F2, P12_Res_F2):

> *If we intend to have an intervention, a literacy program and to focus on positive mental health, then it is important that we base our content on the foundations of positive mental health*. (P8_SpNurs4_F1)
>
> *Is important for literacy, the issue of access, understand and apply, and very focused on apply*. (P1_SpNurs1_F1)

The participants also emphasized the importance of addressing emotions in order to clarify them for adolescents and to differentiate them from diagnoses of mental disorders (P1_SpNurs1_F1, P2_Psy_F1, P3_SpNurs2_F1, P4_Teach_F1, P9_SpNurs5_F1, P11_Ad2_F1, P12_Res_F1, P1_SpNurs1_F2), and recommended that special emphasis be placed on positive emotions and praise (P4_Teach_F1, P6_ChildPsy_F1, P9_SpNurs5_F1, P12_Res_F1), as well as coping/resilience strategies (P2_Psy_F1, P6_ChildPsy_F1):

> *There is a confusion between emotions and diagnoses*. (P3_SpNurs2_F1)
>
> (…) *maybe we won't talk about all of them* [emotions]*, we talk about the primary emotions eventually for the level of development they* [adolescents] *are at, we talk about the most primary emotions.* (P1_SpNurs1_F2)
>
> (…) *to praise the strength,* (...) *working on positive emotions*. (P12_Res_F1)

Also in this subcategory, participants pointed out that the content should be based on the adolescents' needs (P7_SpNurs3_F1, P2_Psy_F2):

> *According to the needs of the target audience itself.* (P2_Psy_F2)

In addition, it was suggested by some of the participants that the Delphi technique should be used to validate the content of each module and session (P1_SpNurs1_F2, P8_SpNurs4_F2):

> (…) *to validate this* [session contents]*, is to look at it thoroughly maybe in a Delphi technique, I think it's the simplest way to do it*. (P8_SpNurs4_F2)

Length and frequency. It was suggested by participants that the program must have a well defined start and end date for implementation (P7_SpNurs3_F1), that it should have a regular frequency during implementation to ensure a certain continuity, every two weeks or monthly implementation was suggested (P1_SpNurs1_F1, P2_Psy_F1, P4_Teach_F1, P6_ChildPsy_F1, P8_SpNurs4_F1, P9_SpNurs5_F1, P10_Ad1_F1, P11_Ad2_F1, P12_Res_F1), with concern that the frequency of implementation needs to be adapted to the school context (P7_SpNurs3_F2, P10_Ad1_F2):

> *An intervention program at the literacy level has to be tight, it has to have a beginning and an end*. (P7_SpNurs3_F1)
>
> *Frequency every 2 weeks or monthly*. (P9_SpNurs5_F1)
>
> *In relation to frequency I think it can be variable, it depends from school to school, it depends on each school's citizenship project.* (P7_SpNurs3_F2)

Regarding the length of each session, participants proposed 45 minutes, which corresponds to one class time (P7_SpNurs3_F1, P9_SpNurs5_F1, P10_Ad1_F2, P11_Ad2_F2), but pointed out that the length may vary depending on the content to be covered and the dynamics to be carried out, and that in some cases two class times may be required, so reaching to 90 minutes (P1_SpNurs1_F1, P7_SpNurs3_F1, P8_SpNurs4_F1, P10_Ad1_F1, P1_SpNurs1_F2, P2_Psy_F2):

> *Maximum duration of 45 min*. (P9_SpNurs5_F1)
>
> *I think that the duration is very relative, because it is very much associated with the content*. (P10_Ad1_F1)
>
> (…) *the time I think has to be between 45 and 90 minutes, if we can negotiate the 90 minutes is much easier.* (P1_SpNurs1_F2)

Pedagogical methods. Participants recommended to give priority to the use of active/dynamic pedagogical methods (P1_SpNurs1_F1, P3_SpNurs2_F1, P8_SpNurs4_F1, P9_SpNurs5_F1, P10_Ad1_F1, P10_Ad1_F2), with a concern to be appropriate to the goal of each session (P1_SpNurs1_F1, P8_SpNurs4_1, P7_SpNurs3_F2, P8_SpNurs4_F2). In addition, they suggested using methods/models that have already demonstrated effectiveness (P6_ChildPsy_F1):

> (…) *in a more dynamic way and not exactly being closed in a room and listening to what someone tells us*. (P10_Ad1_F1)
>
> *If we have people who still do not have a basic knowledge of what we are going to explain, maybe it is important to start with a more expository issue, then move on to the most active strategies so when we already have a higher level of knowledge that is likely to take for the application*. (P8_SpNurs4_F1)
>
> (…) *trying to look for positive models that have already demonstrated success and try to reproduce them*. (P6_ChildPsy_F1)

Pedagogical techniques. Several pedagogical techniques were listed by participants that they most recommend to be used during program implementation, such as role-play/ theater (P1_SpNurs1_F1, P3_SpNurs2_F1, P8_SpNurs4_F1, P9_SpNurs5_F1, P10_Ad1_F1, P1_SpNurs1_F2), games (P1_SpNurs1_F1, P3_SpNurs2_F1, P11_Ad2_F1, P11_Ad2_F2), group dynamics (P1_SpNurs1_F1, P4_Teach_F1, P7_SpNurs3_F1), discussion and reflection (P8_SpNurs4_F1, P9_SpNurs5_F1, P9_SpNurs5_F2), group works (P9_SpNurs5_F1, P11_Ad2_F1), online information search (P9_SpNurs5_F1), movie/video (P1_SpNurs1_F2).

The importance of having a diversity of pedagogical techniques in each session and throughout the program was also underlined (P1_SpNurs1_F1, P4_Teach_F1, P8_SpNurs4_F1):

> *I think that a 50-minute class has to have 4 or 5 different activities to have dynamics and to have interaction between the students and the facilitators of the program*. (P4_Teach_F1)

Resources. During the discussion, some participants suggested including technology as a resource to be used in the program implementation (P2_Psy_F1, P3_SpNurs2_F1, P12_Res_F1), because it is very suitable to the adolescents' tastes nowadays, although they warned about a careful use of these technologies (P2_Psy_F1, P3_SpNurs2_F1, P8_SpNurs4_F1) due to the obstacles/problems it may imply, pointing out that there are also other resources that can be used during the program (P4_Teach_F1, P10_Ad1_F1):

> *Adolescents like means of application, for example any intervention must have digital means, they are the Z generation, they are already the Alpha generation, they were born in the digital environment, and this must be present*. (P12_Res_F1)
>
> *Technology is good, and it's appealing, but it's also distracting, there has to be a balance between these two ideas of technology, yes but with some caution because we can have a lot of obstacles later in our program*. (P8_SpNurs4_F1)
>
> *Schools sometimes don't have internet and that doesn't make it easy, however* (…) *they're not* [internet and Apps] *the only thing we can work with*. (P4_Teach_F1)

Denomination. Although some suggestions for possible denomination of the program were made, participants suggested that it would be more interesting if the name of the program was chosen based on suggestions from the teens themselves, for example through a competition or voting (P7_SpNurs3_F1, P11_Ad2_F1), keeping in mind that the denomination needs to be short (P2_Psy_F2, P7_SpNurs3_F2):

> *The name* (…) *do a competition, for example, to choose, or a student vote*. (P11_Ad2_F1)
>
> *The name,* (…) *it had to be something small to stay in memory, that is easier for diction.* (P7_SpNurs3_F2)

3.2.2. Participants

Target group. According to the participants, the program we are designing should start being implemented from 5th grade and then continue in the following school years (P2_Psy_F1, P4_Teach_F1, P6_ChildPsy_F1, P11_Ad2_F1), i.e. start covering adolescents from 10 years old on. Furthermore, they proposed to keep the class (P9_SpNurs5_F1, P11_Ad2_F1), divided into small groups during the sessions (P4_Teach_F1, P10_Ad1_F1, P11_Ad2_F1, P12_Res_F1). The following context units demonstrate the achieved findings:

> *Mental health literacy has to be worked on as early as possible, it has to start in the 5th grade* (…)*, however it has to be worked on throughout life*. (P4_Teach_F1)
>
> *I think it's important to keep the class, because we know our colleagues better*. (P11_Ad2_F1)
>
> (…) *groups have to be smaller*. (P12_Res_F1)

Program facilitators. Participants considered that the program facilitator team should consist of health professionals and school professionals (P1_SpNurs1_F1, P3_SpNurs2_F1, P4_Teach_F1, P9_SpNurs5_F1, P10_Ad1_F1, P11_Ad2_F1, P1_SpNurs1_F2) to enrich the program:

> (…) *always as a team, School Health, teachers, everyone, always a team*. (P1_SpNurs1_F1)
>
> *I feel that we all have to be there because that's the only way to bring even more benefits because our looks and our visions of everyone are important,* (...) *I speak* (...) *in nursing, I also speak of the school psychologist, I speak of the professionals that we have available.* (P1_SpNurs1_F2)

Furthermore, two very important aspects were highlighted in the program design, on the one hand the team should be composed of at least 2 facilitators (P3_SpNurs2_F1, P7_SpNurs3_F1, P9_SpNurs5_F1), and on the other hand the facilitating team should be maintained until the end of the program implementation (P7_SpNurs3_F1), to guarantee continuity:

> *We need at least two program facilitators to implement the intervention/session plus the class director who is assisting and a psychologist from the school*. (P3_SpNurs2_F1)
>
> *The reference person who starts the program stays until the end* (…) *in order to give continuity*. (P7_SpNurs3_F1)

3.2.3. Assessment

Timings. Participants considered that the evaluation moments should occur before the application of the program and at the end (P1_SpNurs1_F1, P2_Psy_F1, P3_SpNurs2_F1, P4_Teach_F1, P7_SpNurs3_F1, P8_SpNurs4_F1, P9_SpNurs5_F1, P10_Ad1_F1, P12_Res_F1), as well as in the follow-up (P4_Teach_F1, P6_ChildPsy_F1, P7_SpNurs3_F1, P9_SpNurs5_F1, P1_SpNurs1_F2). At these moments, the adolescents would be subject to self-evaluation by filling out instruments that will allow us to verify the existence or not of improvement in the results. The following context units illustrate the results achieved:

> *It is important that we have a pre and post assessment here to see if there is effectively a gain*. (P8_SpNurs4_F1)
>
> [Follow-up] *Always! At least after 3 months*. (P9_SpNurs5_F1)

Adolescent assessment was also recommended in each session (P1_SpNurs1_F1, P2_Psy_F1, P4_Teach_F1, P8_SpNurs4_F1, P9_SpNurs5_F1, P11_Ad2_F1, P12_Res_F1, P1_SpNurs1_F2, P2_Psy_F2, P12_Res_F2), through a hetero-evaluation performed by the program facilitators, to understand if the adolescents are able to apply the themes addressed in the sessions, and to get answers to the program process indicators:

> *It is important to have an assessment of the process* (…) *each session. It even gives us feedback on the improvement of the sessions because we can always improve the program*. (P1_SpNurs1_F1)
>
> [Ask the adolescents] *"can you with this information of positive psychology and positive health literacy apply it to your everyday life, even just one thing? If you did, what did you apply it to?" This is what enriches the competences of these adolescents.* (P12_Res_F2)

Evaluation instruments. Participants suggested the use of instruments that already exist and are validated for the assessment of positive mental health and mental health literacy (P1_SpNurs1_F1, P7_SpNurs3_F1, P8_SpNurs4_F1). However, they stated that in order to be able to make a more specific evaluation of the results regarding positive mental health literacy, the most correct thing to do would be to create an instrument to evaluate the results of the application of this program, as well as observation grids for the process evaluation in each session (P1_SpNurs1_F1, P2_Psy_F1, P3_SpNurs2_F1, P8_SpNurs4_F1, P9_SpNurs5_F1, P12_Res_F1, P2_Psy_F2, P7_SpNurs3_F2). The following context units demonstrate the results we obtained:

> (…) *there is Claudia's instrument, then there is Bjørsen's own study*. (P1_SpNurs1_F1)
>
> (…) *throughout the sessions we have observation grids*. (P1_SpNurs1_F1)
>
> *To have a questionnaire that gives you an answer, a test that gives an answer to your program, you will probably have to build an instrument*. (P8_SpNurs4_F1)

In addition, they recommended that the instruments should allow for the assessment of acquired competencies and not just knowledge (P1_SpNurs1_F2, P2_Psy_F2, P8_SpNurs4_F2, P12_Res_F2):

> *The instruments of evaluation cannot only be effectively instruments of knowledge, there must also be competencies here*. (P1_SpNurs1_F2)
>
> (…) *a scale of* (…) *perceived competence or self-efficacy it's always easier for us to see a difference here*. (P8_SpNurs4_F2)

3.2.4. Other components

Planning, articulation and adaptation. Participants mentioned that the program should focus on practical things (P3_SpNurs2_F1, P12_Res_F1, P2_Psy_F2, P7_SpNurs3_F2, P9_SpNurs5_F2), should be adapted to the adolescents' and context's needs (P1_SpNurs1_F1, P4_Teach_F1, P2_Psy_F2, P9_SpNurs5_F2), that facilitators should be careful with the language used (P9_SpNurs5_F1, P12_Res_F1) to make sure the message is delivered correctly, and emphasized that, above all, good planning and articulation with the school is required (P3_SpNurs2_F1, P4_Teach_F1, P9_SpNurs5_F1):

> *It is better to focus on simple and practical things and bring awareness and give tools*. (P3_SpNurs2_F1)
> *It is good to have this flexibility and this possibility of being able to adjust the program to the needs of the context, the needs of the adolescents and the capacity of the school*. (P1_SpNurs1_F1)
> [The program] *must be planned at the beginning of the school year so that we are successful in the implementation.* (P3_SpNurs2_F1)

Involvement. According to the participants it is important that in the implementation of the program the adolescents themselves who are going to be targeted by the program are involved (P3_SpNurs2_F1, P7_SpNurs3_F1, P1_SpNurs1_F2, P2_Psy_F2, P12_Res_F2), the parents/legal representative (P2_Psy_F1, P3_SpNurs2_F1, P10_Ad1_F1, P2_Psy_F2) and the school (P2_Psy_F1, P3_SpNurs2_F1, P2_Psy_F2):

> *Adolescents should have a voice and should be listened to in their needs*. (P3_SpNurs2_F1)
> *I think it shouldn't be something very addressed just to us, but also to parents*. (P10_Ad1_F1)
> (…) *with the involvement of the school*. (P2_Psy_F1)

Training. It was mentioned by the participants that it is essential to have a previous training for all facilitators about the program and its implementation (P12_Res_F1, P7_SpNurs3_F2, P8_SpNurs4_F2):

> *So, I think it was important for us to talk about this, that in order to be applied, it is necessary to give training to those who are going to apply it, whether they are citizenship teachers, which seems fine to me, or whether they are Class Directors*. (P7_SpNurs3_F2)

Special situations. The participants warned that there may be adolescents with special educational and health needs, but they should not be excluded from the application of the program (P1_SpNurs1_F1, P3_SpNurs2_F1, P4_Teach_F1, P8_SpNurs4_F1, P9_SpNurs5_F1). They also advised that special care should be taken if there are adolescents with other nationalities (P7_SpNurs3_F1) and that special protective measures should be taken during sessions for adolescents with psychological suffering (P2_Psy_F2). The following context units illustrate the findings obtained:

> *I think that no one from the class should be removed because they have some of these criteria, I think that the participation of* (…) *someone who has a special need, can continue to participate, it may not have the best result we expected but it is important that he/she continue in the session anyway.* (P8_SpNurs4_F1)
> *If we have foreign students, have at least the care taken in the translation and in explaining the terms*. (P7_SpNurs3_F1)
> *Adolescents who already have some level of suffering associated, it is not that they are excluded, but perhaps the approach with these will have to be different*. (P2_Psy_F1)

Partnerships. It was mentioned by the participants that it would be interesting to establish partnerships, for example, with Higher Education Institutions for data analysis (P3_SpNurs2_F1):

> (…) *partnerships* (...) *to do the work of research data, because in clinical practice I cannot do research and clinical practice*. (P3_SpNurs2_F1)

Referral. Finally, another alert was left by the participants related to the question of the procedure that should be included in the program in case the facilitators identify adolescents that need specialized support (P1_SpNurs1_F2):

> (…) *because when we have to refer a situation that we have identified, we will have to refer it "outside ourselves".* (P1_SpNurs1_F2)

Through the visualization of the word cloud generated during the content analysis, illustrated in Figure 2, we see that the most common words verbalized by the participants in the focus groups are “think”, “adolescents”, “class”, “knowledge”, “school”, “session”, “apply”, “needs”, “important”, “literacy”, “program”, “health”, with respectively a frequency of 2.38%, 2.06%, 1.52%, 1.41%, 1.30%, 1.30%, 0.98%, 0.98%, 0.76%, 0.76%, 0.54%, 0.54%, which demonstrates

the importance that participants attribute to the construction of a literacy-promoting program targeting adolescents, inserted in their class, that is applied in school, and that contains sessions in which adolescents think about the knowledge they are accessing and apply it in their daily lives to promote their mental health, according to their needs.

Figure 2. Word cloud of the most cited words by the participants (generated by the software NVivo® 12).

4. Discussion

This study explored the perspectives of a group composed of professional experts and adolescents on the design of a proposal for a program to promote positive mental health literacy among adolescents. As result, we were able to identify and describe the components necessary to design the proposal of the mentioned program, and these components were grouped into four categories: structure, participants, assessment, and other components.

Regarding the category *structure*, the participants suggested that the program should be implemented to adolescents at school, mostly in citizenship classes, meeting the emphasis that several authors make on school as a privileged context for the promotion of mental health, HL and MHL [2,7,9,17–20]. They suggested that it should have a modular format, with several sessions, every two weeks or every month, each session lasting between 45-90 minutes, using mainly active pedagogical methods, using pedagogical techniques such as role-play, games, group dynamics, discussion and reflection, among others, and eventually resorting to the use of technology, as long as it is very carefully selected so that it does not become an obstacle. These suggestions from the participants are consistent with the studies developed by other authors, namely Parnell et al.[29], Morgado et al.[9,30], Laranjeira & Querido [31], Choi et al.[32] and Costa et al.[33] . The contents were thoroughly discussed by all the participants, and the consensus was that the Multifactor Model of Positive Mental Health factors should be addressed, that is, personal satisfaction, pro-social attitude, self-control, autonomy, problem solving and self-actualization, and interpersonal relationship skills. Special attention should be given to the clarification of some emotions, to emphasizing positive emotions and the practice of praise, and also to coping/resilience strategies. These proposals of the participants are, on the one hand, in line with the new framework for developing and evaluating complex interventions [23] in the sense that there is a theoretical model at the basis of a complex intervention, which in our case will be the Multifactor

Model of PMH and the HL matrix, and, on the other hand, they are in line with what the study by Carvalho et al. [16] says are the attributes of the concept of PMeHL. The participants recommended that the contents should be approached based on the HL matrix, that is, ensuring that adolescents develop access, comprehension and use competences regarding the contents that will be worked on [10,11], emphasizing that this will be the great added value of this program and will differentiate it from others that already exist. Indeed, in a scoping review conducted by our research team in 2021, we found that the several studies included referred to programs or interventions promoting adolescent MHL, however only a few were directed to the salutogenic dimension of MHL and promoted mainly access to knowledge and not adolescent competences in the dimension of apply [34]. It was also suggested that the validation of the content of each session should be performed through the Delphi technique, which is often used in health sciences to obtain consensus on a particular subject or intervention [35], which is exactly what we intend to do in a future stage. Regarding the denomination of the program, it was suggested that a vote or competition should be held with the adolescents, in order to involve them in the process of building the program itself.

In the category *participants*, it was consensual that the program should have as its target group adolescents from the 5th grade on, and it was advised that the class to which the adolescents belong should not be broken up, but the class should be divided into small groups during the sessions [9,33,36,32]. Regarding the facilitators of the program, it was recommended that a team should be formed with health professionals and education professionals, which should remain unchanged from the beginning until the end of the program implementation, and that at least two facilitators must work together to run each session, which is in line with what is advocated by several authors [7,8,18,36].

In relation to the category *assessment*, participants advocated for evaluation before and after program implementation and also in the follow-up [9,37,38], where adolescents should be given instruments to evaluate the PMeHL, either through instruments that already exist and are properly validated and adapted or through an instrument that the research team constructs specifically for program evaluation. In addition, they recommend that at each session the adolescents should be evaluated by the program facilitators through the application of observation grids that the research team needs to create in order to obtain information not only about the adolescents' progress, but also suggestions for improvement of the program in progress, as recommended by Richards&Halberg [37] and by Morgado et al. [9,30].

Finally, in the category *other components*, there are several extra suggestions that may contribute to a greater effectiveness and success of the program, which emerged from the participants' speech throughout the focus group. In particular, the need for good coordination with the school in terms of short and medium-term planning; the importance of involving the adolescents themselves in the planning and implementation of the program, giving priority to their expressed needs, their opinions and active participation in decision-making; the involvement of the school and parents/legal representatives; the requirement for the facilitating team to undergo training prior to the implementation of the program; the need to adopt inclusive and more protective measures in case there are adolescents with special health and educational needs, or adolescents who have another native language, or adolescents who are in psychological suffering; the extreme importance of having a previously defined referral circuit for specialized care for the adolescents that the facilitators identify during the implementation of the program; and the establishment of partnerships with some entities, for example, for the analysis of the data resulting from the evaluation instruments, but which may also be important in the context of the aforementioned specialized care for adolescent. These suggestions are consistent with several published works [2,7,9,33,36].

It is noteworthy that in several subcategories (throughout the two focus groups) the participants emphasized that it was extremely important that the program be adapted to the adolescents' needs and also to the needs and characteristics of the school context, which is in line with what the new framework for developing and evaluating complex interventions [23] advocates, that is, the flexibility that interventions must have in order to be effective.

Despite the methodological rigor and the relevance of the achieved findings, this study has the limitation that the results cannot be generalized, since we used a non-probabilistic sample.

5. Conclusions

In conclusion, the participants of this study expressed their ideas about the components that a program to promote adolescents' PMeHL should contain, thus contributing to the design of the program proposal. They considered that it should be a program implemented at school by a team of facilitators composed of health and education professionals, aimed at adolescents from the 5th grade on, with a focus on citizenship classes, composed of several modules and each module organized into sessions, with a length of 45-90 minutes each session, a quarterly or monthly application frequency, using active teaching methods and techniques, whose contents are based on the factors of the Multifactor Model of PMH and based on the dimensions of access, understanding and apply of HL. Should include the application of adolescent outcome assessment instruments before and after implementation and at follow-up, as well as adolescent process assessment instruments at each session. In order to increase the success of the program, it was recommended a good articulation with the school, the involvement of adolescents, parents/legal representatives and the school, the adoption of inclusive and protective measures for the most vulnerable adolescents, which should include a referral circuit for specialized care, and, finally, it was advised the establishment of partnerships with other entities.

In terms of implications for clinical practice, we believe that in the future this program will make an outstanding contribution to the promotion of adolescents' mental health and well-being by supporting professionals in clinical practice (nurses, clinical psychologists, physicians) and educational professionals (teachers, educational psychologists) in their care of this group of the educational community.

It is still necessary to develop further research studies to obtain a program that is properly validated and adaptable to adolescents and their context, although with a standard base structure, namely Delphi studies for the validation of the contents of each session, a pilot study, and only then move on to an experimental or quasi-experimental study.

Supplementary Materials: The following are available online at www.mdpi.com/xxx/s1, S1: Tree Nodes.

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Tree Nodes

Name		Archives	References	Created on	Created by	Modified on	Modified by	
Intervention Program Proposal - Construction		19	285	12/09/2022 16:29	JN	17/01/2023 23:04	JN	
1.0. Structure		18	152	12/09/2022 16:30	JN	17/01/2023 23:04	JN	
1.1. Context		7	9	12/09/2022 16:44	JN	09/01/2023 20:04	JN	
1.2. Format		6	8	12/09/2022 16:44	JN	17/01/2023 12:57	JN	
1.3. Contents		15	54	12/09/2022 16:44	JN	17/01/2023 20:11	JN	
1.4. Length and Frequency		14	30	12/09/2022 16:47	JN	16/01/2023 23:20	JN	
1.5. Pedagogical Methods		9	13	12/09/2022 16:48	JN	17/01/2023 20:11	JN	
1.6. Pedagogical Techniques		10	17	12/09/2022 16:48	JN	17/01/2023 20:11	JN	
1.7. Resources		6	11	12/09/2022 16:49	JN	17/01/2023 20:11	JN	
1.8. Denomination		8	10	12/09/2022 16:49	JN	17/01/2023 00:28	JN	
2.0. Participants		11	35	11/01/2023 20:31	JN	17/01/2023 23:04	JN	
2.1. Target Group		7	18	11/01/2023 20:32	JN	17/01/2023 00:09	JN	
2.2. Program Facilitators		8	17	11/01/2023 20:32	JN	17/01/2023 20:11	JN	
3.0. Assessement		16	45	12/09/2022 16:41	JN	17/01/2023 23:04	JN	
3.1. Timings		14	23	12/09/2022 16:55	JN	17/01/2023 00:09	JN	
3.2. Evaluation Instruments		12	22	12/09/2022 16:55	JN	17/01/2023 20:11	JN	
4.0. Other Components		15	53	12/09/2022 16:42	JN	17/01/2023 23:04	JN	
4.1. Planning, Articulation and Adaptation		9	17	08/01/2023 20:53	JN	17/01/2023 20:11	JN	
4.2. Involvement		7	18	08/01/2023 20:53	JN	17/01/2023 20:14	JN	
4.3. Training		3	4	08/01/2023 20:53	JN	16/01/2023 23:20	JN	
4.4. Special situations		7	11	08/01/2023 20:53	JN	17/01/2023 20:11	JN	
4.5. Partnerships		1	1	08/01/2023 20:54	JN	17/01/2023 20:11	JN	
4.6. Referral		1	2	09/01/2023 18:35	JN	17/01/2023 12:57	JN	

Documento 6 – Proposta de Programa de Promoção da Literacia em Saúde Mental Positiva para Adolescentes

PROGRAMA DE PROMOÇÃO DA LITERACIA EM SAÚDE MENTAL POSITIVA PARA ADOLESCENTES

PROPOSTA – DRAFT

INTRODUÇÃO

A presente proposta é um draft do Programa de Promoção da Literacia em Saúde Mental Positiva dirigido a adolescentes, que está em fase de desenvolvimento. Tem como finalidade servir de guia às equipas de facilitadores para a futura implementação do programa nos contextos da prática clínica. Contém as linhas estruturais do programa, esclarece os procedimentos standards a serem executados e estabelece os limites mínimos obrigatórios do programa, permitindo um certo grau de flexibilidade para que possa ser ajustado às necessidades dos adolescentes e às especificidades dos variados contextos escolares.

Para dar resposta a uma lacuna identificada no âmbito da literacia em saúde mental dos adolescentes, mais especificamente a sua dimensão salutogénica, foi formulada esta proposta com base nos resultados de uma scoping review, de dois estudos transversais e correlacionais, e de dois focus group, todos eles realizados no âmbito do Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili (Tarragona – Espanha). É de salientar que esta proposta é uma sugestão de programa que resulta da investigação realizada até ao momento, porém carece ainda de validação.

Este programa tem como referenciais: o Modelo Multifatorial da Saúde Mental Positiva de Teresa Lluch (Lluch-Canut & Sequeira, 2020), a matriz da literacia em saúde (Sørensen et al., 2012) e, também, o Programa Mentis Plus+ de Sónia Teixeira (Teixeira et al., 2020).

OBJETIVO DO PROGRAMA

O objetivo deste programa é promover a literacia em saúde mental positiva dos adolescentes, de modo que estes desenvolvam competências de aplicação das dimensões da saúde mental positiva no seu quotidiano e ao longo do seu ciclo de vida.

ESTRUTURA DO PROGRAMA

O programa de promoção da literacia em saúde mental positiva para adolescentes é modular, composto por 6 módulos (que correspondem aos 6 fatores do Modelo Multifatorial da Saúde Mental Positiva – MM-PMH), e cada módulo é constituído, no mínimo, por 4 sessões sequenciais obrigatórias, tal como ilustra a Figura 5.

Cada sessão, de cada módulo, corresponde a uma dimensão da matriz da literacia em saúde, ou seja, na sessão A o objetivo é proporcionar o acesso ao tema, na sessão B o objetivo é promover a compreensão do tema, na sessão C o objetivo é fomentar a interpretação e avaliação da informação

do tema, e na sessão D o objetivo é promover as competências de utilização/aplicação do tema abordado.

Podem ser realizadas mais sessões em cada módulo, de acordo com as necessidades dos adolescentes, até que estes atinjam as quatro dimensões da literacia em saúde (acesso, compreensão, avaliação e utilização).

A seleção do(s) módulo(s) a abordar será feita pela equipa de investigadores juntamente com os adolescentes, com base nos resultados dos instrumentos de avaliação aplicados e nas necessidades/preferências expressas dos adolescentes.

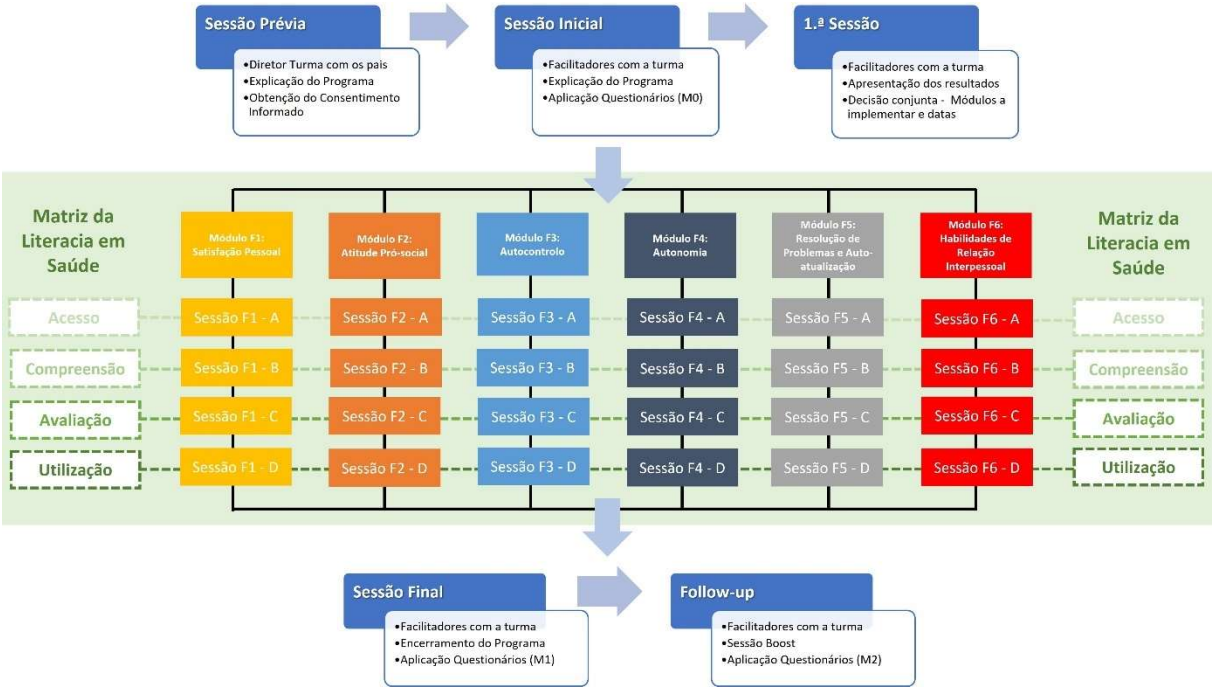

Figura 5. Esquema da estrutura do Programa de Promoção da Literacia em Saúde Mental Positiva

FACILITADORES DO PROGRAMA

O programa deve ser aplicado por uma equipa de facilitadores composta por profissionais de saúde das Equipas de Saúde Escolar dos Centros de Saúde (Enfermeiros e, caso existam, outros profissionais), que coordenam o programa, e por profissionais da área da educação das escolas, num mínimo de 2 profissionais de cada área (saúde e educação).

A equipa de facilitadores deve manter-se a mesma desde o início até ao fim da aplicação do programa.

Em cada sessão devem estar presentes no mínimo 2 facilitadores da equipa, sendo o ideal estar toda a equipa.

Todos os profissionais que pretendam aplicar o programa têm que obrigatoriamente frequentar uma formação prévia sobre o programa, que será ministrada pela investigadora.

GRUPO-ALVO

Este programa tem como grupo-alvo os adolescentes entre os 10 e os 14 anos, que frequentam o 2.º e o 3.º ciclo do ensino básico (5.º - 9.º ano de escolaridade), que queiram participar no programa e que possuam autorização do seu encarregado de educação/representante legal.

Como critério de exclusão define-se o seguinte: não saber comunicar no idioma em que vai ser aplicado o programa.

O programa será aplicado por turma, não devendo esta ser separada. A equipa de facilitadores poderá optar por dividir os adolescentes em pequenos grupos no decorrer de cada sessão, dependendo das dinâmicas previstas para cada sessão.

SETTING

O programa deve ser aplicado preferencialmente nas aulas da disciplina de Cidadania. No entanto, caso a equipa do programa e as escolas entendam, o programa pode ser aplicado em outras disciplinas.

O programa deve ser aplicado o mais precocemente possível, ou seja, logo a partir do 5.º ano de escolaridade e, depois, ser continuado anualmente até ao final do 9.º ano de escolaridade.

DURAÇÃO E FREQUÊNCIA

Cada sessão de cada módulo deve ter uma duração entre 45 a 90 minutos, de acordo com as dinâmicas a aplicar e a disponibilidade da escola.

O programa deve iniciar a sua aplicação e terminar durante o 1.º semestre de cada ano letivo, de modo a permitir que o follow-up ocorra no final do 2.º semestre, garantindo um intervalo de cerca de 3 meses.

O intervalo entre as sessões de cada módulo poderá ser semanal ou quinzenal, de acordo com as necessidades dos adolescentes e a disponibilidade da escola.

PLANEAMENTO DAS SESSÕES

Pretende-se que este programa tenha uma estrutura base uniforme, no entanto deve ser flexível em vários aspetos de modo a dar resposta às necessidades dos adolescentes e do contexto escolar. Por

esse motivo, são aqui apresentadas indicações base para as sessões, que depois devem ser adaptadas a cada realidade.

SESSÃO PRÉVIA	
Objetivos:	▪ Explicar sumariamente o programa aos encarregados de educação ▪ Obter o consentimento informado assinado pelos encarregados de educação
Grupo-alvo:	Encarregados de educação
Facilitador:	Diretor de turma
Local:	Escola – Reunião de início de ano letivo
Data:	Setembro (início do ano letivo)
Intervenção:	▪ Apresentação do programa
	▪ Assinatura dos consentimentos informados
Materiais:	Sala; PC; Projetor multimédia; Apresentação digital do programa; Modelos de Consentimento Informado

SESSÃO INICIAL	
Objetivos:	▪ Estabelecer o primeiro contacto da equipa de facilitadores com os adolescentes ▪ Explicar, em linhas gerais, como vai funcionar o programa ▪ Aplicar os questionários (Avaliação M0)
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	1.º semestre – início do ano letivo
Intervenção:	▪ Apresentação dos facilitadores e dos participantes
	▪ Apresentação do programa
	▪ Aplicação dos questionários (M0)
Materiais:	Sala; PC; Projetor multimédia; Apresentação digital do programa; Questionários

1.ª SESSÃO	
Objetivos:	▪ Apresentar os resultados dos questionários; ▪ Decidir o(s) módulo(s) a implementar; ▪ Planear as datas das sessões.
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	1.º semestre – início do ano letivo
Intervenção:	▪ Apresentação dos resultados
	▪ Negociação entre a equipa de facilitadores e os adolescentes sobre o(s) módulo(s) a implementar e sobre as datas das sessões
Materiais:	Sala; PC; Projetor multimédia; Apresentação digital dos resultados

SESSÃO A (DE CADA MÓDULO)	
Objetivos:	▪ Proporcionar o acesso dos adolescentes ao tema a abordar
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	1.º semestre – durante o 1.º semestre
Intervenção:	A definir de acordo com o tema a abordar
Materiais:	A definir de acordo com o tema a abordar

Nota: O conteúdo destas sessões será alvo de um estudo Delphi

SESSÃO B (DE CADA MÓDULO)	
Objetivos:	▪ Promover a compreensão dos adolescentes sobre o tema abordado
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	1.º semestre – durante o 1.º semestre
Intervenção:	A definir de acordo com o tema abordado
Materiais:	A definir de acordo com o tema abordado

Nota: O conteúdo destas sessões será alvo de um estudo Delphi

SESSÃO C (DE CADA MÓDULO)	
Objetivos:	▪ Fomentar a interpretação e avaliação, por parte dos adolescentes, da informação do tema abordado
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	1.º semestre – durante o 1.º semestre
Intervenção:	A definir de acordo com o tema abordado
Materiais:	A definir de acordo com o tema abordado

Nota: O conteúdo destas sessões será alvo de um estudo Delphi

SESSÃO D (DE CADA MÓDULO)	
Objetivos:	▪ Promover as competências de utilização/aplicação dos adolescentes sobre o tema abordado
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	1.º semestre – durante o 1.º semestre
Intervenção:	A definir de acordo com o tema abordado
Materiais:	A definir de acordo com o tema abordado

Nota: O conteúdo destas sessões será alvo de um estudo Delphi

SESSÃO FINAL	
Objetivos:	▪ Aplicar os questionários (Avaliação M1) ▪ Fazer o encerramento do Programa no atual ano letivo
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	1.º semestre – durante o 1.º semestre
Intervenção:	▪ Aplicação dos questionários (M1)
	▪ Recolher sugestões de melhoria dos adolescentes
	▪ Explicação dos próximos passos do Programa
	▪ Agradecer o empenho e a participação nas sessões
Materiais:	Sala; Questionários

FOLLOW-UP	
Objetivos:	▪ Aplicar os questionários (Avaliação M2) ▪ Reforçar o(s) módulo(s) aplicados
Grupo-alvo:	Adolescentes 10 – 14 anos
Facilitador:	Equipa de facilitadores
Local:	Escola – Disciplina de Cidadania
Data:	2.º semestre – no final do 2.º semestre
Intervenção:	▪ Aplicação dos questionários (M2)
	▪ Realizar dinâmicas de reforço do(s) módulo(s) abordados
Materiais:	Sala; Questionários; Material para as dinâmicas

AVALIAÇÃO DO PROGRAMA

O programa tem os seguintes momentos de avaliação:

- Antes da aplicação do programa (Momento 0 – M0): aplicação dos instrumentos de avaliação/questionário(s) aos adolescentes;
- Em cada sessão: preenchimento de grelhas de observação pela equipa;
- Após a aplicação do programa (Momento 1 – M1): aplicação dos instrumentos de avaliação/questionário(s) aos adolescentes;
- No Follow-up (Momento 2 – M2): aplicação dos instrumentos de avaliação/questionário(s) aos adolescentes.

Os instrumentos de avaliação são os seguintes:

- **Opção 1:** MHKQ, MHPK-10, PMHQ, Grelha de observação (a construir pela investigadora);

- **Opção 2:** Instrumento de avaliação do programa (a construir pela investigadora), Grelha de observação (a construir pela investigadora).

PARCERIA – ANÁLISE DOS DADOS

A equipa de facilitadores e a escola devem estabelecer uma parceria com uma Instituição de Ensino Superior, para que esta efetue a análise dos dados provenientes dos instrumentos aplicados aos adolescentes e devolva à equipa de facilitadores.

CIRCUITO DE REFERENCIAÇÃO PARA APOIO PSICOLÓGICO ESPECIALIZADO

A equipa de facilitadores e a escola devem estabelecer um circuito de referenciação com o Centro de Saúde e/ou Hospital da área de influência, para que possam ser encaminhados os adolescentes que a equipa de facilitadores identifique com necessidade de apoio psicológico especializado, de modo a garantir um acesso rápido.

Esta referenciação para apoio psicológico especializado só deve ocorrer após o consentimento do adolescente e do seu encarregado de educação/representante legal.

CONCLUSÃO

Esta proposta de programa é dinâmica por forma a poder receber inputs que contribuam para poder passar para a fase de *feasibility* do new framework for developing and evaluating complex interventions (Skivington et al., 2021), nomeadamente inputs que permitam a validação do conteúdo específico de cada sessão para cada nível de ensino (5.º, 6.º, 7.º, 8.º e 9.º ano de escolaridade), a decisão final sobre os instrumentos de avaliação e a definição de uma designação para o programa e criação do respetivo logotipo. Neste sentido, prevê-se a realização de um estudo Delphi, de um concurso para o nome do programa com base nas sugestões dos adolescentes e o estabelecimento de uma parceria com estudantes de um Curso de Licenciatura da área do Design para a criação do logotipo. Também será necessário proceder à formação de equipas de facilitadores do programa. Depois destes procedimentos, é possível avançar para a realização de um estudo piloto experimental ou quase-experimental.

CONCLUSÕES E IMPLICAÇÕES PARA A PRÁTICA

Confrontada com a complexidade das transições que são vivenciadas pelo ser humano ao longo do seu ciclo de vida, a Enfermagem assume um papel primordial como facilitadora de transições saudáveis, em que os enfermeiros são um dos grupos profissionais da área da saúde que mais se encontra vocacionado para a implementação comunitária de intervenções promotoras da saúde.

Nos últimos anos, a sociedade tem vindo a reconhecer de uma forma acentuada a importância da saúde mental, situação que cresceu exponencialmente com a Pandemia COVID-19. Vítimas das consequências negativas do progresso tecnológico e científico, os indivíduos passaram a confrontar-se com distúrbios da sua saúde mental, e a ter a verdadeira consciência que estes comprometem a sua qualidade de vida e o seu bem-estar. Se esta é uma verdade para a população adulta, a literatura evidencia cientificamente que infelizmente também o é para as crianças e adolescentes, o que constitui uma enorme preocupação, pois é nesta população que reside o futuro da sociedade.

Investigadores e profissionais de saúde têm vindo a investir no desenvolvimento de intervenções promotoras da saúde mental e da literacia em saúde mental, porém com um foco deveras direcionado para a prevenção da doença ou das complicações, e parcamente orientado para a sua dimensão mais salutogénica. Face a este cenário, foi desenvolvida a presente investigação, com a finalidade de desenhar uma proposta de programa de literacia em saúde mental positiva para adolescentes, de modo a dar contributos para colmatar esta lacuna identificada.

De modo a responder ao primeiro objetivo específico delineado para esta investigação, procedeu-se ao estudo 1, com a realização de uma scoping review e respetivo protocolo prévio, que permitiu reunir a evidência disponível em termos de programas promotores da literacia em saúde mental dos adolescentes em contexto escolar, e deu lugar à publicação do artigo 1. Esta revisão da literatura veio confirmar que vários programas estavam a ser implementados no âmbito da promoção da literacia em saúde mental, mas poucos estavam relacionados com a literacia em saúde mental positiva, para além disso eram programas muito díspares não só em termos de estrutura como também os seus resultados eram difíceis de interpretar e comparar, pois a maioria não utilizava instrumentos de avaliação validados.

Para dar resposta aos objetivos específicos 2, 3, 4 e 5, realizaram-se dois estudos transversais e correlacionais (estudo 2 e estudo 3) no sentido de se fazer um diagnóstico da situação relativamente aos níveis de literacia em saúde mental dos adolescentes, aos seus níveis de saúde mental positiva e de vulnerabilidade psicológica, que se materializaram com a publicação de dois artigos (artigo 2 e artigo 3). Os resultados destes estudos, evidenciaram que, de uma maneira geral, os adolescentes da amostra estudada apresentavam níveis elevados de literacia em saúde mental e de saúde mental positiva. Os participantes que reportaram níveis mais elevados de literacia em saúde mental foram os

mais velhos, os que frequentavam um ano escolar mais avançado, as raparigas, aqueles cujas mães eram profissionalmente ativas, os que tinham hábitos alimentares saudáveis, e os que possuíam uma melhor autoperceção da imagem corporal. Por sua vez, os adolescentes num ano de escolaridade mais baixo, os que passavam menos horas por dia em frente a um ecrã ou online, e que tinham uma melhor auto-percepção da sua saúde mental e física e da imagem corporal foram os que apresentaram níveis mais elevados de saúde mental positiva. Em termos da vulnerabilidade psicológica, os adolescentes reportaram índices moderados, embora as raparigas, os adolescentes mais velhos e os que tinham pior autopercepção da sua saúde física, mental e imagem corporal, bem como os que recorriam frequentemente a um serviço de saúde devido a um problema de saúde mental, tenham mostrado níveis mais elevados de vulnerabilidade psicológica. Com estes estudos, obteve-se, também, uma relação positiva estatisticamente significativa entre a literacia em saúde mental e a saúde mental positiva nos adolescentes avaliados; por outro lado, verificou-se uma relação negativa entre a vulnerabilidade psicológica e o conhecimento sobre os fatores para uma boa saúde mental, embora sem significância estatística. Ainda assim, parece haver aqui uma certa incongruência nos resultados, uma vez que se for considerada esta possível relação negativa entre a vulnerabilidade psicológica e o conhecimento dos fatores para uma boa saúde mental, bem como o facto do nível de conhecimento dos fatores para uma boa saúde mental ser maior na *late adolescence*, isso deveria significar que na *late adolescence* o índice de vulnerabilidade psicológica seria menor, porém não foi isso que se verificou nos resultados obtidos. Tal situação, aponta para a provável falta de competência dos adolescentes mais velhos no que diz respeito à dimensão da utilização do conhecimento a que tiveram acesso. No fundo, a execução destes estudos permitiu a obtenção de pistas importantes para o design da proposta do programa de intervenção, nomeadamente a necessidade de se direcionar a intervenção para a *early adolescence*, muito focada na literacia em saúde mental positiva, de se utilizarem instrumentos de avaliação validados, e de se apostar na dimensão da utilização da matriz da literacia em saúde.

Por fim, o objetivo específico 6 concretizou-se com a realização do estudo 4, onde foram exploradas as perspetivas de peritos profissionais e de adolescentes sobre as componentes essenciais para um programa promotor da literacia em saúde mental positiva dirigido à *early adolescence*, que resultou na submissão do artigo 4 a uma revista com arbitragem científica. Através da realização de dois focus group, obteve-se informação sobre como deve ser a estrutura do programa, em termos do contexto, formato, conteúdos, duração e frequência, métodos e técnicas pedagógicas a utilizar, recursos e designação; sobre o grupo-alvo e quem deve constituir a equipa de facilitadores; sobre os timings e os instrumentos de avaliação do programa; e sobre outros componentes a ter em conta para promover a eficácia do programa, nomeadamente o bom planeamento e articulação com a escola, a necessidade

de ser um programa com algum grau de flexibilidade para se adaptar ao contexto e às necessidades dos adolescentes, a obrigatoriedade da equipa de facilitadores frequentarem uma formação prévia à implementação do programa, a necessidade de se envolverem os adolescentes na tomada de decisão, bem como os pais e a escola, a importância da adoção de medidas inclusivas e protetoras para os adolescentes com necessidades especiais, a existência de um circuito de referenciação para apoio especializado em caso de necessidade, e o estabelecimento de parcerias para a análise dos resultados. Com estas sugestões, e tendo como referencial o MM-PMH, a matriz da literacia em saúde e o programa Mentis Plus+, elaborou-se uma proposta de programa de promoção da literacia em saúde mental positiva para adolescentes, que consta no Documento 6.

Ao longo da investigação aqui apresentada, houve uma preocupação contante com a aplicação de procedimentos metodológicos cientificamente rigorosos. No entanto, existem algumas limitações que devem ser tidas em conta, aquando da interpretação dos resultados de cada um dos estudos, bem como desta tese. Em primeiro lugar, o facto dos estudos quantitativos efetuados terem por base dados provenientes do autorrelato dos participantes, pelo que deve ser considerado o possível risco de viés tendo em conta a possibilidade de as respostas terem sido dadas de acordo com a desejabilidade social. Em segundo lugar, o facto de nos estudos quantitativos e no focus group ter sido utilizada uma amostra não probabilística intencional, não permitindo a generalização dos resultados obtidos. Em terceiro lugar, não terem sido realizados estudos longitudinais, experimentais ou quase-experimentais, condicionando o estabelecimento de relações causais entre as variáveis estudadas.

Esta investigação constitui-se como uma mais-valia para a ciência de enfermagem, uma vez que a comunidade científica tem agora ao seu dispor dados sobre os níveis de literacia em saúde mental dos adolescentes, bem como sobre os seus níveis de saúde mental positiva e de vulnerabilidade psicológica, proporcionando um conhecimento mais aprofundado numa área onde existem dados escassos. Para além disso, tem implicações para prática clínica, no sentido em que permitirá que os enfermeiros tenham ao seu dispor uma proposta de programa de intervenção promotor da literacia em saúde mental positiva dos adolescentes que poderão aplicar na sua prática de cuidados, contribuindo assim para a promoção da saúde da comunidade.

Apesar de terem sido atingidos os objetivos da presente tese de doutoramento, esta investigação não termina aqui. Numa perspetiva de investigação futura, pretende-se dar continuidade ao trabalho efetuado, para se conseguir realizar todas as fases previstas no new framework for developing and

evaluating complex interventions e obter um programa validado, eficaz, que se constitua como um instrumento de trabalho para a prática clínica dos enfermeiros e, sobretudo, que seja facilitador das transições dos adolescentes, promovendo uma metamorfose saudável para a fase adulta.

DISSEMINAÇÃO DA INVESTIGAÇÃO

Ao longo do Programa de Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili, entre 2018 e 2023, à medida que a investigação foi decorrendo e produzindo resultados, para além dos artigos publicados em revistas indexadas e com fator de impacto e do registo do protocolo da scoping review no Open Science Framework, procurou-se também divulgar os resultados através de outras publicações digitais e da realização de comunicações orais e pósteres em eventos científicos na área, os quais se enumeram neste capítulo. Considerou-se também importante fazer aqui referência à Menção Internacional relacionada com o Estágio Internacional de Investigação realizado, bem como a um prémio recebido.

Apresentação em Seminários / Workshops

Preleção intitulada "Literacia em Saúde Mental", realizada no *III Seminário Internacional de Investigação em Saúde Mental d'A Sociedade Portuguesa de Enfermagem de Saúde Mental.* Organizado pela ASPESM e pelo Instituto Politécnico de Portalegre: Castelo de Vide – Portugal (29 de outubro de 2019).

Preleção intitulada "A Literacia e a Saúde Mental Positiva dos Adolescentes – Projeto de Doutoramento" – Càpsula 2 "Tesis en la línea de recerca Infermeria de Salut Mental i Addicions: Instruments d'Anàlisi Mesura, realizada no *II Workshop del Programa de Doctorat en Infermeria i Salut de la URV.* Organizada pela Universitat Rovira i Virgili – Facultat d'Infermeria – Departament d'Infermeria i el Grup de Recerca d'Infermeria Avançada: Tarragona – Espanha (14 de novembro de 2019).

Preleção intitulada "Literacia e Saúde Mental nos Adolescentes", realizada em conjunto com Ana Paula Oliveira, no *I Encontro Internacional de Literacia em Saúde Mental Positiva - Webinar.* Organizado pela Escola Superior de Enfermagem do Porto: Portugal (02 e 03 de junho de 2020).

Preleção intitulada "A Literacia e a Saúde Mental Positiva dos Adolescentes", realizada no *Encontro de Doutorandos 2021 - Seminário de Investigação em Enfermagem e Saúde "Saúde Mental em Construção"* - Webinar. Universitat Rovira i Virgili: Tarragona – Espanha (08 de janeiro de 2021).

Conference Proceedings

Nobre, J., Oliveira, P., Sequeira, C. & Ferré-Grau, C. (2021). Literacia e saúde Mental nos Adolescentes. *Ebook do I Encontro Internacional de Literacia em Saúde Mental Positiva - Conference*

Proceedings (pp. 17-19). Escola Superior de Enfermagem do Porto (UNIESEP - Grupo de Investigação do Projeto "Literacia e Saúde Mental Positiva"): Portugal. ISBN: 978-989-54454-2-4. Disponível em http://i-d.esenf.pt/wp-content/uploads/2021/02/ebook_I-Encontro-Literacia.pdf

Comunicações Orais em Eventos Científicos

Nobre, J., Oliveira, A. P., Monteiro, F., Sequeira, C. & Ferré-Grau, C. (2022). "Estudo Correlacional Sobre A Literacia Em Saúde Mental E A Saúde Mental Positiva Dos Adolescentes". In *NursID Winter School 2020 – Congresso Internacional de Investigação em Enfermagem.* Escola Superior de Enfermagem do Porto: Porto – Portugal (14 a 18 de dezembro).

Nobre, J., Luis, H., Monteiro, F., Cordeiro, R., Sequeira, C. & Ferré-Grau, C. (2022). "Índice de Vulnerabilidade Psicológica e Fatores para uma Boa Saúde Mental dos Adolescentes: resultados de um Estudo Correlacional". In *XIII Congresso Internacional d'A Sociedade Portuguesa de Enfermagem de Saúde Mental – "Saúde Mental: É preciso agir!"*. ASPESM: Funchal – Portugal (26 a 28 de outubro).

Pósteres em Eventos Científicos

Nobre, J., Oliveira, A. P., Monteiro, F., Sequeira, C. & Ferré-Grau, C. (2020). "Os Níveis de Saúde Mental Positiva dos Adolescentes – Resultados Preliminares". In *NursID Winter School 2020 – Semana de Investigação em Enfermagem.* Escola Superior de Enfermagem do Porto: Porto – Portugal (14 a 18 de dezembro).

Nobre, J., Oliveira, A. P., Monteiro, F., Sequeira, C. & Ferré-Grau, C. (2020). "Vulnerabilidade Psicológica dos Adolescentes – Resultados Preliminares". *NursID Winter School 2020 – Semana de Investigação em Enfermagem.* Escola Superior de Enfermagem do Porto: Porto – Portugal (14 a 18 de dezembro).

Nobre, J., Oliveira, A., Monteiro, F., Sequeira, C. & Ferré-Grau, C. (2021). "Resultados de uma Scoping Review sobre Promoção da Literacia em Saúde Mental dos Adolescentes". In *XII Congresso Internacional d'A Sociedade Portuguesa de Saúde Mental – "Saber mais e fazer melhor".* ASPESM: Felgueiras – Portugal (29 de outubro).

Menção Internacional

No período de 01.05.2021 a 31.07.2021 realizou um estágio de investigação na Escola Superior de Saúde do Instituto Politécnico de Portalegre (Portugal), sob a orientação do Professor Doutor Raul Alberto Carrilho Cordeiro. O trabalho desenvolvido teve como objetivo principal explorar a associação entre o índice de vulnerabilidade psicológica dos adolescentes e o seu conhecimento sobre os fatores para obtenção e manutenção de uma boa saúde mental, o que resultou na publicação do artigo ***Psychological Vulnerability Indices and the Adolescent's Good Mental Health Factors: A Correlational Study in a Sample of Portuguese Adolescents*** na revista *Children* (Q2). O documento comprovativo da realização deste estágio internacional de investigação numa Instituição do Ensino Superior Estrangeira encontra-se no anexo VI.

Prémios

1.º Prémio no Concurso de Comunicações Orais: *"*Índice de Vulnerabilidade Psicológica e Fatores para uma Boa Saúde Mental dos Adolescentes: resultados de um Estudo Correlacional*",* no *XIII Congresso Internacional d'A Sociedade Portuguesa de Enfermagem de Saúde Mental – "Saúde Mental: É preciso agir!"*. ASPESM: Funchal – Portugal (26 a 28 de outubro de 2022).

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ANEXOS

Anexo I – Questionário de Caracterização dos Adolescentes

UNIVERSITAT ROVIRA i VIRGILI

QUESTIONÁRIO DE CARACTERIZAÇÃO DOS ADOLESCENTES

Código: Q __|__|__|__

1. Idade: _____ anos (anos completos)

2. Sexo: O Masculino O Feminino

3. Ano de Escolaridade: O 5.º ano O 6.º ano O 7.º ano O 8.º ano O 9.º ano O 10.º ano O 11.º ano O 12.º ano

4. O teu pai tem emprego? O Sim O Não

5. Profissão do teu pai: _____

6. A tua mãe tem emprego? O Sim O Não

7. Profissão da tua mãe: _____

8. Tens algum problema de saúde mental? O Sim O Não

8.1. Se sim, qual? _____

9. Nos últimos 3 meses, recorreste a algum Serviço de Saúde devido a um problema de saúde mental?

O Sim O Não

10. Já tiveste acompanhamento de um psicólogo ou de um psiquiatra? O Sim O Não

11. Conheces alguém que tem ou teve um problema de saúde mental? O Sim O Não

11.1. Se sim, quem? (escolhe as opções que se aplicarem)

O Familiar
O Amigo(a)
O Namorado(a)
O Colega
O Vizinho(a)

12. Em média, quantas horas dormes por dia? _____ horas

13. Tomas medicamentos de forma regular para algum problema de saúde mental? O Sim O Não

14. Como ocupas os teus tempos livres? _____
_____

15. Praticas algum desporto ou exercício físico de forma regular? O Sim O Não

15.1. Se sim, qual? _____

16. Quantas refeições fazes por dia? _____ refeições

17. Comes fruta/legumes todos os dias? O Sim O Não

18. Em média, quantas horas por dia estás "online"? _____ horas

19. Em média, quantas horas por dia passas em frente a um ecrã (computador, tablet, telemóvel, …)? ___ horas

20. Já foste vítima de algum tipo de violência (ex: física, psicológica, bullying, cyberbullying, …)?

O Sim O Não

20.1. Se sim, qual ou quais? _____

21. Tens amigos na escola? O Sim O Não

22. Tens amigos fora da escola? O Sim O Não

23. Consomes bebidas alcoólicas? O Sim O Não

23.1. Se sim, quantas vezes por semana? _____

24. Fumas tabaco? O Sim O Não

24.1. Se sim, quantos cigarros por dia? _____

25. De 1 a 5 como classificas a tua saúde mental?

1 Péssima	2 Má	3 Normal	4 Boa	5 Excelente
O	O	O	O	O

26. De 1 a 5 como classificas a tua saúde física?

1 Péssima	2 Má	3 Normal	4 Boa	5 Excelente
O	O	O	O	O

27. De 1 a 5 como classificas a tua imagem corporal?

1 Péssima	2 Má	3 Normal	4 Boa	5 Excelente
O	O	O	O	O

28. Com o confinamento em casa devido ao COVID-19 sentes que a sua saúde física se alterou?

1 Está muito pior	2 Está pior	3 Está igual	4 Está melhor	5 Está muito melhor
O	O	O	O	O

29. Com o confinamento em casa devido ao COVID-19 sentes que a sua saúde mental se alterou?

1 Está muito pior	2 Está pior	3 Está igual	4 Está melhor	5 Está muito melhor
O	O	O	O	O

Muito obrigada pela tua participação!

Anexo II – Questionário de Saúde Mental Positiva (PMHQ)

UNIVERSITAT ROVIRA i VIRGILI

QUESTIONÁRIO DE SAÚDE MENTAL POSITIVA

(Sequeira, Carvalho, Sampaio, Sá, Lluch-Canut, Roldán-Merino, 2014)

Este questionário contém uma série de afirmações, sobre a sua forma de pensar, sentir e agir que são mais ou menos frequentes em cada um. Para responder, leia cada frase e responda de acordo com a frequência que melhor caracteriza o seu caso, de acordo com as seguintes possibilidades de resposta:

1 «Sempre ou quase sempre»; **2 «Na maioria das vezes»**; **3 «Algumas vezes»**; **4 «Raramente ou nunca»**

Código: Q __|__|__|__

	Itens	1	2	3	4
1	Para mim, é difícil aceitar os outros quando têm atitudes diferentes das minhas	O	O	O	O
2	Os problemas bloqueiam-me facilmente	O	O	O	O
3	Para mim é difícil escutar os problemas das pessoas	O	O	O	O
4	Gosto de mim como sou	O	O	O	O
5	Sou capaz de controlar-me quando tenho emoções negativas	O	O	O	O
6	Sinto-me capaz de explodir	O	O	O	O
7	Para mim a vida é aborrecida e monótona	O	O	O	O
8	Para mim é difícil dar apoio emocional	O	O	O	O
9	Tenho dificuldades em estabelecer relações interpessoais satisfatórias com algumas pessoas	O	O	O	O
10	Preocupa-me muito o que as pessoas pensam de mim	O	O	O	O
11	Acredito que tenho muita capacidade para colocar-me no lugar dos outros e compreender as suas respostas	O	O	O	O
12	Vejo o meu futuro com pessimismo	O	O	O	O
13	As opiniões dos outros influenciam-me muito na hora de tomar as minhas decisões	O	O	O	O
14	Considero-me uma pessoa menos importante do que as outras pessoas que me rodeiam	O	O	O	O
15	Sou capaz de tomar as decisões por mim mesmo	O	O	O	O
16	Procuro retirar os aspetos positivos das coisas "más" que me acontecem	O	O	O	O
17	Procuro melhorar como pessoa	O	O	O	O
18	Considero-me um(a) bom/boa conselheiro(a)	O	O	O	O
19	Preocupa-me que as pessoas me critiquem	O	O	O	O
20	Considero-me uma pessoa sociável	O	O	O	O
21	Sou capaz de controlar-me quando tenho pensamentos negativos	O	O	O	O
22	Sou capaz de manter um bom autocontrolo nas situações de conflito que surgem na minha vida	O	O	O	O
23	Penso que sou uma pessoa digna de confiança	O	O	O	O
24	Para mim é difícil entender os sentimentos dos outros	O	O	O	O
25	Penso nas necessidades dos outros	O	O	O	O
26	Na presença de pressões desfavoráveis do exterior sou capaz de manter o meu equilíbrio pessoal	O	O	O	O
27	Quando surgem alterações na minha vida procuro adaptar-me	O	O	O	O
28	Perante um problema sou capaz de solicitar informação	O	O	O	O
29	As alterações que ocorrem habitualmente no meu quotidiano estimulam-me	O	O	O	O
30	Tenho dificuldades em relacionar-me abertamente com os meus professores/chefes	O	O	O	O
31	Penso que sou um(a) inútil e que não sirvo para nada	O	O	O	O
32	Procuro desenvolver e potenciar as minhas boas atitudes	O	O	O	O
33	Tenho dificuldades em ter opiniões pessoais	O	O	O	O
34	Quando tenho que tomar decisões importantes sinto-me muito inseguro(a)	O	O	O	O
35	Sou capaz de dizer não quando o quero dizer	O	O	O	O
36	Quando tenho um problema procuro arranjar soluções possíveis	O	O	O	O
37	Gosto de ajudar os outros	O	O	O	O
38	Sinto-me insatisfeito(a) comigo mesmo(a)	O	O	O	O
39	Sinto-me insatisfeito(a) com o meu aspeto físico	O	O	O	O

Anexo III – Questionário de Conhecimento de Saúde Mental (MHKQ)

UNIVERSITAT ROVIRA i VIRGILI

QUESTIONÁRIO DE CONHECIMENTO DE SAÚDE MENTAL

(Chaves, Sequeira & Duarte, 2019)

Para responder, leia cada frase e responda de acordo com as seguintes possibilidades de resposta:

1 «Discordo totalmente»; **2 «Discordo parcialmente»**; **3 «Nem concordo nem discordo»**; **4 «Concordo parcialmente»**; **5 «Concordo totalmente»**

Código: Q __|__|__|__

	Itens	1	2	3	4	5
1	A saúde mental é uma componente da saúde	O	O	O	O	O
2	Os distúrbios mentais são causados por pensamentos incorretos	O	O	O	O	O
3	Muitas pessoas têm problemas mentais, mas não se apercebem	O	O	O	O	O
4	Todos os distúrbios mentais são causados por stressores externos	O	O	O	O	O
5	Componentes da saúde mental incluem inteligência normal, humor estável, uma atitude positiva, relações interpessoais de qualidade e adaptabilidade	O	O	O	O	O
6	A maioria dos distúrbios mentais não pode ser curada	O	O	O	O	O
7	Devem ser procurados serviços psicológicos ou psiquiátricos se suspeitarmos da presença de problemas ou distúrbios mentais	O	O	O	O	O
8	Problemas psicológicos podem ocorrer em qualquer idade	O	O	O	O	O
9	Distúrbios mentais e problemas psicológicos não podem ser evitados	O	O	O	O	O
10	Nos distúrbios mentais graves (por exemplo, esquizofrenia), os medicamentos devem ser tomados apenas por um determinado período de tempo	O	O	O	O	O
11	Atitudes positivas, boas relações interpessoais e um estilo de vida saudável podem ajudar a manter a saúde mental	O	O	O	O	O
12	Indivíduos com história familiar de distúrbios mentais têm maior risco de problemas psicológicos e distúrbios mentais	O	O	O	O	O
13	Problemas psicológicos nos adolescentes não influenciam os resultados académicos	O	O	O	O	O
14	É improvável que indivíduos de meia-idade ou idosos desenvolvam problemas psicológicos e distúrbios mentais	O	O	O	O	O
15	Indivíduos com fraco temperamento são mais propensos a ter problemas mentais	O	O	O	O	O
16	Problemas ou distúrbios mentais podem ocorrer quando um indivíduo está sob stress psicológico ou enfrenta uma situação significativa na sua vida (por exemplo, morte de membros da família)	O	O	O	O	O

	Atividades de promoção da saúde mental	Sim	Não
17	Já ouviu falar sobre o Dia Mundial da Saúde Mental?	O	O
18	Já ouviu falar do Dia Internacional contra o Abuso de Drogas e o Tráfico Ilícito de Drogas?	O	O
19	Já ouviu falar sobre o Dia Internacional de Prevenção do Suicídio?	O	O
20	Já ouviu falar do Dia Mundial do Sono?	O	O

Anexo IV – Questionário "O que é importante para uma boa saúde mental?" (MHPK-10)

UNIVERSITAT ROVIRA i VIRGILI

O QUE É IMPORTANTE PARA UMA BOA SAÚDE MENTAL?

(Chaves, Sequeira & Duarte, 2019)

Seguem abaixo 10 declarações sobre coisas que podem ser importantes para uma boa saúde mental. Para responder, leia cada frase e responda de acordo com as seguintes possibilidades de resposta:

1 «Discordo totalmente»; **2 «Discordo parcialmente»**; **3 «Nem concordo nem discordo»**; **4 «Concordo parcialmente»**; **5 «Concordo totalmente»**; **N/A «Não aplicável»**

Código: Q __|__|__|__

	Nesta escala quão correta é cada declaração	**1**	**2**	**3**	**4**	**5**	**N/A**
1	Lidar com situações stressantes de uma forma adequada	O	O	O	O	O	O
2	Acreditar em si próprio	O	O	O	O	O	O
3	Ter boas rotinas de sono	O	O	O	O	O	O
4	Tomar decisões baseado na sua própria vontade	O	O	O	O	O	O
5	Estabelecer limites para suas próprias ações	O	O	O	O	O	O
6	Sentir-se que pertence a uma comunidade	O	O	O	O	O	O
7	Dominar os seus pensamentos negativos	O	O	O	O	O	O
8	Definir limites sobre o que é aceitável para si	O	O	O	O	O	O
9	Sentir-se valioso, independentemente das suas próprias realizações	O	O	O	O	O	O
10	Vivenciar o sucesso escolar /profissional	O	O	O	O	O	O

Anexo V – Escala de Vulnerabilidade Psicológica (PVS)

UNIVERSITAT ROVIRA i VIRGILI

ESCALA DE VULNERABILIDADE PSICOLÓGICA

(Nogueira, Barros & Sequeira, 2017)

Para responder, leia cada frase e responda de acordo com as seguintes possibilidades de resposta:

1 «Discordo totalmente»; **2 «Discordo parcialmente»**; **3 «Nem concordo nem discordo»**; **4 «Concordo parcialmente»**; **5 «Concordo totalmente»**

Código: Q __|__|__|__

	Itens	1	2	3	4	5
1	Quando não consigo atingir os meus objetivos, sinto-me um fracasso como pessoa.	O	O	O	O	O
2	Sinto que mereço melhor tratamento do que aquele que normalmente recebo dos outros.	O	O	O	O	O
3	Tenho plena consciência de me sentir frequentemente inferior aos outros.	O	O	O	O	O
4	Preciso da aprovação dos outros para me sentir bem comigo mesmo.	O	O	O	O	O
5	Tenho tendência para definir metas demasiado elevadas e depois a sentir-me frustrado ao tentar alcançá-las.	O	O	O	O	O
6	Sinto-me frequentemente ressentido quando outros se aproveitam de mim.	O	O	O	O	O

Anexo VI – Certificado de estágio internacional de investigação - Menção Internacional

POLITÉCNICO DE PORTALEGRE
Escola Superior de Saúde

CERTIFICATE OF INTERNSHIP IN A FOREIGN INSTITUTION

28.04.2022

To whom it may concern,

This is to certify that the PhD student **JOANA RITA PIMENTA NOBRE** has performed an internship in the Escola Superior de Saúde, Polytechnic Institute of Portalegre, from 01.05.2021 to 31.07.2021 under the supervision of PhD Raul Alberto Carrilho Cordeiro.

Her work has focused on:

- Hold working meetings with the internship supervisor;

- Visit the Investigation Research Unit of Polytechnic Institute of Portalegre: VALORIZA – Research Centre for Endogenous Resource Valorization;

- Meeting with the Research Staff of VALORIZA – Research Centre for Endogenous Resource Valorization;

- Conception, planning and data analysis under the tematic research: Psychological Vulnerability Indices and Adolescent's Good Mental Health Factors;

- Preparation to submission for publish of the manuscript *Psychological Vulnerability Indices and Adolescent's Good Mental Health Factors: Comparison between pre-Teens and Teens* to a scientific Journal.

Sincerely,

Raul Alberto Carrilho Cordeiro, PhD

Assinado por : **Raul Alberto Carrilho Cordeiro**
Num. de Identificação: BI07426998
Data: 2022.04.28 19:36:07 Hora de Verão de GMT

Coordinator Professor
Doctor in Health Sciences and Technologies
Specialist Nurse in Mental Health and Psychiatry
Integrated Investigator of Comprehensive Health Research Centre (CHRC)
Collaborating Investigator of VALORIZA – Research Centre for Endogenous Resource Valorization
Collaborating Investigator at CINTESIS - Center for Health Technology and Services Research

Anexo VII – Comprovativo da submissão do artigo 4 ao IJERPH

Gmail **Joana Nobre <joana.r.nobre@gmail.com>**

[IJERPH] Manuscript ID: ijerph-2215552 - Submission Received

Editorial Office <ijerph@mdpi.com> 29 de janeiro de 2023 às 00:50
Responder a: ijerph@mdpi.com
Para: Francisco Monteiro <franciscomonteiro@ipportalegre.pt>
Cc: Joana Nobre <joana.r.nobre@gmail.com>, Helena Arco <helenarco@ipportalegre.pt>, Ana Paula Oliveira <paulaoliveira@ipportalegre.pt>, Carme Ferré-Grau <carme.ferre@urv.cat>, Carlos Sequeira <carlossequeira@esenf.pt>

Dear Professor Monteiro,

Thank you very much for uploading the following manuscript to the MDPI submission system. One of our editors will be in touch with you soon.

Journal name: International Journal of Environmental Research and Public Health
Manuscript ID: ijerph-2215552
Type of manuscript: Article
Title: Development of a Proposal for a Program to Promote Positive Mental Health Literacy among Adolescents: A focus group study
Authors: Joana Nobre *, Helena Arco, Francisco Monteiro, Ana Paula Oliveira, Carme Ferré-Grau, Carlos Sequeira
Received: 29 January 2023
E-mails: joana.r.nobre@gmail.com, helenarco@ipportalegre.pt, franciscomonteiro@ipportalegre.pt, paulaoliveira@ipportalegre.pt, carme.ferre@urv.cat, carlossequeira@esenf.pt

You can follow progress of your manuscript at the following link (login required):
https://susy.mdpi.com/user/manuscripts/review_info/b7041beed91e3b0414481285f55af1b0

The following points were confirmed during submission:

1. IJERPH is an open access journal with publishing fees of 2500 CHF for an accepted paper (see https://www.mdpi.com/about/apc/ for details). This manuscript, if accepted, will be published under an open access Creative Commons CC BY license (https://creativecommons.org/licenses/by/4.0/), and I agree to pay the Article Processing Charges as described on the journal webpage (https://www.mdpi.com/journal/ijerph/apc). See https://www.mdpi.com/about/openaccess for more information about open access publishing.

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a. If previously published material is reproduced in my manuscript, I will provide proof that I have obtained the necessary copyright permission. (Please refer to the Rights & Permissions website: https://www.mdpi.com/authors/rights).

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e-mail for invoicing purposes.

If you have any questions, please do not hesitate to contact the IJERPH editorial office at ijerph@mdpi.com

Kind regards,
IJERPH Editorial Office
St. Alban-Anlage 66, 4052 Basel, Switzerland
E-Mail: ijerph@mdpi.com
Tel. +41 61 683 77 34
Fax: +41 61 302 89 18

*** This is an automatically generated email ***

Anexo VIII – Parecer Comissão de Ética

Instituto Politécnico Portalegre

COMISSÃO DE ÉTICA

PARECER

Nº Pedido 5 / Data 29/01/2020

Ref. SC/2020/106

A Comissão de Ética do Instituto Politécnico de Portalegre, vem deste modo informar que na reunião de 21 de janeiro 2020 deliberou emitir *Parecer Positivo* à realização do Estudo de Investigação "A Literacia e a Saúde Mental Positiva dos Adolescentes", no âmbito do Doutoramento em Enfermagem e Saúde sob a responsabilidade da Investigadora Joana Rita Pimenta Nobre, com orientação do Sr. Prof. Doutor Carlos Alberto da Cruz Sequeira e da Sra. Profª. Doutora Carme Ferré-Grau.

A Presidente da Comissão de Ética do Instituto Politécnico de Portalegre

Ana Paula Enes de Oliveira

Ana Paula Calado Baptista Enes de Oliveira

29-01-2020

Anexo IX – Parecer Direção-Geral de Educação de Portugal

Gmail Joana Nobre <joana.r.nobre@gmail.com>

Monotorização de Inquéritos em Meio Escolar: Inquérito nº 0730000001

1 mensagem

mime-noreply@gepe.min-edu.pt <mime-noreply@gepe.min-edu.pt> 5 de março de 2020 às 09:17
Para: joana.r.nobre@gmail.com

Exmo(a)s. Sr(a)s.

O pedido de autorização do inquérito n.º 0730000001, com a designação *Questinário de Caracterização dos Adolescentes; Questionário de Saúde Mental Positiva; Escala de Vulnerabilidade Psicológica; Questionário de Conhecimento de Saúde Mental; Questionário "O que É Importante para uma Boa Saúde Mental?"*., registado em 05-02-2020, foi aprovado.

Avaliação do inquérito:

> Exmo.(a) Senhor(a) Joana Rita Pimenta Nobre
> Venho por este meio informar que o pedido de realização de inquérito em meio escolar é autorizado uma vez que, submetido a análise, cumpre os requisitos, devendo atender-se às observações aduzidas.
> Com os melhores cumprimentos
> José Vitor Pedroso
> Diretor-Geral
> DGE

Observações:

> a) A realização dos Inquéritos fica sujeita a autorização das Direções dos Agrupamentos de Escolas do ensino público a contactar para a realização do estudo. Merece especial atenção o modo, o momento e condições de aplicação dos instrumentos de recolha de dados em meio escolar, porque sensíveis e de vida privada, sendo muito onerosos, devendo fazer-se em estreita articulação com as Direções dos Agrupamentos.
> b) Informa-se que a DGE não é competente para autorizar a realização de estudos/aplicação de inquéritos ou outros instrumentos em estabelecimentos de ensino privados e para a realização de intervenções educativas/desenvolvimento de projetos e atividades/programas de intervenção/formação em meio escolar, em tempo curricular, dadas as competências da Escola/Agrupamento, nos domínios da organização pedagógica, da organização curricular, da gestão estratégica, entre outras. Os órgãos de gestão pedagógica e educativa, (a Direção, o Conselho Pedagógico e o Conselho Geral) melhor decidirão sobre a realização destas matérias.
> c) Deve considerar-se o disposto legal em matéria de garantia de anonimato dos sujeitos, confidencialidade, proteção e segurança dos dados. Considerados os documentos que foram anexados e para efeitos da proteção de dados pessoais sensíveis e de vida privada a recolher e tratar para o presente estudo, devem prever-se medidas adequadas e específicas para a defesa dos direitos fundamentais e dos interesses do titular dos dados. Deste modo, procura-se garantir o tratamento lícito dos mesmos, a conformidade com os termos procedimentais indicados e legislação em vigor (Lei n.º 58/2019 de 8 de agosto, que assegura a execução, na ordem jurídica nacional, do Regulamento (UE) 2016/679 do Parlamento e do Conselho, de 27 de abril de 2016, relativo à proteção das pessoas singulares no que diz respeito ao tratamento de dados pessoais e à livre circulação desses dados).

Pode consultar na Internet toda a informação referente a este pedido no endereço http://mime.gepe.min-edu.pt. Para tal terá de se autenticar fornecendo os dados de acesso da entidade.

Anexo X – Autorização os autores das escalas

POLITÉCNICO DE PORTALEGRE

Joana Nobre <joana.nobre@ipportalegre.pt>

Pedido de autorização para a utilização de escalas em Trabalho de Doutoramento

Joana Nobre <joana.nobre@ipportalegre.pt> 10 de dezembro de 2019 às 01:45
Para: Carlos Sequeira <carlossequeira@esenf.pt>

Ex.mo Senhor
Professor Doutor Carlos Sequeira

O meu nome é Joana Nobre, encontro-me a realizar o Curso de Doutoramento em Enfermagem e Saúde na Universidade de Rovira i Virgili (Tarragona - Espanha), com o título "A Literacia e a Saúde Mental Positiva dos Adolescentes".
Neste sentido, sou pelo presente a solicitar a sua autorização para a utilização dos seguintes instrumentos no meu trabalho de doutoramento:

- Questionário de Saúde Mental Positiva (Lluch, 2003; Sequeira & Carvalho, 2009);

- Questionário de Vulnerabilidade Psicológica (Nogueira, Barros & Sequeira, 2017);

- Questionário de Conhecimento de Saúde Mental (Chaves, Sequeira & Duarte, 2019);

- Questionário "O que é Importante para uma Boa Saúde Mental?" (Chaves, Sequeira & Duarte, 2019).

Grata pela atenção.

Com os melhores cumprimentos,
--
Joana Nobre
Docente
MSc, RN

Escola Superior Saúde
IPPortalegre

A. de Santo António, 23 | 7300-075 Portalegre
T +351 245 300 430 | F +351 245 300 439

Formação, investigação e desenvolvimento científico tecnológico, serviços à comunidade e serviços sociais em todas as unidades orgânicas do IPP.

POLITÉCNICO DE PORTALEGRE

Joana Nobre <joana.nobre@ipportalegre.pt>

Pedido de autorização para a utilização de escalas em Trabalho de Doutoramento

Carlos Sequeira <carlossequeira@esenf.pt> 10 de dezembro de 2019 às 23:19
Para: Joana Nobre <joana.nobre@ipportalegre.pt>

Exma. Joana Nobre,

Informa-se que poderão utilizar os instrumentos referidos neste email no seu trabalho de investigação.

- Questionário de Saúde Mental Positiva (Lluch, 2003; Sequeira & Carvalho, 2009);

- Questionário de Vulnerabilidade Psicológica (Nogueira, Barros & Sequeira, 2017);

- Questionário de Conhecimento de Saúde Mental (Chaves, Sequeira & Duarte, 2019);

- Questionário "O que é Importante para uma Boa Saúde Mental?" (Chaves, Sequeira & Duarte, 2019).

Envio um documento em anexo que deverá preencher e devolver.

Trata-se de um documento de monitorização.

Os instrumentos devem ser utilizados na totalidade e não podem ser alterados. Poderão alterar apenas a sua forma de apresentação.

Com os melhores cumprimentos e ao dispor,

Carlos Sequeira

Carlos Sequeira, PhD, MSc, RN

Prof. Coordenador - **Escola Superior de Enfermagem do Porto**

Coordenador do Grupo de Investigação - NursID: Inovação e Desenvolvimento em Enfermagem – CINTESIS – Centro de Investigação em Tecnologias e Serviços de Saúde – FMUP

Coordenador da Unidade de Investigação da Escola Superior de Enfermagem do Porto

Presidente da Sociedade Portuguesa de Enfermagem de Saúde Mental

https://www.researchgate.net/profile/Carlos_Sequeira2

[Citação ocultada]

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info_utiliza_instrumentos (1).doc
30K

Anexo XI – Modelo de Consentimento Informado: Participante/Representante Legal

UNIVERSITAT ROVIRA i VIRGILI

DECLARAÇÃO DE CONSENTIMENTO INFORMADO PARA A PARTICIPAÇÃO EM ESTUDO DE INVESTIGAÇÃO[1]

AO PARTICIPANTE / REPRESENTANTE

Por favor, leia com atenção todo o conteúdo deste documento.

Não hesite em solicitar mais informações se não estiver completamente esclarecido.

Caro(a) Senhor(a)

No âmbito do Programa de Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili (Tarragona – Espanha) a investigadora Joana Rita Pimenta Nobre, sob a orientação do Professor Doutor Carlos Alberto da Cruz Sequeira e da Professora Doutora Carme Ferré-Grau, pretende realizar um estudo de investigação com o título **A Literacia em Saúde Mental Positiva dos Adolescentes** e cujo objetivo principal é conhecer a literacia em saúde mental positiva dos adolescentes.

A evolução dos conhecimentos científicos, nos mais diversos domínios, tem sido possível graças ao contributo da investigação, por isso reveste-se de elevada importância a sua colaboração através da autorização de participação do(a) seu(sua) educando(a) no presente estudo de investigação.

A investigadora assegura que neste estudo será mantido o anonimato e a confidencialidade dos dados, de acordo com o previsto na legislação em vigor em matéria de proteção de dados e no Regulamento Geral sobre a Proteção de Dados (Regulamento UE 2016/679 do Parlamento Europeu e do Conselho, de 27 de abril de 2016).

Declaração do Participante/Representante:

Declaro ter lido e compreendido este documento, bem como os objetivos, riscos e benefícios do estudo, explicados pela investigadora que assina este documento. Foi-me garantida a possibilidade de, em qualquer altura, recusar a participação neste estudo sem qualquer tipo de consequências. Desta forma, aceito autorizar o(a) meu(minha) educando(a) a participar neste estudo e permito a utilização dos dados que o(a) meu(minha) educando(a) de forma voluntária fornece, confiando em que apenas serão utilizados para esta investigação e nas garantias de confidencialidade e anonimato que me são dadas pela investigadora.

Assim, depois de devidamente informado(a) e esclarecido(a) **autorizo a participação do(a) meu(minha) educando(a)** neste estudo.

Nome do educando: _____

Assinatura do educando: _____

[1] Adaptado do modelo de Declaração de Consentimento Informado da Comissão de Ética do Instituto Politécnico de Portalegre e do Modelo de Consentimento Informado proposto pela Direção-Geral de Saúde (Norma da Direção-Geral da Saúde n.º 015/2013 de 03/10/2013)

UNIVERSITAT ROVIRA i VIRGILI

SE NÃO FOR O PRÓPRIO A ASSINAR POR IDADE OU INCAPACIDADE:

(Se o menor tiver discernimento deve também assinar em cima, se consentir)

Nome do encarregado de educação/representante legal: _____

BI/CC/Passaporte N.º: _____ **Data de Validade:** _____/_____/_____

Grau de parentesco ou tipo de representação: _____

Assinatura do encarregado de educação/representante legal: _____

_____, ____ de _____ de _____
(local) (dia) (mês) (ano)

Declaração da Investigadora:

Declaro que prestei a informação adequada e me certifiquei que a mesma foi entendida, ficando o participante/representante informado e esclarecido.

Declaro ainda que foi entregue ao participante/representante um documento explicativo do estudo de investigação que pretendo desenvolver.

Nome da Investigadora: Joana Rita Pimenta Nobre

Número da Cédula Profissional: OE 49436

Assinatura da Investigadora: _____

Agradeço, desde já, a sua disponibilidade para colaborar e autorizar que o(a) seu(sua) educando(a) participe no estudo.

Para qualquer questão ou esclarecimento adicional, contactar a investigadora:

Joana Nobre

Tel: 969302749; Email: joana.r.nobre@gmail.com

Equipa de Investigação:

Investigador Principal – Joana Rita Pimenta Nobre (Enfermeira, Doutoranda na Universidade de Rovira i Virgili – Espanha)

Orientador – Professor Doutor Carlos Alberto da Cruz Sequeira (Escola Superior de Enfermagem do Porto; CINTESIS)

Coorientador – Professora Doutora Carme Ferré-Grau (Universidade de Rovira i Virgili – Espanha)

Este documento é composto por 2 páginas e feito em duplicado: uma via para a investigadora, outra para a pessoa que consente.

UNIVERSITAT ROVIRA i VIRGILI

DOCUMENTO EXPLICATIVO DO ESTUDO DE INVESTIGAÇÃO

Título do estudo: A Literacia e a Saúde Mental Positiva dos Adolescentes

Enquadramento:

A literatura, até ao momento, diz-nos que os níveis de literacia em saúde mental dos adolescentes são modestos (Medina, 2013; Pedreiro, 2013). Este baixo nível de literacia em saúde mental dos adolescentes é um problema da sociedade portuguesa atual, uma vez que contribui para a ausência da procura de ajuda por parte dos adolescentes, afeta o seu desenvolvimento e aumenta o risco de recorrência das perturbações psiquiátricas (Rosa, Loureiro & Sequeira, 2014).

Tendo por base esta evidência, bem como o reduzido número de estudos a nível nacional sobre os níveis de saúde mental positiva e sobre a literacia em saúde mental positiva, numa perspetiva salutogénica, especificamente na adolescência, consideramos fundamental o seu estudo, no sentido de concebermos um programa de intervenção promotor de uma saúde mental positiva dos adolescentes. Razão pela qual propomos a realização deste estudo, que se insere no projeto de doutoramento da Enfermeira Joana Nobre do Curso de Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili (Tarragona – Espanha), tendo como orientadores o Senhor Professor Doutor Carlos Sequeira e a Senhora Professora Doutora Carme Ferré-Grau.

Explicação do estudo:

O presente estudo tem como objetivo geral compreender os níveis de saúde mental positiva dos adolescentes para construir uma proposta de programa promotor da sua saúde mental positiva. O estudo encontra-se estruturado em quatro estudos sequenciais:

- **Estudo 1**: scoping review; Objetivo: mapear a evidência disponível sobre programas/intervenções de promoção da literacia em saúde mental nos adolescentes em contexto escolar;
- **Estudo 2**: estudo quantitativo, exploratório e descritivo; Objetivo: avaliar os níveis de saúde mental positiva dos adolescentes; Amostra de Conveniência: adolescentes frequentadores das escolas do concelho de Portalegre, que aceitem participar no estudo e cujos encarregados de educação/representantes legais dêem o seu consentimento informado; Instrumentos de colheita de dados: Questionário de Saúde Mental Positiva (Sequeira, Carvalho, Sampaio, Sá, Lluch-Canut, Roldán-Merino, 2014) Questionário de Vulnerabilidade Psicológica (Nogueira, Barros & Sequeira, 2017);
- **Estudo 3**: estudo quantitativo, exploratório e descritivo; Objetivo: avaliar o nível de literacia em saúde mental dos adolescentes e correlacionar com os níveis de saúde mental positiva dos mesmos (resultados do Estudo 2); Amostra de Conveniência: adolescentes frequentadores das escolas do concelho de Portalegre, que aceitem participar no estudo e cujos encarregados de educação/representantes legais dêem o seu consentimento informado e que tenham participado no Estudo 2; Instrumentos de colheita de dados: Questionário de Conhecimento de Saúde Mental (Chaves, Sequeira & Duarte, 2019) e Questionário "O que é Importante para uma Boa Saúde Mental?" (Chaves, Sequeira & Duarte, 2019);
- **Estudo 4**: estudo qualitativo; Objetivo: construir uma proposta de programa promotor da literacia em saúde mental positiva dos adolescentes; Amostra: peritos na área da saúde mental positiva e na área da adolescência; Ferramenta de colheita de dados: Focus group.

Os questionários serão disponibilizados online para que os adolescentes possam responder, sendo que têm que ter o Consentimento Informado prévio dos respetivos encarregados de educação/representantes legais. A equipa de investigação enviará para os Diretores das Escolas o link do Consentimento Informado para que os Diretores de Turma o enviem aos encarregados de educação/representantes legais.

O Focus Group será dinamizado pela investigadora. A data e local para a sua realização serão definidos em conformidade com a disponibilidade profissional dos participantes.

Condições e financiamento:

O financiamento do estudo ficará a cargo da investigadora principal, não havendo lugar a pagamento de contrapartidas. A participação no estudo é de caráter voluntário. O participante poderá a qualquer momento decidir abandonar o estudo,

não havendo quaisquer prejuízos na eventualidade de não querer participar. Mais se informa que o presente estudo mereceu o Parecer Positivo da Comissão de Ética do Instituto Politécnico de Portalegre (Parecer de 29-01-2020; Ref. SC/2020/106). Para além disso, todos os questionários foram registados na Plataforma MIME - Monitorização de Inquéritos em Meio Escolar da Direção-Geral da Educação (registo n.º 0730000001), tendo sido aprovado o seu registo por cumprir todos os requisitos.

Riscos Potenciais:

Não haverá riscos inerentes à operacionalização do estudo para os participantes.

Potenciais vantagens:

A realização desta investigação será uma mais valia para a ciência de enfermagem, uma vez que a comunidade científica passará a ter aos seu dispôr dados sobre os níveis de literacia em saúde mental positiva dos adolescentes, que é uma área onde existem dados muito escassos. Para além disso, poderá trazer benefícios para prática clínica, pois permitirá que os enfermeiros tenham ao seu dispor uma proposta de programa de intervenção promotor da literacia em saúde mental positiva dos adolescentes que poderão aplicar na sua prática de cuidados, contribuindo assim para a promoção da saúde da comunidade.

Confidencialidade e anonimato:

A equipa de investigação garante que os dados recolhidos serão usados exclusivamente para efeitos de investigação científica e serão tratados de acordo com o previsto na legislação em vigor em matéria de proteção de dados e no Regulamento Geral sobre a Proteção de Dados (Regulamento UE 2016/679 do Parlamento Europeu e do Conselho, de 27 de abril de 2016), garantindo assim a confidencialidade dos dados e o anonimato dos participantes. Os resultados que posteriormente sejam divulgados serão sempre sobre a forma numérica e nunca de forma a que seja possível identificar os participantes deste estudo. Após a conclusão do estudo, a equipa de investigação garante a destruição dos dados dos questionários aplicados aos adolescentes bem como a destruição de todo o material audiovisual e escrito resultante do Focus Group realizado com os peritos.

Divulgação dos resultados:

Os resultados obtidos neste estudo serão usados para investigação científica, pelo que serão divulgados em eventos científicos nacionais e internacionais, tais como conferências e congressos, bem como em publicações científicas em revistas nacionais e internacionais. Desta forma, os resultados do estudo estarão disponíveis a todos os participantes.

Equipa de Investigação:

Investigador Principal – Joana Rita Pimenta Nobre (Enfermeira, Doutoranda na Universidade de Rovira i Virgili – Espanha)

Orientador – Professor Doutor Carlos Alberto da Cruz Sequeira (Escola Superior de Enfermagem do Porto; CINTESIS)

Coorientador – Professora Doutora Carme Ferré-Grau (Universidade de Rovira i Virgili – Espanha)

Contactos da Investigadora Principal:

Joana Nobre

Tel: 969302749;

Email: joana.r.nobre@gmail.com

Anexo XII – Modelo de Consentimento Informado: Peritos

UNIVERSITAT ROVIRA i VIRGILI

DECLARAÇÃO DE CONSENTIMENTO INFORMADO PARA A PARTICIPAÇÃO EM ESTUDO DE INVESTIGAÇÃO[1]

AO PARTICIPANTE

Por favor, leia com atenção todo o conteúdo deste documento.

Não hesite em solicitar mais informações se não estiver completamente esclarecido.

Caro(a) Senhor(a)

No âmbito do Programa de Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili (Tarragona – Espanha) a investigadora Joana Rita Pimenta Nobre, sob a orientação do Professor Doutor Carlos Alberto da Cruz Sequeira e da Professora Doutora Carme Ferré-Grau, pretende realizar um estudo de investigação com o título **A Literacia em Saúde Mental Positiva dos Adolescentes** e cujo objetivo principal é conhecer a literacia em saúde mental positiva dos adolescentes.

A evolução dos conhecimentos científicos, nos mais diversos domínios, tem sido possível graças ao contributo da investigação, por isso reveste-se de elevada importância a sua colaboração através da autorização de participação do(a) seu(sua) educando(a) no presente estudo de investigação.

A investigadora assegura que neste estudo será mantido o anonimato e a confidencialidade dos dados, de acordo com o previsto na legislação em vigor em matéria de proteção de dados e no Regulamento Geral sobre a Proteção de Dados (Regulamento UE 2016/679 do Parlamento Europeu e do Conselho, de 27 de abril de 2016).

Declaração do Participante:

Declaro ter lido e compreendido este documento, bem como os objetivos, riscos e benefícios do estudo, explicados pela investigadora que assina este documento. Foi-me garantida a possibilidade de, em qualquer altura, recusar a participação neste estudo sem qualquer tipo de consequências. Desta forma, aceito participar neste estudo e permito a utilização dos dados que de forma voluntária forneço, confiando em que apenas serão utilizados para esta investigação e nas garantias de confidencialidade e anonimato que me são dadas pela investigadora.

Assim, depois de devidamente informado(a) e esclarecido(a) **autorizo a minha participação** neste estudo.

Nome: _____

Assinatura: _____

_____, ____ de _____ de _____
(local) (dia) (mês) (ano)

[1] Adaptado do modelo de Declaração de Consentimento Informado da Comissão de Ética do Instituto Politécnico de Portalegre e do Modelo de Consentimento Informado proposto pela Direção-Geral de Saúde (Norma da Direção-Geral da Saúde n.º 015/2013 de 03/10/2013)

Declaração da Investigadora:

Declaro que prestei a informação adequada e me certifiquei que a mesma foi entendida, ficando o participante/representante informado e esclarecido.

Declaro ainda que foi entregue ao participante/representante um documento explicativo do estudo de investigação que pretendo desenvolver.

Nome da Investigadora: Joana Rita Pimenta Nobre

Número da Cédula Profissional: OE 49436

Assinatura da Investigadora: _____

Agradeço, desde já, a sua disponibilidade para colaborar e participar no estudo.

Para qualquer questão ou esclarecimento adicional, contactar a investigadora:

Joana Nobre

Tel: 969302749; Email: joana.r.nobre@gmail.com

Equipa de Investigação:

Investigador Principal – Joana Rita Pimenta Nobre (Enfermeira, Doutoranda na Universidade de Rovira i Virgili – Espanha)

Orientador – Professor Doutor Carlos Alberto da Cruz Sequeira (Escola Superior de Enfermagem do Porto; CINTESIS)

Coorientador – Professora Doutora Carme Ferré-Grau (Universidade de Rovira i Virgili – Espanha)

Este documento é composto por 2 páginas e feito em duplicado: uma via para a investigadora, outra para a pessoa que consente.

UNIVERSITAT ROVIRA i VIRGILI

DOCUMENTO EXPLICATIVO DO ESTUDO DE INVESTIGAÇÃO

Título do estudo: A Literacia e a Saúde Mental Positiva dos Adolescentes

Enquadramento:

A literatura, até ao momento, diz-nos que os níveis de literacia em saúde mental dos adolescentes são modestos (Medina, 2013; Pedreiro, 2013). Este baixo nível de literacia em saúde mental dos adolescentes é um problema da sociedade portuguesa atual, uma vez que contribui para a ausência da procura de ajuda por parte dos adolescentes, afeta o seu desenvolvimento e aumenta o risco de recorrência das perturbações psiquiátricas (Rosa, Loureiro & Sequeira, 2014).

Tendo por base esta evidência, bem como o reduzido número de estudos a nível nacional sobre os níveis de saúde mental positiva e sobre a literacia em saúde mental positiva, numa perspetiva salutogénica, especificamente na adolescência, consideramos fundamental o seu estudo, no sentido de concebermos um programa de intervenção promotor de uma saúde mental positiva dos adolescentes. Razão pela qual propomos a realização deste estudo, que se insere no projeto de doutoramento da Enfermeira Joana Nobre do Curso de Doutoramento em Enfermagem e Saúde da Universidade de Rovira i Virgili (Tarragona – Espanha), tendo como orientadores o Senhor Professor Doutor Carlos Sequeira e a Senhora Professora Doutora Carme Ferré-Grau.

Explicação do estudo:

O presente estudo tem como objetivo geral compreender os níveis de saúde mental positiva dos adolescentes para construir uma proposta de programa promotor da sua saúde mental positiva. O estudo encontra-se estruturado em quatro estudos sequenciais:

- **Estudo 1**: scoping review; Objetivo: mapear a evidência disponível sobre programas/intervenções de promoção da literacia em saúde mental nos adolescentes em contexto escolar;
- **Estudo 2**: estudo quantitativo, exploratório e descritivo; Objetivo: avaliar os níveis de saúde mental positiva dos adolescentes; Amostra de Conveniência: adolescentes frequentadores das escolas do concelho de Portalegre, que aceitem participar no estudo e cujos encarregados de educação/representantes legais dêem o seu consentimento informado; Instrumentos de colheita de dados: Questionário de Saúde Mental Positiva (Sequeira, Carvalho, Sampaio, Sá, Lluch-Canut, Roldán-Merino, 2014) Questionário de Vulnerabilidade Psicológica (Nogueira, Barros & Sequeira, 2017);
- **Estudo 3**: estudo quantitativo, exploratório e descritivo; Objetivo: avaliar o nível de literacia em saúde mental dos adolescentes e correlacionar com os níveis de saúde mental positiva dos mesmos (resultados do Estudo 2); Amostra de Conveniência: adolescentes frequentadores das escolas do concelho de Portalegre, que aceitem participar no estudo e cujos encarregados de educação/representantes legais dêem o seu consentimento informado e que tenham participado no Estudo 2; Instrumentos de colheita de dados: Questionário de Conhecimento de Saúde Mental (Chaves, Sequeira & Duarte, 2019) e Questionário "O que é Importante para uma Boa Saúde Mental?" (Chaves, Sequeira & Duarte, 2019);
- **Estudo 4**: estudo qualitativo; Objetivo: construir uma proposta de programa promotor da literacia em saúde mental positiva dos adolescentes; Amostra: peritos na área da saúde mental positiva e na área da adolescência; Ferramenta de colheita de dados: Focus group.

Os questionários serão disponibilizados online para que os adolescentes possam responder, sendo que têm que ter o Consentimento Informado prévio dos respetivos encarregados de educação/representantes legais. A equipa de investigação enviará para os Diretores das Escolas o link do Consentimento Informado para que os Diretores de Turma o enviem aos encarregados de educação/representantes legais.

O Focus Group será dinamizado pela investigadora. A data e local para a sua realização serão definidos em conformidade com a disponibilidade profissional dos participantes.

Condições e financiamento:

O financiamento do estudo ficará a cargo da investigadora principal, não havendo lugar a pagamento de contrapartidas. A participação no estudo é de caráter voluntário. O participante poderá a qualquer momento decidir abandonar o estudo,

não havendo quaisquer prejuízos na eventualidade de não querer participar. Mais se informa que o presente estudo mereceu o Parecer Positivo da Comissão de Ética do Instituto Politécnico de Portalegre (Parecer de 29-01-2020; Ref. SC/2020/106). Para além disso, todos os questionários foram registados na Plataforma MIME - Monitorização de Inquéritos em Meio Escolar da Direção-Geral da Educação (registo n.º 0730000001), tendo sido aprovado o seu registo por cumprir todos os requisitos.

Riscos Potenciais:

Não haverá riscos inerentes à operacionalização do estudo para os participantes.

Potenciais vantagens:

A realização desta investigação será uma mais valia para a ciência de enfermagem, uma vez que a comunidade científica passará a ter aos seu dispôr dados sobre os níveis de literacia em saúde mental positiva dos adolescentes, que é uma área onde existem dados muito escassos. Para além disso, poderá trazer benefícios para prática clínica, pois permitirá que os enfermeiros tenham ao seu dispor uma proposta de programa de intervenção promotor da literacia em saúde mental positiva dos adolescentes que poderão aplicar na sua prática de cuidados, contribuindo assim para a promoção da saúde da comunidade.

Confidencialidade e anonimato:

A equipa de investigação garante que os dados recolhidos serão usados exclusivamente para efeitos de investigação científica e serão tratados de acordo com o previsto na legislação em vigor em matéria de proteção de dados e no Regulamento Geral sobre a Proteção de Dados (Regulamento UE 2016/679 do Parlamento Europeu e do Conselho, de 27 de abril de 2016), garantindo assim a confidencialidade dos dados e o anonimato dos participantes. Os resultados que posteriormente sejam divulgados serão sempre sobre a forma numérica e nunca de forma a que seja possível identificar os participantes deste estudo. Após a conclusão do estudo, a equipa de investigação garante a destruição dos dados dos questionários aplicados aos adolescentes bem como a destruição de todo o material audiovisual e escrito resultante do Focus Group realizado com os peritos.

Divulgação dos resultados:

Os resultados obtidos neste estudo serão usados para investigação científica, pelo que serão divulgados em eventos científicos nacionais e internacionais, tais como conferências e congressos, bem como em publicações científicas em revistas nacionais e internacionais. Desta forma, os resultados do estudo estarão disponíveis a todos os participantes.

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