UNIVERSIDADE D
COIMBRA

Mariana Portocarrero Maia de Carvalho

Positive Mental Health Literacy for Complete Mental Health

CONTRIBUTIONS ON THEORY, MEASUREMENT AND INTERVENTION

Tese no âmbito do Doutoramento em Psicologia, especialidade Psicologia do Desenvolvimento orientada pela Professora Doutora Maria da Luz Bernardes Rodrigues Vale Dias, pelo Professor Doutor Corey L. M. Keyes e pelo Professor Doutor Sérgio Andrade Carvalho, apresentada à Faculdade de Psicologia e Ciências de Educação da Universidade de Coimbra.

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Contributions on theory, measurement and intervention

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Este trabalho é dedicado aos meus pacientes, que tanto me inspiram, com quem tanto aprendo sobre ser-se humano.

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ABSTRACT

Recent mental health conceptualizations operationalize two continuums: the positive mental health continuum, with mental well-being, and the mental illness continuum, with psychopathology. Though the importance of mental well-being for overall mental health and development has been well established by scientific evidence, mental health literacy research has gravitated solely into mental illness literacy, leaving positive mental health literacy to be defined, so as its measures and interventions. Additionally, psychological processes underlying mechanisms of change related to mental health literacy have not been explored. In order to answer these gaps the present thesis aimed to contribute: a) at a theoretical level – by integrating the complete mental health model to operationalize positive mental health literacy; b) at a psychometric level – developing and validating a new measure of positive mental health literacy; c) on the mapping of psychological processes related to mental health literacy; d) at an intervention level – developing and pilot testing the efficacy of two interventions promoting mental health literacy that includes positive mental health. Therefore, eight studies were developed, following different designs. The first study (study I) is theoretical study on the importance of positive mental health literacy; three studies (studies II, III, IV) are psychometric – studies II (N=418 adults; cross-sectional) and III (N= 548 adolescents; cross-sectional) focused on the development of a new measure of positive mental health literacy: the PosMHLit; study IV (N=534 adolescents; cross-sectional) adapted the Brief Cope to Portuguese adolescents; two studies (studies V and VI) explore psychological processes related to mental health literacy, like the relation between mental health literacy and coping study V (N= 240 adolescents; 74 young-adults; 105 adults; cross-sectional) and the mediational effect of self-compassion and hope on the relation between mental health literacy and mental health in study VI (N= 181 adults; cross-sectional); two studies on intervention development, study VII (N= 30 adolescents; 30 adults; experimental) that assessed the effect of 8 video-vignettes promoting mental health literacy and study VIII (N= 33 adults; quasi-experimental) on the efficacy of a new mental health literacy intervention program that integrates positive mental health literacy, literacy about mental

illness, compassionate attitudes towards help-seeking and help-giving. Measures of mental health literacy, positive mental health, mental illness, self-compassion, coping and hope were used. The results found suggest that: a) Positive mental health literacy should be operationalized as different from literacy about mental disorders. It should focus on mental well-being and its protectors conceptualization and training. b) The PosMHLit is a valid and reliable measure for adolescents and adults, composed by one-dimension that is correlated to literacy about mental illness, mental well-being, mental illness, self-compassion, coping and hope. The Brief Cope is valid and reliable to portuguese adolescents. c) All coping strategies are significantly correlated to both literacies but in different directions. Using emotional support is the only strategy associated to both literacies in all developmental groups. Although mental health literacy is a predictor of both mental well-being and illness, positive mental health literacy is a better predictor of mental well-being. Self-compassion, more than hope, mediates this effect as well as the meditational effect of hope in the relation between mental health literacy and mental health. d) Adolescents and adults recognize mental illness videos vignettes better than positive mental health videos, yet videos and expert explanation combined only promoted positive mental health literacy in adolescents from experimental condition. The innovative program developed for adults (study VIII) and tested trough robust ITT and RCI analysis improves self-compassion and coping in experimental condition. Finally, girls present higher levels of mental health literacy. Implications from the results found acknowledge mental health literacy and developmental research, clinical practice, and policy making.

KEY-WORDS: Positive mental health literacy; Mental Health Literacy; Self-Compassion; Coping; Hope;

RESUMO

As concetualizações recentes de saúde mental operacionalizam dois contínuos: o contínuo da saúde mental positiva, com bem-estar mental, e o contínuo da doença mental, com psicopatologia. Apesar da importância do bem-estar mental para a saúde mental, no geral, e desenvolvimento estar bem estabelecida pela evidência científica, a investigação sobre literacia em saúde mental tem gravitado somente à volta da doença mental, deixando por definir a literacia sobre saúde mental positiva, as suas medidas e intervenções. Adicionalmente, os processos psicológicos na base de mecanismos de mudança relacionados com literacia em saúde mental não têm sido explorados. De forma a responder a estas lacunas, a presente tese pretendeu contribuir: a) a nível teórico – integrando o modelo de saúde mental complete para definir literacia sobre saúde mental positiva; b) a nível psicométrico – desenvolvendo e validando uma nova medida de literacia sobre saúde mental positiva; c) mapeando os processos psicológicos relacionados com a saúde mental positiva; d) a um nível de intervenção – desenvolvendo e realizando o teste piloto de duas intervenções que visam promover literacia em saúde mental, integrando literacia em saúde mental positiva. Desta forma, desenvolveram-se oito estudos, com diferentes desenhos de investigação. O primeiro estudo (estudo I) é um estudo teórico sobre a importância da literacia sobre saúde mental positiva; três estudos (estudos II, III, IV) são psicométricos – os estudos II (N=418 adultos; transversal) e III (N= 548 adolescentes; transversal) focaram-se no desenvolvimento de uma nova medida de literacia sobre saúde mental positive – a PosMHLit ; o estudo IV (N=534 adolescentes; transversal) adaptou o Brief Cope para adolescents portugueses; dois estudos (estudos V e VI) exploram os processos psicológicos relacionados com a literacia em saúde mental, como a relação entre a literacia em saúde mental e o coping V (N= 240 adolescentes; 74 jovens-adultos; 105 adultos; transversal) e o efeito mediador da auto-compaixão e da esperança na relação entre a literacia em saúde mental e a saúde mental no estudo VI (N= 181 adultos; transversal); dois estudos de desenvolvimento de intervenções, o estudo VII (N= 30 adolescentes; 30 adultos; experimental) que avaliou o efeito de 8 vinhetas em vídeos para promover a literacia em saúde mental e o estudo VIII (N= 33

adultos; quasi-experimental) sobre a eficácia de um programa novo de literacia em saúde mental que integra literacia sobre saúde mental positiva, literacia sobre doença mental, atitudes compassivas a dar e oferecer ajuda. As medidas de avaliação usadas foram: literacia em saúde mental positiva, literacia sobre doença mental, auto-compaixão, coping, epserança, bem-estar mental, psicopatologia. Os resultados encontrados sugerem que: a) A Literacia sobre saúde mental positiva deve ser operacionalizada como sendo diferente da literacia sobre doenças mentais. Deve-se focar em concetualizar e em treinar o bem-estar mental e os seus protetores. b) A PosMHLit é uma medida válida e fiável para adolescentes e adultos, composta por uma dimensão que se correlaciona com a literacia sobre doença mental, o bem-estar mental, a doença mental, a auto-compaixão, o coping, a esperança. The Brief Cope é válido e fiável para os adolescents portugueses. c) Todas as estratégias de coping surgem significativamente correlacionadas com ambas as literacias mas em direções diferentes. O uso do suporte emocional e social é a única estratégia correlacionada com ambas as literacias em todos os grupos desenvolvimentais. Apesar da literacia sobre saúde mental ser um preditor do bem-estar mental e da doença mental, a literacia sobre saúde mental positiva é um melhor preditor do bem-estar mental. A auto-compaixão, mais do que a esperança, media este efeito e reforça o efeito da esperança nesta relação. d) Os adolescentes e adultos reconhecem melhor os vídeos-vinheta de doença mental do que os de saúde mental positiva, apesar disso, os vídeos combinados com explicações clínicas destes somente promovem literacia em saúde mental positiva nos adolescentes. O Programa inovador desenvolvido para adultos (estudo VIII) e testado através de análises robustas ITT e RCI aumenta a auto-compaixão e o coping no grupo experimental. Finalmente, as raparigas apresentam níveis superiores de literacia em saúde mental. As implicações dos resultados encontrados reconhecem a investigação sobre literacia em saúde mental e desenvolvimento, implicações para a prática clínica e o desenho de políticas.

PALAVRAS-CHAVE: Literacia sobre saúde mental positiva; literacia sobre saúde mental; auto-compaixão; coping; esperança;

ÍNDICE

PREFACE

Throughout the history of science, mental health was first dominated by psychiatry and medical models. Though this was an important advance to frame some types of mental suffering as mental illness, apart from common sense or spiritual explanations, psychiatry has focused almost exclusively on mental illness prevention, treatment, and management. The beginning of psychology was marked by the expectation of navigating through mental well-being and flourishing as part of mental health. Nonetheless, most psychology research on mental health was inspired by psychiatric pathogenic models. Thus, mental health was only recently conceptualized as mental well-being besides mental illness. Therefore, mental health literacy, which has a tradition of research in psychiatry and nursing, has been approaching mental illness much more than mental well-being. Yet, research has been suggesting mental well-being is equally important for mental health.

Thinking about the effect of mental illness on life tasks management, at any age, it is clear the importance of an agenda on mental illness. How many people suffering from learning disabilities on their first years of school will have their academic performance affected? How many people suffering from social anxiety during adolescence will cross through social media, substance abuse, social isolation as an escape from discomfort, having social impairment, limited psychosocial development and significant mental pain? How many young-adults facing depression and burnout drop-out from their life projects? How many adults feel stigmatized because of having psychosis or personality disorders that are misunderstood? How many elderlies are left apart from their families while developing depression and dementia? These are some examples of how mental illness can affect lives. Yet, we know that not only mental illness but also lack of mental well-being can affect mental health and overall development. How many adolescents look for mental well-being in risk behaviors? How many young adults question their life purposes, and overall, the meaning of life, when confronted with career and relationship challenges? How many adults struggle to find balance between different social roles (e.g., professional, parent, friend, lover, citizen) and time constraints? How many elder suffer from isolation and loneliness after retirement?

All these questions go back to what mental well-being can be: feeling well, functioning well, having social balance.

Just as mental illness was mapped, clustered and has been prevented and treated, so did mental well-being, in recent times. The knowledge on what is mental well-being (e.g., its characteristics, how it can be promoted) is now available. Science has been investing on the etiology and promotion of mental well-being.

Nonetheless, not psychiatry, nor clinical psychology, have dedicated much time on transmitting this knowledge to their main receivers: the public.

In human systems, it is believed that education is fundamental for survival. In recent years, mental health has been a core target of population education. Nonetheless, although the mainstream narrative of mental health being about mental well-being, scientific investment in mental health literacy has focused solely on mental illness education.

A lot is left to do in the operationalization, measurement, and promotion of positive mental health literacy in the scientific community. If positive mental health and mental well-being are science-based constructs that can be measured, promoted and are essential to mental health, there is no reason for the positive mental health literacy space being occupied only by common knowledge.

This project takes a preventive and developmental perspective of mental health and mental health literacy, integrating recent complete mental health models, positive psychology, and self-compassion research into the science of positive mental health literacy, to overcome the identified limitations on positive mental health literacy.

Organized in five chapters, this thesis starts with a theoretical framework that contains chapter 1 and 2. Chapter 1 presents the complete mental health model, its historical evolution, most important findings and in 1.1. the importance of positive mental health for adjusted development. Chapter 2 defines mental health literacy as construct, its historical evolution and state of art, 2.1. synthetizes the development and usefulness of mental health literacy instruments and 2.2. contains mental health literacy interventions current state. The part 2.3. situates the research about positive mental health literacy. In the second part of the thesis, there is a brief presentation of the methods and aims of the project, in chapter 3, followed by the empirical studies on chapter 4. Chapter 5 presents the discussing of the main findings, the conclusion, followed by the strengths and limitations, recommendations for mental health literacy research and clinical practice, developmental research and policy-making.

INTRODUCTION

1. COMPLETE MENTAL HEALTH: THE HISTORY OF HOW WE GOT THERE

The operationalization of mental health as a multi-construct concept is recent (cf. Spiker & Hammer, 2019). Until the 1940s, health was guided by pathogenic and medical frameworks concerned with the measurement, treatment and prevention of the causes of mental pathology (Ramos, 2005). Mental health was defined as the absence of mental illness, observational behavior and internal phenomena were studied to create the necessary conditions to avoid or prevent human suffering and disability. Therefore, mental health was conceptualized as a dichotomic state that could be represented as a dimension of a bipolar continuum of mental health and pathology (Keyes, 2005). In this continuum, an individual could have less symptoms and less disability, and therefore more mental health, or more symptoms and more disability and, consequently, less mental health. Gravitating around this framework, research was primarily focused on: 1) understanding the causes of suffering and disfunction; 2) attaining precise and differentiated diagnostics of psychopathology cases; 3) addressing its risk factors; 4) developing adequate treatment and prevention protocols for mental disorders (Seligman & Csikszentmihalyi, 2000).

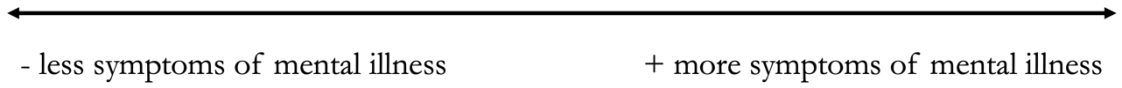

Figure 1. Traditional representation of a bipolar continuum of mental health

In 1948, World Health Organization (WHO) defined mental health as a complete state of well-being, in addition to the absence of mental illness. WHO stated the first salutogenic definition of mental health and opened a way for the scientific study of a multi-construct framework, where there was room for a positive view of mental health.

The first scientific explorations of positive mental health can be found in the research of developmental and humanistic psychologists like Marie Jahoda, Rogers, Erikson, Jung, Allport, Buhler, Neugarten and Maslow (Ryff, 1989). Also, sociology had an important role

in this field, as Antonovsky (1996), a health sociology researcher, created the area salutogenisis for the study of human health, resilience, its causes, and protectors.

With Martin Seligman and Positive Psychology (Seligman et al., 2005), the study of positive mental health was systematized by integrating the contribution of several lines of research gravitating around mental well-being, positive emotions and adaptative functioning. Ed Diener and his colleagues (1989) studied subjective well-being from a hedonistic perspective, which defined happiness as positive affect and satisfaction. His work would add to the measurement of well-being with Positive and Negative Affective Scales with Life Satisfaction Questionnaires and would influence Positive Psychology Interventions focused on enacting positive affect (cf. Seligman et al., 2005). Caroll Ryff (1989a; 1989b) presented a developmental framework for defining psychological well-being from an eudaimonic perspective. According to this field, positive functioning and feelings result from self-development, personal growth, and meaningful purpose (Ryff et al., 2004). Using psychological well-being scales, this construct could be measured by: autonomy, purpose in life, positive relations, personal growth, environmental mastery, self-acceptance. The work of Ryff would later inform, for example, Well-Being Therapy (Fava, 2016). On another perspective, Corey Keyes (1998) explored the importance of social connection and integration to well-being, measuring social well-being as social acceptance, social growth, social contribution, social coherence, and social integration. Later, Keyes (2002; 2005; 2007) developed and proposed a Complete Model of Mental Health that would represent mental health as two continuums rather than a single continuum of bipolar dimensions. The Two Continuum Model or the Dual Model of Mental Health and Mental Illness measured the Mental Illness Continuum with mental illness instruments that could capture the presence or absence of mental illness and the Mental Health Continuum with the Mental Well-Being Continuum Scale that resulted from the combination of subjective well-being (Diener, 1989), psychological well-being (Ryff, 1989b) and social well-being (Keyes, 1996) items. The Mental Health Continuum (Keyes, 2005) facilitated dimensional and categorical diagnosis. Flourishing is diagnosed when individuals report feeling high hedonic well-being at least in one item of emotional well-being subscale and high positive functioning in six items of psychological and social well-being during the last month, every day or almost every day. Languishers refer feeling low hedonic well-being at least in one item of emotional well-being factor, six of the psychological and social well-being factors. Moderate mental health is diagnosed when levels of mental well-being are in between what is operationalized as to languish or to flourish.

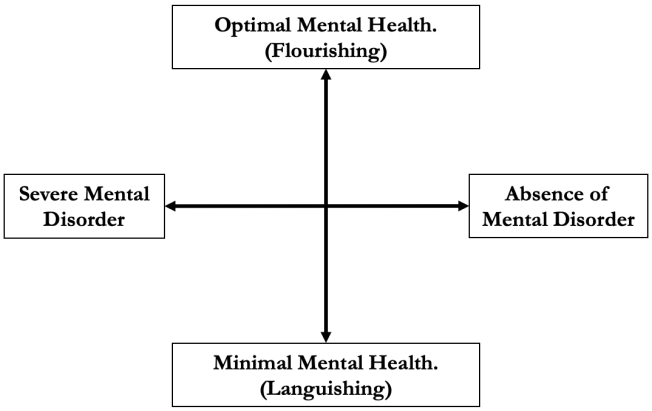

Figure 2. Present representation of complete mental health

The dual structure of mental health and mental illness was previously explored by other authors such as Massé et al. (1998). Several conceptualizations of positive mental health as a unique field of research can be found (Fava & Guidi, 2020; Manwell et al., 2015; Huppert & Whittington, 2003), as well as evidence for the unique causes and consequences of positive mental health. For example, Huppert (2005) and Goodman et al. (2018) presented strong arguments for the independent correlates of positive mental health.

In a recent scoping review Iasiello et al., (2020) presented strong evidence for the dual model of mental health and mental illness. Implications deriving from the dual model regard three levels. First, a measurement level, concerning the need to identify and measure adequately positive mental health as mental well-being. Second, an intervention level where prevention, treatment and recovery from mental illness may benefit from positive mental health promotion. Last, a design level concerning the opened possibility of reach individuals with mental illness stigma using positive mental health programs.

1.1 ***Positive mental health as a necessary condition for adaptation and development***

Since positive mental health has been identified, measured, and promoted as mental well-being, several research inputs have informed the relevance of positive mental health. Positive mental health is associated with better functioning, less use of health care services and less days missed at work (Keyes & Grzywack, 2005). High mental well-being is associated in general with resilience and adaptation (Schotanus-Dijkstra et al., 2017) what might be explained by the effect of positive emotions on the perception of events, coping with events and behavioral activation as Bohlmeijer and Westerhof (2020) suggest revising some studies.

Mental well-being is associated with better psychological functioning and less psychopathology in different age groups (Keyes, 2002; 2005; 2006; 2007). In terms of

developmental trajectories, it does not follow the same paths as mental illness (Westerhof & Keyes, 2010), appearing to be superior in the early adolescence until adulthood and in late adulthood, drawing a U-shaped curve.

The first onset of more than 50% of mental disorders appear between 14 and 18 years old (WHO, 2014) and become a burden for those who are not treated or do not ask for help. It is estimated that one quarter of the population will be diagnosed with mental illness.

Nonetheless, positive mental health might have a protective effect. First, mental well-being is a protector factor against the first onset of mood and anxiety disorders (e.g., Keyes et al., 2010; Lamers et al., 2012; Lamers et al., 2015; Schotanus-Dijkstra et al., 2017; Wood & Joseph, 2010). The effect is the same for relapse against mental illness episodes, and equally important, mental well-being has the capacity to improve recovery from mental illness (De Voos et al., 2017; Fava, 2016; Provencher & Keyes, 2011; Schotanus-Dijkstra et al., 2017). Two outstanding research outputs from the dual continuum approach concern overall functioning with or without flourishing. Those with mental illness may have high mental well-being (DeVos et al., 2018; Franken et al., 2018; Trompetter et al., 2017; Spinhoven et al., 2015), which can aid overall development and functioning. On the other side, those who do not have psychopathology but are languishing in positive mental health, function worst (Westerhof & Keyes, 2010; Spinhoven et al., 2015).

Dual models of mental health brought the evidence that mental well-being and mental illness are related but independent continuums that influence each other (Keyes, 2007). Therefore, assessing a population's complete mental health requires evaluating both mental well-being and psychopathology.

In Portugal, studies suggest that the levels of flourishing across different ages are less than optimal. Matos et al. (2010) evaluated 905 adolescents aged between 19-26 and split the sample in younger adolescents (12-14 years old) and older adolescents (15-16). Younger adolescents and older adolescents had similar percentages of languishing (16.4%) and moderate mental health (37.6%-40.9%), and flourishing (46%-42.7%). Levels of flourishing appear to drop as age increases, as Figueira et al. (2014) found out: 18.7% of a sample of 465 Portuguese young adults were flourishing, while 52.9% had moderate mental health and 28.4% were languishing. Portugal is not only below average levels of well-being in Europe (OECD, 2018), but also above levels of mental illness (Caldas de Almeida & Xavier, 2013). For example, anxiety disorders were the most prevalent of a large-scale national study, followed by depression, impulse disorders and substance use disorders (Caldas de Almeida

& Xavier, 2013), although prevalence differ by gender. In young adult women and middle-aged women, depression is the 3rd cause of morbidity and anxiety the 5th cause. Older women report that depression is the 2nd cause of morbidity. In young adult men and middle-aged men depression is the 4th cause of morbidity (DGS, 2016).

Before the covid-19 pandemic, it was estimated that 1 in 5 Portuguese would suffer from a mental disorder. Now the WHO (2021) suggests that prevalence increased to 1 in 4. It is also estimated that only half of diagnosed people will receive professional help in Portugal (Caldas de Almeida & Xavier, 2013).

Factors associated with delayed help-seeking are related to shame, mental illness stigma and lack of mental health literacy (Kutcher et al., 2016; Rüsch et al., 2014). For this reason, the promotion of mental health literacy to protect and maintain complete mental health has been highlighted by health organizations such as WHO (2014) or the DGS (2016).

2. MENTAL HEALTH LITERACY: CONSTRUCT DEFINITION AND EXPANSION

The 21st century witnessed several health-related changes. As referred, mental health conceptualizations broadened pathogenic to salutogenic conceptualizations. The concept health literacy was created by Nutbeam (2000) as a possibility to educate individuals on managing information and behaviors related to their health. Health literacy would encompass the capacity to extract information, process content and adopt behaviors necessary to identify and prevent diseases or seek help. Nonetheless, health literacy as concept was limited to physical health and was focusing on ill-health.

As health literacy was focused on physical ill-health, mental health was left apart. To overcome the omission of mental health in health literacy, Jorm and colleagues (1997) created the construct mental health literacy as a tool that encompassed knowledge and beliefs about mental disorders that facilitate their recognition, prevention and management. Specifically, the first formulation of mental health literacy included an identification component: a) the ability to recognize mental illnesses; three information search components: b) the ability to seek mental health information; c) knowledge of risk factors, self-help, and professional help treatments available; and a behavioral component: d) attitudes towards help seeking.

A later definition (Jorm, 2012) would distinguish five elements: a) knowledge on mental disorders prevention; b) recognition of mental disorders onset; c) information about help seeking and treatments of mental illness; d) self-help for mild mental suffering; e) first aid for help and others.

Each conceptualization of mental health literacy presented a clear focus on empowering the public to access information, process it critically and transform it into valuable action (Jorm, 2000). Also, mental health literacy had three levels of cognitive and behavioral competency: prevention (focused on the individual), management (focused on the individual) and treatment help seeking (towards specialist). Mental health literacy opened the possibility of educating the public to understand mental illness in a rational scientific frame and overcome the silence created by mental stigma.

Important progress in mental health reforms at a public level was possible because mental health literacy inspired the development of mental health literacy surveys at international levels, especially in Western Countries like Australia, Canada, and the United States (Jorm, 2019; Wei et al., 2016). These surveys helped to understand the misinformation and lack of knowledge in the public concerning: types of mental disorders, normative and pathological mental states, help treatment preferences, kinds of self-help strategies used. Additionally, MHL appeared to be related as well to mental health outcomes such as mental pathology and mental well-being (Chao et al., 2020). Data regarding help-seeking options would later inform programs on the importance of peers as adolescents, but adults as well typically find their peers a preferred source of help (Hart et al., 2018; Hart et al., 2022). More than socioeconomic status, gender would also open the debate regarding mental health literacy disadvantages (Campos et al., 2016). Lack of MHL was associated to delayed help-seeking, suspicion towards treatments and worst medication uptake (Bonabi et al., 2016; Rüsch et al., 2014). Also, the capacity to help others and social distance from those who have mental illness is present when MHL is low (Bonabi et al., 2016), affecting help-giving (Kirchener & Jorm, 2022). These processes were prompted by mental illness stigma. Lack of information about mental health is associated with more stigmatized beliefs and attitudes, and stigma about mental health is connected to worst mental health outcomes such as help-seeking and mental health itself (Eisenberg et al., 2009; Lally et al., 2013; Gulliver et al., 2010; Velasco et al., 2020).

The MHL definition opened space to fundamental advances in mental health education. These necessary changes were possible because of the MHL formulation. Despite this progress, criticism was made to the pathogenic focus of MHL construct once MHL just as mental health was defined for centuries as lack of mental illness, lacking salutogenic elements.

2.1 Mental health literacy instruments

Several instruments have been created to evaluate MHL. The first instrument to officially measure MHL was a vignette-based survey composed of one depression vignette and a schizophrenia vignette plus to several questions, used by Jorm et al. (1997), in Australia. This survey asked people's opinions and beliefs about the etiology of mental illness, their help-seeking preferences, trust about sources of treatment, information seeking. To the time,

the survey enabled revealing results on MHL such as mistrust about mental health professionals and misleading information being consumed by the public.

With MHL measures available, it was possible to measure, characterize and delimitate people's opinions about what mental illnesses are, where they come from, how they are best treated, to whom one can ask support (Jorm, 2000). At a sample or a population level, in a country or between countries, MHL measurement estimated populations parameters of knowledge about mental health, levels of stigma, probabilities on help-seeking or help-giving. This made it possible to define which groups are at risk, what variables predict lower or higher MHL. Measuring MHL facilitated intervention efficacy control, the study of the relationship between this construct and other outcomes.

Nonetheless, MHL instruments capture what was historically defined as MHL or mental health itself. In systematic reviews authors have divided the measures in three categories (Wei et al., 2015): measures of knowledge, measures of attitudes and measures of help-seeking. Interestingly, this division reflects the theoretical formulation behind MHL instruments that is Jorms´definition of MHL, a pathogenic definition. In this sense, the majority of MHL measures target literacy about mental illness and leave apart mental well-being literacy (Mansfield et al., 2020). There are currently many MHL instruments, some that are general MHL measures evaluating opinions about mental illness and help-seeking attitude, other more focused at specific illnesses or stigma (see studies II and III for a more clear description of measures). All are disorder focused ignoring mental well-being because at the historic time most of these measures were developed mental well-being was not seen as part of mental health, nor positive mental health as construct.

Concerning the proliferation of different illness-derived measures, not only the pathogenic bias can be identified as a limitation of current measures, but also their lack of discriminant validity (Spiker & Hamer, 2019). Many instruments measure distinct components of MHL as if it they are the same.

A further division can be created in MHL instruments, concerning their format. The first MHL measures were vignette based. For example, the participant was presented a story of a character with a mental illness problem and had to answer questions evaluating the capacity for diagnose, help-seeking and stigma. This is highly useful to focus-group experiences, surveys on specific illnesses, projection assessment, but misses some psychometric criteria for construct validity and reliability (Spiker & Hamer, 2019). Other authors, recognizing the limitations posed by vignette measures, developed questionnaires to evaluate MHL (Wei et al., 2015). Questionnaires assessing MHL vary in terms of length,

content, and specificity - while some measure MHL about depression or eating disorders, others measure general MHL, its components or stigma. Recently, BjØrnsen et al., (2017) developed the Mental Health Promoting Knowledge to evaluate positive MHL, the first and until now the only instrument to measure positive MHL (see studies II and III to understand its limitations). Other instruments capture positive MHL items (Chao et al., 2020; Mcluckie et al. 2014).

Criticism referring to MHL instruments, in general, focus on lack of psychometric validation, such as not consulting members of the public and clinicians, not providing reliability and construct validity examination (Mansfield et al., 2020; Spiker & Hammer, 2019; Wei et al., 2015; Wei et al., 2016). Another aspect referred is the imbalance between measures evaluating mental health stigma and measures targeting knowledge and attitudes, so as the absence of instruments that measure all elements of MHL. Nonetheless, much is to do on evaluating positive MHL compared to literacy about mental illness.

2.2 Mental Health Literacy Interventions

MHL interventions are initiatives aiming to promote knowledge about mental health, to train skills that facilitate mental illness prevention and management or mental well-being promotion, help-seeking and help giving, but also stigma reduction (Jorm, 2019a; 2019b). These interventions are developed under the non-tested hypotheses that by promoting MHL knowledge, cognitions will lead to attitude change, preventing mental illness and mental stigma.

In fact, there are several initiatives considered to be MHL interventions, though there is significant variance across them. To begin with, MHL can be grouped by their scope, with some focusing on raising awareness about mental illness (e.g., knowledge), with a focus on empowering participants to identify it, prevent it and manage it (e.g., skills training and help-seeking), and other interventions targeting mental illness in general and the experience of stigma in particular (e.g., stigma) (Cairns & Rosseto, 2019). Such as instruments measuring MHL can be divided in knowledge, help-seeking, and stigma instruments, so MHL interventions can be clustered following these three domains. Additionally, within these illness-focused programs, some are specific to mental condition (e.g., depression, additions) (Duran et al., 2020), some approach mental pathologies in general (e.g., common mental disorders and several mental disorders) (Kitchener & Jorm, 2008; Lubman et al., 2016; Lubman et al., 2020; Mcluckie et al., 2014; Patalay et al., 2017; Perry et al., 2014; Skre et al.,

2013). Few MHL programs explore positive MHL or mental well-being (BjØrnsen et al.,2018; Kurki et al., 2021; Mcluckie et al., 2014). For example, the first program to promote MHL is Mental Health First Aid (Kitchener & Jorm, 2008). It is possibly the intervention with currently more empirical support (Hart et al., 2022; Jorm, 2019b; Morgan et al., 2018). Mental Health First Aid follows the first MHL definition and has a focus towards help-providing. It is based on the acronym ALGE (approach, listen, give support, empathize). Mental Health First Aid is available online, face-to-face, for children, adolescents, young-adults, adults, educational and work settings. It integrates training courses, booklets, role-plays. Though considerable empirical evidence suggests the effectiveness of Mental Health First Aid, the program does not cover positive mental health.

In terms of length, there is also a spectrum of possibilities with some interventions during two-days (e.g., workshops) (Campos et al., 2018) and others lasting months (e.g., campaigns with multiple domains) (Kelly et al., 2007), which depends also on their structure - for example, if it is a workshop at a school or a national campaign involving the media, booklets, community events. Considering formats, most programs at the moment are face-to-face (e.g., training courses for the public) (Hart et al., 2018; Perry et al., 2014), but many have been conducted online (e.g., websites, online interventions, digital apps) (Brijnath et al., 2016; Kurki et al., 2021). The targets of MHL can be participants themselves or peers (e.g., teacher and parent training programs), so that MHL programs divide into age specific programs (for children, adolescents, young-adults, adults) (Fretian et al., 2021; Morgan et al., 2018). Within juvenile programs, some are curriculum based and others independent projects.

For example, The Guide (Lubman et al., 2016; Lubman et al., 2020; Mcluckie et al., 2014) is a curriculum based MHL program. It is normally delivered in schools, to teachers and educational community or directly to students. The Guide follows the more recent MHL definition, therefore it targets knowledge about mental illness and good mental health, attitudes to help-seeking and help-giving, self-care. This intervention is based on solid research about mental illness, it de-pathologizes mental experience considering the spectrum of non-pathogenic feelings and mental states and pathological conditions. Using de-stigmatizing perspectives, it humanizes mental experiences. The Guide can also be adapted for older students, in the program Transitions it targets secondary or university.

An important theme to evaluate MHL interventions is whether there is yet a focus in positive mental health. NEST (BjØrnsen et al., 2019) was the first intervention to exclusively focus on positive MHL. It is directed at university students and promotes knowledge about

mental well-being, self-care, emotional needs. Research suggest NEST is effective at promoting mental well-being. With some exceptions such as NEST and The Guide, most MHL initiatives are illness focused and share a pathogenic perspective. For this reason, research evaluating the effects of MHL programs mostly determine results in MHL about mental illness, help-seeking, mental illness, and there is a lack of understanding of how positive MHL interventions can help improving positive MHL and mental well-being.

There is some preliminary evidence regarding the effects of MHL are promising in the long run (Alonso et al., 2019; Lo et al., 2017; Xu et al., 2018). This applies to interventions focusing on stigma. For example, Alonso et al. (2019), Gronholm et al. (2017) found effects on internalized stigma reduction, subjective recovery, and coping. Help-seeking interventions appear to improve attitudes of formal help-seeking in at risk or mentally ill people, but not in children, adolescents, and the general public.

Interventions that target overall MHL (i.e., not only focused on improving knowledge), are the most well-established. One meta-analysis of studies conducted in school settings found an increase in MHL, knowledge, and stigma reduction (Ma et al., 2023), while other found no effect in help-seeking and sigma reduction but gains in knowledge (Amado Rodríguez et al., 2022). Concerning young-adults and university settings, MHL appear to be beneficial (Lo et al., 2017). Mental health first aid is particularly effective at promoting knowledge and confidence on help-giving.

Meta-analyses revising the effects of Mental Health First Aid found it is effective for adults, in promoting MHL, knowledge, help-seeking and help-giving up to at least 6 months follow-up (Hart et al., 2022; Jorm, 2019; Morgan et al., 2008). Not only training courses have been evaluated but also other formats. Ito-Jaeger et al. (2022) found effects from video interventions and Brijnath et al. (2016) in digital interventions. Janoušková et al., (2017) suggest video interventions may be more effective than classical interventions.

Even though there is growing evidence to support MHL interventions, solid methodology is still needed, more studies in low- and middle-income countries, follow-up measurement and PMHL.

2.3 Positive mental health literacy

MHL was reformulated as: a) comprehension of how to obtain and maintain good mental health; b) mental health problems and their treatments identification capacity c)

stigma reduction; d) improved help-seeking (when, where, how to get mental health help) integrating self-care skills (Kutcher et al., 2016). This recent formulation of MHL reflected an integration of the dual model of mental health research outputs, by identifying good mental health as a component of mental health and self-care as different from self-help. From this new definition, other authors claimed the need to investigate positive mental health literacy (Mansfield et al., 2020; Sampaio, 2022; Sequeira, 2022). Indeed, much was developed to assess and promote mental illness literacy than positive MHL.

Nonetheless, the conceptualization proposed did not specify what good mental health was, how it could be achieved and how different it would be from mental illnesses. That space left could be determined by researchers′ preferences in terms of their views on MHL.

A first attempt to define positive MHL was made by BjØrnsen and colleagues (2017) while creating a new measure of positive MHL. They stated that good mental health is more than the absence of mental illness and using WHOs´ definition of mental health they called attention to the importance of well-being. Therefore, they used the Basic Needs Theory of Deci and Ryan to generate items referring to elements that promote mental health by responding to psychological needs. This formulation would correspond to Mental Health Promoting Knowledge (MHPK-10).

Recently, Carvalho et al., (2022) made a concept analysis to positive MHL. Several aspects related to good mental health were organized into antecedents, components, and consequences. Some theories of positive mental health were announced, and data regarding positive mental health effects were presented. Still, this concept analysis contains some limitations. First, authors ignored mental well-being as a central component of good mental health. Second, the dual nature of mental illness and health was not clarified, nor its interactions. Third, most outputs presented derive from a western perspective of positive mental health, while cross cultural models of positive mental health are currently available to frame positive mental health.

In sum, the literature on positive mental health literacy calls for a solid framework, empirically sustained, to conceptualize positive mental health, its measurement and promotion.

3. AIMS AND METHODS

3.1 General aim

This research project is grounded in a developmental and preventative perspective of mental health and seeks to update MHL research by integrating recent advances on complete mental health and well-being. The pathogenic background of MHL research, theory, measurement and intervention on MHL was identified in face of current complete mental health models. Therefore, a lack of positive mental health literacy operationalization, measurement instruments and interventions emerged. This project focused on adding to MHL research a contribute to define and measure positive MHL by explaining the importance of mental well-being. To do so developmental, clinical and positive psychology backgrounds were used. The complete mental health model was the main framework to the studies developed, though compassion focused therapy and positive psychology were also integrated to studies targeting psychological processes and intervention development. The project contemplates 8 studies. The first studies on theory (I) and psychometry (II-III-IV) focus on the difference between mental illness literacy and positive mental health literacy which is possible due to the dual nature of mental health operationalized by the complete mental health approach. The developmental importance of mental illness and mental health is the background for preventive aims (identification, prevention, promotion). The following studies on psychological processes (V-VI) do not exclude mental illness literacy, rather they aim to add to the understanding of the dual nature of mental illness literacy and positive mental health literacy in relation to self-regulation strategies fundamental to adaptation a across development such as coping, self-compassion, hope. The last studies on intervention (VII-VIII) development integrate compassion focused therapy (as preferred clinical approach), classical cognitive-behavioral therapy and positive psychology to guide the operationalization of mental illness and positive mental health literacy promotion in complete mental health perspective. Developmental differences were considered.

Theoretical background

Humans are developmental beings to whom environmental adaptations trigger several mental health reactions that can be operationalized into two continuums: the mental illness continuum and the mental health continuum. The developmental nature of mental health, capable of plasticity depending on the protective risk factors dynamics, call for mental health literacy promotion as a tool for prevention and protection.

MHL research has focused much on mental illness literacy. Fundamental to complete mental health is mental well-being as the core of positive mental health (etiology of positive mental health). Positive mental health literacy integrates mental well-being operationalization (etiology) following the two continuum model, the risk and protective factors of mental well-being so as skills to promote it (prevention, protection). Evidence based strategies can be operationalized from developmental psychology, clinical psychology – compassion focused therapy and positive psychology.

3.2 Specific aims

The studies of this project contemplate specific aims:

- Study I aims to critically review the literature on mental health literacy and complete mental health and integrate the two continuum model to define positive mental health literacy.
- Studies II and III aim to develop and test two measures of positive mental health literacy, for adults and adolescents.
- Study IV aims to adapt a measure of coping, the Brief Cope, to adolescents, once this measure would be necessary for the project.
- Study V focus on the description of MHL and coping use levels of adolescents, young-adults and adults, so as its relationship to coping strategies.
- Study VI explores the potential effect of MHL predicting complete mental health and the role of psychological processes like self-compassion and hope as moderating variables.
- Study VII develops and tests the efficacy of a video-based intervention for adolescents and adults targeting MHL about complete mental health.
- Study VIII develops and tests the efficacy of a MHL intervention for adults.

3.3 Studies design

Study	Contribution	Design	Sample	Instruments
I	Theory extension	Position Paper	X	X
II	Psychometry contribution	Cross-sectional	418 Adults	Positive Mental Health Literacy Questionnaire Mental Health Literacy Questionnaire Mental Health Continuum Short Form Brief Symptom Inventory Self-Compassion Scale Brief Cope Hope Scale
III	Psychometry contribution	Cross-sectional	548 adolescents	Positive Mental Health Literacy Questionnaire Mental Health Literacy Questionnaire Mental Health Continuum Short Form Brief Symptom Inventory Self-Compassion Scale Brief Cope Hope Scale
IV	Psychometry contribution	Cross-sectional	534 adolescents	Positive Mental Health Literacy Questionnaire Mental Health Literacy Questionnaire Mental Health Continuum Short Form Brief Symptom Inventory Self-Compassion Scale Brief Cope Hope Scale
V	Psychological processes comprehension	Cross-sectional	240 adolescents 74 young-adults 105 adults	Positive Mental Health Literacy Questionnaire Mental Health Literacy Questionnaire Brief Cope
VI	Psychological processes comprehension	Cross-sectional	181 adults	Positive Mental Health Literacy Questionnaire Mental Health Literacy Questionnaire Mental Health Continuum Short Form Brief Symptom Inventory Self-Compassion Scale Hope Scale
VII	Intervention development	Experimental	15 control group adolescents 15 experimental group adolescents 15 control group adults 15 control group adults	Positive Mental Health Literacy Questionnaire Mental Health Literacy Questionnaire
VIII	Intervention development	Quasi-experimental	14 control group adults 19 control group adults	Positive Mental Health Literacy Questionnaire Mental Health Literacy Questionnaire Mental Health Continuum Short Form Brief Symptom Inventory Self-Compassion Scale Brief Cope Hope Scale

3.4 Procedures

Specific procedures of each study, so as its sample, instruments are described within each study.

This project was started in 2018. The first years of the project were allocated to preliminary studies preparation. During these years and as a result from the literature review studies psychometric ones were added to the initial project. In 2019 the Covid Pandemic started limiting the development of the following studies. In this sense several modifications took place departing from the initial project.

EMPIRICAL STUDIES

STUDY I - DO WE NEED POSITIVE MENTAL HEALTH LITERACY?

Carvalho, M., Vale-Dias, M.L., Keyes, C., & Bohlmeijer, E. (2022). Do we need positive mental health literacy? First explorations of broadening the scope of mental health literacy. [Manuscript submitted for publication at Áccion Psicológica].

Abstract

Background –Mental well-being is widely accepted as a fundamental part of mental health, and conceptualized as distinct from mental illness. However, mental health literacy (MHL) has overwhelmingly focused on mental illness, and less on mental well-being.

Methods- In this position paper, we argue that MHL, as an evolving concept, would benefit from including literacy on mental well-being.

Results – Though it is suggested that MHL is an important factor for mental illness prevention and mental health promotion, there is still room for improvement in MHL research and practice. It is argued that the actual definitions of MHL, so as its measures and interventions leave out mental well-being, ignoring an important dimension of mental health.

Conclusions – A new concept, positive mental health literacy is proposed in order to achieve a complete mental health literacy approach. Integrating mental illness and positive mental health literacy may reflect different yet complementary aspects of mental health, facilitate help-seeking and mental health de-stigmatization. Expanding MHL by including both mental illness and positive mental health literacy may result in improved mental health indicators, such as less psychological symptoms and more mental well-being.

Keywords: Mental Health; Mental Health Literacy; Well-Being; Positive Mental Health; Positive Psychology; Prevention.

Título: Necesitamos una alfabetización positiva en salud mental? Primeras exploraciones para ampliar el alcance de la alfabetización en salud mental

Resumen

Antecedentes: el bienestar mental es ampliamente aceptado como una parte fundamental de la salud mental y se conceptualiza como algo distinto de la enfermedad mental. Sin embargo, la alfabetización en salud mental (MHL) se ha centrado abrumadoramente en las enfermedades mentales y menos en el bienestar mental.

Métodos: en este documento de posición, sostenemos que MHL, como concepto en evolución, se beneficiaría al incluir la alfabetización sobre el bienestar mental.

Resultados: aunque se sugiere que MHL es un factor importante para la prevención de enfermedades mentales y la promoción de la salud mental, todavía hay margen de mejora en la investigación y la práctica de MHL. Se argumenta que las definiciones actuales de MHL, así como sus medidas e intervenciones, dejan de lado el bienestar mental, ignorando una dimensión importante de la salud mental.

Conclusiones – Se propone un nuevo concepto, la alfabetización positiva en salud mental, para lograr un enfoque completo de alfabetización en salud mental. La integración de las enfermedades mentales y la alfabetización positiva en salud mental puede reflejar aspectos diferentes pero complementarios de la salud mental, facilitar la búsqueda de ayuda y la desestigmatización de la salud mental. Ampliar la MHL incluyendo tanto las enfermedades mentales como la alfabetización positiva en salud mental puede dar como resultado mejores indicadores de salud mental, como menos síntomas psicológicos y más bienestar mental.
Palabras clave: Salud Mental; Alfabetización en Salud Mental; Bienestar; Salud Mental Positiva; Psicologia POSITIVA; Prevención.

Introduction: Current state of art of mental health literacy

Mental health literacy (MHL) has been conceptualized as construct (Jorm et al., 1997; Kutcher et al., 2016) and recently as been framed as multi-construct theory (cf. Spiker & Hammer, 2019). It represents, broadly, the set of knowledge that aids mental disorder prevention, recognition or management, through cognitive and behavioral skills (Jorm, 2000). As construct, it was first operationalized as encompassing: a) the acknowledgement of specific mental illnesses and different types of psychological distress; b) knowledge about the etiology and risk factors of mental disorders; c) knowledge about professional and self-help types of treatments; d) adequate help seeking and recognition attitudes; and e) knowledge about how to search valid mental health information (Jorm et al., 1997; Jorm, 2000).

Recently, the concept of MHL has been expanded, and has integrated the achievement / maintenance of "good mental health" and the development of "self-care competencies" (Kutcher, Wei, & Coniglio, 2016). Hence, these new components reflect the assertion that MHL should cover both positive mental health, as well as illness recognition and management (BjØrnsen et al., 2017; Kutcher, Wei, Costa, Gusmão, Skokauskas, & Sourander, 2016). Nevertheless, the definition of "good mental health" or "positive mental health" remains to be unequivocally operationalized.

One current obstacle to the study of this approach to MHL is the absence of a measure capable of grasping these two dimensions of MHL, i.e., mental illness and mental well-being literacy. BjØrnsen et al., (2017) developed a Positive Mental Health Literacy Scale for adolescents, that captures basic psychological needs such as relatedness, competence and autonomy, but most MHL measures focus on mental illness and neglect the measurement of "good mental health" (Wei et al., 2015). A lack of consensus about what "good mental health is" constrains the development of measures that accurately capture it in the context of a

multi-construct theory of MHL (Spiker & Hammer, 2019). Additionally, this posits considerable limitations in the study of both good mental health and MHL, given that it does not allow us to conduct a thorough exploration of the difference between absence of mental illness and presence of mental well-being.

Nonetheless, several studies using different methodologies corroborate the hypothesis that lack of MHL is associated with stigma and stigma is related to decreased help-seeking intention in both subjects (Eisenberg et al., 2009; Lally et al., 2013; Gulliver et al., 2010; Velasco et al., 2020) and parents (Jeong et al., 2018). Poor knowledge about mental health is also connected to delayed help-seeking behavior, suspicion of treatments, difficulty in helping others, worst mental health outcomes (Kutcher et al., 2016; Rüsch et al., 2014; Wei et al., 2015). Also, low MHL is associated with depression (Lam, 2014) and other forms of psychopathology (Brijnath et al., 2016). On the other hand, studies suggest that individuals who have better MHL are more likely to adhere to psychotherapy and medication (Bonabi et al., 2016). Few studies have explored the relationship between MHL and good mental health (BjØrnsen et al., 2017; Kurki et al., 2021; Maia de Carvalho et al., 2022; Nobre et al., 2021).

The mounting evidence correlating MHL and mental illness have prompted the development of MHL programs that target key elements of the MHL construct (Jorm, 2000). A considerable amount of heterogeneity is reported in terms of the composition of MHL programs, with some covering all components of MHL (Kitchener & Jorm, 2008), others focusing on a specific component of mental health - e.g., some focusing on stigma (Gronholm et al., 2017), others on help-seeking (Lubman et al., 2016; Lubman et al., 2020). MHL programs appear to be particularly promising when applied in school or university settings (Lubman et al., 2016; Lubman et al., 2020; Mcluckie et al., 2014; Patalay et al., 2017; Perry et al., 2014; Skre et al., 2013) which have prompted the development of curriculum based mental health literacy interventions in schools. Evidence suggests that help-seeking interventions benefit MHL, destigmatize mental illness and improve help-seeking behavior (Xu et al., 2018). One example of a MHL program is the Mental Health First Aid (MHFA; Kitchner & Jorm, 2008). This program teaches first aid skills on how to support people with mental health issues or who are in a mental health crisis. The program has been adapted to different settings (e.g., general public, working setting, high-school teachers), and results from a recent meta-analysis suggests it is effective in improving MHL, help-giving behavior, and in reducing social distance from those with mental illness (Morgan et al., 2018). Nevertheless, some studies have found no significant impact, and most mental health literacy

interventions, except MHFA, show no significant impact on help-seeking and stigma (Lo et al., 2018).

MHL programs via web-based platforms have also been conducted (see Brijnath et al., 2016), and results suggest that these are effective in reducing self-stigma, particularly when they include "active ingredients" (e.g., delivered evidenced-based content) (Cairns & Rosseto, 2019). Stigma is a particularly relevant target of MHL programs, given that it can severely affect developmental trajectories, limiting access to health care, education, employment, causing poverty, risk of maltreatment and exclusion (Eisenberg et al., 2013; Gronholm et al., 2017). Some studies have found that programs addressing mental illness stigma are effective in reducing stigma (Byrne, 2000; Gronholm et al., 2017).

Within the umbrella of MHL interventions, some target knowledge about mental illness, distress, risk-factors and causes; some focus on improving help seeking attitudes and behavior, others aim to reduce mental illness stigma (self-stigma and stigma towards others). But a common feature regarding measures and interventions is that the vast majority is illness-oriented and do not focus on mental well-being.

The relevance of mental well-being as part of mental health

According to the World Health Organization (WHO, 2005), mental health is a state of well-being in which every individual fulfills their potential, is able to cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to their community. This idea emphasizes the notion that mental health is more than the absence of mental illness, and that it is a state of social, physical and mental well-being (WHO, 1948).

Between 2002 and 2005, Corey Keyes developed a Complete Model of Mental Health – the Two-Continuum Model. To test it mental illness measures and a new measure of mental well-being, the – Mental Health Continuum – Long-Form, were used. The Mental Health Continuum integrates items from emotional well-being, psychological well-being and social well-being. The findings supported a two-factor model of complete mental health, in which mental well-being and psychopathology factors are correlated, but distinct (Keyes, 2002, 2005). Also, evidence shows that well-being and ill-being have different biological biomarkers (Ryff et al., 2006), activate different brain areas (Urry et al., 2004) and are differently influenced by genes (RØyband et al., 2018). Personality dimensions correlate

differently with well-being and psychopathology (Spinhoven et al., 2015) suggesting different pathways of mental health. Indeed, several studies analyzed in a recent scoping review consistently suggest that the absence of mental illness does not equate mental health/well-being, nor the presence of mental illness necessarily implies lack of mental well-being (Iasiello et al., 2020) and it is important to observe that this varies across the life-span (Westerhof & Keyes, 2010). In addition, the use of the Mental Health Continuum (Keyes, 2005) allows the distinction between: Flourishing – when having high levels of well-being in at least one item/measure of hedonic well-being and in six or more items/measures of positive functioning; Languishing – when having low levels of one item/measure of hedonic well-being and in six or more items/measures of positive functioning; Moderate mental health – when between participants are between flourishing and languishing.

Mental well-being is necessary for complete mental health and good functioning in adolescents, young-adults and adults (Keyes, 2002, 2005, 2006, 2007), and it fosters healthy developmental trajectories (Westerhof & Keyes, 2010). This seems to suggest that one may have psychopathological symptoms and still be able to attain mental well-being (e.g. Franken et al., 2018; De Vos et al., 2018), which across time and contexts may act as a protective factor for personal development and functioning (Provencher & Keyes, 2011; Schotanus-Dijkstra et al., 2017). Also, for those who don´t have a mental illness, flourishing mental health brings resilience to life vulnerabilities and challenges (Schotanus-Dijkstra et al., 2017).

There is specific evidence suggesting that promoting and protecting mental well-being are protective against mood and anxiety disorders, and against first onset of depressive episode and relapse (e.g. Keyes et al., 2010; Lamers et al., 2012; Lamers et al., 2015; Schotanus-Dijkstra et al., 2017; Wood & Joseph, 2010). Indeed, well-being not only decreases the risk of mental illness symptoms, but also increases physical health (Diener & Chan, 2011; Friedman et al., 2005; Schotanus-Dijkstra et al., 2017; Seligman, 2008; Siahpush et al., 2008; Tsenkova et al., 2008), is associated with work productivity and with less use of health care services (Keyes & Grzywack, 2005).

Finally, the evidence that people with both mental illness and flourishing mental health function better than people who are languishing (Keyes & Grzywack, 2005; Westerhof & Keyes, 2010) tentatively suggests that it is not only possible but crucial to promote well-being in those who are recovering or at risk of developing mental health difficulties (De Voos et al., 2017; Fava, 2016; Provencher & Keyes, 2011; Schotanus-Dijkstra et al., 2017), for example by helping foster self-care. This seems to indicate the centrality of expanding MHL

focus from a strictly mental illness treatment and prevention, to mental well-being protection and promotion.

Positive mental health literacy

Jorm′s (2000) premise that lack of MHL could delay help-seeking, raise distrust of treatments, and potentially worsen mental outcomes was supported by evidence (Bonabi et al., 2016; Kutcher et al., 2016; Rüsch et al., 2014). Nevertheless, most studies on MHL have an exclusive focus on mental illness literacy and indicators (Wei et al., 2015), rather than exploring complete mental health (Mansfield et al., 2020).

Just as Jorm (2015) asserted that health literacy vastly ignored mental disorders as a key aspect of health, some have recently argued that the current definition and measurement of MHL ignore mental well-being (e.g., BjØrnsen et al., 2017). The overfocus on mental illness, and disregard for mental well-being as a core element of MHL, is not a minor detail when conceptualizing MHL, given that growing evidence suggests that mental well-being is an important aspect of mental health.

To have a first glimpse on how a complete MHL program would look like, we used the two-continuum model as guidance (Keyes, 2002, 2005). To develop a complete theory-driven MHL package, we argue that it is crucial to measure positive mental health literacy - or what some would call "positive mental health literacy" (BjØrnsen et al., 2017) –, in addition to the commonly measured mental illness literacy, in order to successfully measure complete mental health literacy.

As a result from our proposition to merge the mental health continuum model (Keyes, 2002, 2005) with the MHL concept (Jorm′s, 2000; Kutcher at al., 2016), we argue that having complete MHL refers to both mental illness literacy and positive mental health literacy. In this context positive mental health literacy is considered:

- The ability to distinguish between mental well-being and mental illness;
- The ability to recognize the importance of well-being for good mental health;
- The understanding of the factors that protect/promote well-being and how to cultivate those (e.g. self-care).

To distinguish mental well-being from mental illness, the presence of emotional well-being (e.g. feeling positive affect and life satisfaction), positive functioning (e.g. developing attitudes of acceptance towards the self, the perspective of feeling personal growth, finding

purpose in life, cultivating environmental mastery, autonomy and positive relations with others) and social well-being (e.g. a position of accepting society, observing growth in society, feeling the ability for contribution, social coherence and social integration) must be acknowledged (Keyes, 2002, 2005).

The lack of acknowledgment of mental well-being as a crucial part of mental health might prevent individuals from seeking helpful programs that foster mental well-being. Individuals who do not present mental illness symptoms might not recognize lack of mental well-being as a valid and reasonable motive to seek mental health programs or professionals. Thus, it is crucial for MHL programs to start incorporating mental well-being – and overall "good mental health" – as a core element of their content, promoting a more expanded notion of mental health as the absence of illness and the presence of health. Those without MHL about mental well-being may be less aware of their risk of languishing, having mental illness and functioning poorly. Recognizing mental well-being as a fundamental part of mental health opens the possibility of monitoring mental well-being indicators and asking for help when languishing or having poor levels of mental well-being.

The same rationale applies to healthcare practitioners and psychology professionals. They play an important role tracking and diagnosing those who need psychological support therefore they need to have a clear comprehension of what is mental well-being and why it is necessary. For example, if healthcare professionals don´t have MHL they will have more difficulty identifying those who need psychological/medical help and providing the specialized help to those that need it (Jorm, 2000). The same might occur in regards to mental well-being, where by following the current illness-focused mental health paradigm (cf. Bohlmeijer & Westerhof, in press), professionals might underlook relevant indicators of lack of mental well-being. In fact, if healthcare practitioners and psychologists hold an illness-oriented view of mental health, they will not be efficient at targeting those who are languishing and/or who would benefit from a mental well-being intervention. In fact, one potential impact of MHL not focusing exclusively on mental illness, but expanding its definition to include positive mental health literacy, is its ability to serve as a reference point for more accurate assessment of needs and, consequently, developing more targeted interventions in a clinical setting and/or with clinical populations. For example, similarly to a stepcare logic, those who do not present a mental illness diagnosis but do present low levels of well-being (e.g., high on languishing) might benefit from a complete MHL program, i.e., including positive mental health literacy. After the program, those who score bellow average in well-being might then be able to proceed with further approaches, such as positive

psychology interventions (cf. Bolier et al., 2013; Schotanus-Dijkstra et al., 2015). The need for a complete MHL program comes from the fact that in order to make available and conduct targeted effective interventions, healthcare professionals working in clinical setting should be able to identify the lack of mental well-being and not just the presence of mental illness. This implicates specific complete MHL training where healthcare professionals learn to 1) recognize the importance of mental well-being; 2) identify low levels of mental well-being; 3) discuss with clients the nefarious impact of low well-being; and 4) conduct interventions specifically designed to promote well-being.

Protecting and promoting mental well-being appears to be a fundamental element for complete recovery during and after mental disorder treatment (Bohlmeijer & Westerhof, in press; De Voos et al., 2017; Fava, 2016; Provencher & Keyes, 2011). Therefore, some treatment protocols target not only mental illness symptoms but also mental well-being. Again, the importance of mental well-being is relevant for both clinicians and patients during their treatment process. If clinicians know the importance of mental well-being for recovery and relapse prevention mental well-being can be monitored during and after treatment using the Mental Health Continuum – Short Form (Keyes, 2005) and patients can benefit from positive psychology interventions or well-being therapy if their well-being is still bellow average (De Voos et al., 2017; Fava, 2016). But for this, clinicians also need positive mental health literacy, as they need to create the skills to observe, measure and talk about the absence of mental well-being and to be trained to apply or recommend well-being interventions or know the evidence based resources to cultivate mental well-being in a broad mental health treatment (e.g. Layous & Lyubomirsky, 2014).

Additionally, not less important is the fact that positive mental health literacy and a complete MHL approach may help normalize and destigmatize mental health interventions, shifting the focus from an exclusively clinical perspective of recovery, to a personal perspective of empowerment and/or recovery that involves mental well-being promotion (cf. Bohlmeijer & Westerhof, in press).

Not only in clinical settings but also in general populations, complete MHL has a vast array of potential benefits. Awareness of mental well-being can be raised in schools and university settings through MHL programs that target teachers, students and mental health counsellors and professionals. As MHL programs have been increasing in schools and universities with promising results, positive mental health literacy and mental illness literacy interventions reinforce the importance of assessing mental health, as well as of asking for help not exclusively when one experiences mental illness and suffering, but also when one is

not experiencing mental well-being (Mansfield et al., 2020). Just as MHL programs that focus on mental illness teach different mental illnesses and symptoms, a complete MHL program would add to it the acknowledgment and teaching of well-being related experiences, such as flourishing, languishing and moderate mental health.

Mental health services in universities and schools are designed to help those with mental or performance-related issues, though these interventions are designed to diagnose, prevent and treat mental illness symptoms or give support to performance problems. Expanding the help options in context of mental well-being promotion could involve monitoring mental well-being, providing MHL interventions that target mental well-being, delivering mental well-being interventions for those with low levels of mental well-being, self-help interventions targeting mental well-being or eHealth interventions that train positive mental health literacy.

Also, the need for a MHL that includes positive mental health literacy is based on the growing literature pointing out for the health-related benefits of well-being. For example, mental wellness seems to boost resilience, significantly prevent the relapse of mental illness, and to decrease the risk of developing the onset of mental illness (e.g. Keyes et al., 2010; Lamers et al., 2015; Schotanus-Dijkstra et al., 2017; Wood & Joseph, 2010). Hence, overall, it can be asserted that most people may benefit from knowing that investing in personal well-being may in fact protect them from getting ill. But then again, it is self-evident that in order to foster well-being, one has to first be acquainted with the construct, and then learn how to cultivate it. We argue that the investment in developing and delivering complete MHL packages is the necessary condition to open this avenue of mental health research and practice.

In other words, recognizing and measuring the different dimensions of mental health (mental illness and mental well-being) and MHL (mental illness literacy and positive mental health literacy) allows the development of more specific and complete interventions for clinical and non-clinical populations not only at a prevention but also at promotion and treatment levels.

Conclusion

We argue that well-being literacy adds an important contribution to MHL research. Having literacy about mental well-being and mental illness, professionals will be better

equipped to track and treat individuals at risk. Also, well-being literacy brings research closer to a complete approach of mental health, allowing researchers to better understand whether mental illness literacy and well-being literacy impact differently and/or concomitantly on mental health outcomes, stigma, help-seeking and help-giving. Interventions designed to improve MHL will be more complete as they will target both mental illness and well-being.

Expanding the scope of MHL by including well-being literacy calls first and foremost for the development of psychometrically robust instruments that accurately measure positive mental health literacy or complete mental health literacy, as well as the development and efficacy test of a complete MHL intervention.

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STUDY II - THE POSITIVE MENTAL HEALTH LITERACY QUESTIONNAIRE – POSMHLIT

Maia de Carvalho, M., Vale-Dias, M.L., Keyes, C., & Carvalho, S.A. (2022). The Positive Mental Health Literacy Questionnaire – PosMHLit. *Mediterranean Journal of Clinical Psychology*, *10*(2). https://doi.org/10.13129/2282-1619/mjcp-3407

Abstract

Background: Literature suggests that mental health literacy (MHL) promotes good mental health. However, existing measures of MHL do not capture mental well-being and its protective or promoting factors in its definition of good mental health, and almost exclusively focus on mental illness literacy. In this paper, we present the development and validation of the Positive Mental Health Literacy Questionnaire - PosMHLit.

Method: Scale development was built upon an extensive literature review. Generated items were validated by a panel of experts (focus-group and single analysis). Psychometric analyses were conducted in a community sample of adults (N=418). Exploratory Factor Analysis (EFA) and Parallel Analysis (PA) were performed to examine the factor structure of the scale. Correlations between relevant variables (MHL, well-being and psychopathology) were conducted and Pearsons´ quoficients were examined to test construct validity.

Results: Two factors emerged from the EFA: Factor 1 - "*Characteristics and promoters of positive mental health*" (17 items), and Factor 2- "*Vulnerability factors of positive mental health*" (3 items). Both factors show good internal consistency ($\alpha 1 = .92$; $\alpha 2 = .70$, respectively) and construct validity. The use of a total score of the scale should not include the 3 items from Factor 2.

Conclusion: The PosMHLit is a valid and reliable measure to evaluate literacy about positive mental health and well-being in the adult population, but future studies should further replicate these findings. Clinical implications include the provision of a valid measure of positive mental health, which will contribute to the efficacy testing of MHL interventions.

Key-words: Mental health literacy; Positive mental health; Well-being; Psychometric analysis;

Introduction

Mental health literacy (MHL) has been studied as an empowering tool for the prevention, recognition and management of mental health problems. The MHL construct was introduced by Jorm and colleagues (Jorm et al., 1997; Jorm, 2000), and categorized as the capacity to: a) recognize different mental illnesses and psychological distress; b) understand mental illness as predicted by identifiable causes and risk factors; c) differentiate self-help interventions and professional help available; d) acknowledge the problem and seek

for help; d) look for adequate mental health information. A later definition by Kutcher, Wei, and Conglio (2016) also included knowledge on how to obtain and maintain good mental health, even though what constitutes good mental health has not yet been clearly conceptualized.

Research suggests that low MHL is associated with delayed help-seeking behavior, impaired adherence to treatment, worst help-giving and several forms of psychopathology (Bonabi et al., 2016; Brijnath et al., 2016; Lam, 2014; Kutcher et al., 2016; Rüsch et al., 2014; Wei et al., 2015). This seems to indicate that MHL is a relevant construct for mental illness prevention.

Several measures have been developed in order to assess MHL, although presenting both methodological and theoretical problems, such as lack of validation and construct confusion (Spiker & Hammer, 2019; Wei et al., 2016). For this reason, and because MHL as an overall construct entails several other constructs (e.g., knowledge about mental disorders, stigma, positive mental health, help-seeking), Spiker and Hammer (2019) suggest that MHL would be much more successfully conceptualized if though of as a multi-construct, where knowledge about mental disorders and positive mental health would then be measured separately.

In fact, the majority of MHL measures have an illness-oriented understanding of mental health (Mansfield et al., 2020). Most MHL assessment methods (i.e., scales and vignettes) were built under the first MHL definition, which primarily focused on mental illnesses (such as depression, anxiety disorders, personality disorders, psychotic disorders or parental mental illness), stigma about mental disorders and help-seeking (Wei et al., 2015). For example, O´Connor and Casey (2015) developed the Mental Health Literacy Scale (MHLS), which is a unidimensional scale of thirty-five items, rated in both a four-point scale and a five-point scale, measuring knowledge about different types of mental disorders and psychological distress (e.g. anxiety disorders, depression, personality disorders, addiction), risk factors and causes, types of help available, stigma and help-seeking. Although the instrument measures all domains of the first conceptualization of MHL (Jorm et al., 1997) and captures extremely relevant factors for mental illness prevention, with appropriate psychometric properties, it does not contemplate good mental health understanding, maintenance and promotion. The same is true with The Mental Health Literacy Questionnaire by Campos (MHLq), which was first developed to adolescents and later adapted to adults (Dias et al., 2018). The adolescents version is composed of thirty-three items rated in a 5-point Likert scale. Three factors capture MHL: first aid skills and help-

seeking, knowledge and stereotypes and self-help strategies (a total MHL score can be computed). For the adults version, twenty-nine items are divided into four dimensions: knowledge of mental health problems, erroneous beliefs/stereotypes, help-seeking and first aid skills, self-help strategies. Although this is a useful instrument where MHL can be similarly measured across different developmental groups using variance analysis, a fundamental aspect remains missing: the assessment of literacy on mental well-being and positive mental health.

The notion of mental health as the mere absence of mental illness that underly several mental health instruments, constrains the distinction between mental health and mental illness, and impairs good mental health promotion. Therefore, one might argue that the existing MHL measures, are in fact mental illness literacy measures.

The conceptualization of mental health/well-being and mental illness as two potentially non-overlapping constructs is both theoretical and empirically supported. Mental health is theoretically operationalized as the presence of well-being, well functioning and in the capacity for contributing to the community (World Health Organization [WHO], 2005). In fact, empirical data suggests that the absence of mental illness does not necessarily imply the presence of mental well-being (DeVos et al., 2018; Keyes, 2005; Spinhoven et al., 2015). A recent scoping review unequivocally showed that positive mental health and mental illness - measured through mental well-being and mental illness symptoms instruments - are two related but distinct factors (Iasiello et al., 2020). According to this conceptualization of mental health and mental illness as two potentially non-overlapping continuums, illness-focused MHL instruments are missing important segments of mental health by only addressing mental suffering, and not measuring mental well-being. Thus, one clear concern about the measurement of MHL is that it should not only focus on measuring the knowledge of mental illness management and prevention, but also tap into the knowledge of mental health and mental well-being protection and promotion.

The absence of a suitable measure that addresses literacy of mental health/well-being results in the current lack of understanding of the effects of positive mental health literacy, comparatively to what is known about the benefits of mental illness literacy. Indeed, many argue that MHL instruments should capture positive mental health, good mental health or well-being (BjØrnsen et al., 2017; Kutcher, Wei, Costa, et al., 2016; Kutcher, Wei, & Conglio, 2016; Mansfield et al., 2020; Spiker & Hammer, 2019; Wei et al., 2015) but none of the existing instruments designed to do so target at the same time a complete mental health definition, involving mental well-being and the factors that allow its promotion and

protection. Recently, BjØrnsen et al. (2017) developed the Mental Health Promoting Knowledge (MHPK-10). This self-report instrument was developed for Norwegian adolescents and is composed of a one-dimensional scale, with ten items, rated on a six-point Likert type scale. The measure contemplates the MHL new component proposed by Kutcher, Wei, and Conglio (2016) (i.e., the knowledge necessary to obtain and maintain good mental health) and items cover the importance of training autonomy, competence and relatedness (e.g. "having influence on your own day"; "experiencing school mastery"; "being a good friend"). Although this is a significant and much needed improvement in the measurement of MHL, it exclusively focuses on knowledge of factors that influence mental health/well-being, and not on its definition itself. Indeed, it does not grasp the knowledge of the difference between positive mental health and mental illness nor the dual nature of mental health as integrating mental well-being and the presence or absence of mental illness.

On the other hand, The Attitudes and Knowledge Survey used by Mcluckie et al., (2014), when applied to "The Guide" (e.g. a MHL intervention for school aged children and adolescents), contains two items on the complete mental health definition (e.g. " mental health and mental illness both involve the brain and how it functions"; "people who have mental illness can at the same time have mental health"). However, it does not contemplate factors that specifically protect and promote mental health as a complete state that includes mental well-being. The survey is composed of two sections, the first section has twenty-eight items rated as "True", "False" "Do not know", asking questions about general mental health knowledge. Additionally, the second section contains eight items rated on a Likert rate type scale with seven points, examining attitudes related to mental illnesses. Nonetheless, it does not measure knowledge on the factors that promote complete mental health. Additionally, it was specifically designed to assess the components of the program "The Guide" and is directed to the young population.

The current study aims to develop and explore the factor structure and the psychometric properties of a new instrument that assesses positive mental health and well-being literacy: the Positive Mental Health Literacy Questionnaire (PosMHLit).

Method

Questionnaire development

Item development was based on extensive literature review on MHL, particularly on its operative definition, current measurement and limitations. The core element underlying the need for a new measure of MHL is the realization that the existing measures of MHL are not able to grasp a complete operationalization of mental health, i.e., one that encompass both literacy of mental illness (negative mental health) and of mental health and well-being (positive mental health). We used the Two-Continuum Model of Mental Health and Mental Illness (Keyes, 2002; 2005; 2007; 2010) and related research on developmental psychology, clinical psychology and positive psychology to generate items on 1) positive mental health or mental well-being definition; 2) beliefs about positive mental health and/or mental well-being; 3) factors that protect and promote positive mental health or mental well-being.

From the literature review, three aspects were clear: a) the importance of mental well-being for mental health, b) mental health and mental illness as distinct factors of overall mental health/illness, c) the importance of factors that protect and promote mental well-being. Thirty items were generated according to these three aspects, from which derived six factors initially hypothesized: 1) definition of good mental health and mental well-being, 2) beliefs about good mental health and mental well-being, and four overall protectors/promoters of mental health: 3) gratitude, 4) positive interpersonal relationships, 5) emotion regulation, and 6) valued action.

The 30 items of the scale were organized in a 5-point Likert scale ranging from 1-strongly disagree; 2 – disagree; 3 – neither agree nor disagree; 4 – agree; 5- strongly agree. Items 3, 12 and 17 were reversed.

To address content validity, a focus-group with three clinicians was conducted. Clinicians received an envelope with all items separately and randomly distributed. They were instructed to 1) evaluate its clarity and adequacy, and 2) to group them into one of six envelopes. The envelopes were coded with: "Definition of good mental health"; "Knowledge and beliefs about good mental health"; "Gratitude as protective factor"; "Social relationships as protective factor"; "Values as protective factor"; "Emotion regulation as protective factor". The same procedure was followed with three senior researchers experts in mental health and mental well-being, who independently examined the items and allocated them into different envelopes (Note: senior researchers proceeded with the task individually, given

that it was not possible to conduct a focus-group due to schedule incompatibilities). According to Olson (2010) expert review should be performed using multiple experts when evaluating questionnaires. See Table 1 for a full depiction of the distribution/grouping of items by the clinicians and the researchers.

Table 1. Conceptual Validation

Items	Clinicians			Researchers		
Initially hypothesized	1	2	3	1	2	3
1 - D	B	D	D	D	B	D
2 - B	B	D	B	B	B	B
3 - B	B	B	B	B	B	D
4 - B	D	V	B	B	ER	B
5 - SR	SR	SR	SR	SR	SR	SR
6 - ER	ER	ER	ER	ER	B	ER
7 - B	D	D	B	B	B	B
8 - B	B	D	B	B	B	B
9 - B	B	V	V	V	ER	B
10 - B	B	D	D	B	B	B
11 - G	G	G	G	G	G	G
12 - ER	ER	ER	ER	ER	ER	ER
13 - B	B	D	G	B	B	V
14 - ER	ER	ER	ER	ER	B	ER
15 - D	B	D	D	D	B	D
16 - D	B	B	D	D	B	B
17 - D	B	B	D	D	B	D
18 - SR	SR	SR	SR	SR	SR	SR
19 - V	V	V	V	V	V	V
20 - ER	ER	ER	ER	ER	ER	ER
21 - SR	SR	SR	SR	SR	SR	SR
22 - B	D	B	B	B	B	D
23 - V	B	V	V	V	B	V
24 - B	D	B	B	B	B	D
25 - B	D	B	V	B	B	B
26 - V	V	ER	V	V	V	V
27 - G	B	G	G	G	G	G
28 - B	B	D	G	B	B	RE
29 - ER	ER	ER	ER	ER	ER	ER
30 - G	B	G	G	G	B	G

Note. D = Definition; B = Beliefs; SR = Social Relationships; ER = Emotion Regulation; G = Gratitude; V = Values.

Concerning the distribution of the items by hypothesized factors, agreement was not met. Data collection was then conducted in order to explore the factor structure and psychometric properties of the scale.

Participants

The current study was conducted in a community sample of 418 participants collected online or through paper-and-pencil. In order to meet inclusion criteria participants should be older than 18 years old.

The majority of our sample was composed of women (n = 293; 70.1%), and men (n = 123; 29.4%), with one participant identifying as "other" (n = 1; 0.2%). The mean age of our sample was M = 35.59 (SD = 13.75). In terms of marital status, participants were either dating (n = 111; 26.7%), married (n = 143; 34.4%) or in a civil partnership (n = 26; 6.3%), single (n = 114; 27.4%), and some were divorced/separated (n = 16; 3.9%) and widowed (n = 6; 1.4%). The majority of our sample had either completed high-school (n = 107; 25.6%), had a bachelors (n = 145; 34.7%) or a master´s degree (n = 101; 24.2%). Also, our sample was composed of participants with a low (n = 59; 14.1%), medium (n = 153; 36.6%) or high socioeconomic status (n = 54; 12.9%), in addition to some being college students (n = 94; 22.5%), psychologists (n = 29; 6.9%), unemployed (n = 13; 3.1%) or retired (n = 16; 3.8%). Finally, 154 participants had never had counseling nor psychotherapy (70.6%), and 192 had never been to a psychiatrist (88.9%).

Procedure

This study is part of a larger research project that was approved by the Scientific Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra. All participants provided informed consent to its participation and received information regarding the confidentiality and anonymity of the data, the voluntary role of the participation, so as the right to withdraw the study.

During September 2018 and July 2019, a sample of 594 young-adults and adults was collected, of which 370 were recruited online, through email and unpaid social media posting and cross-posting. Emails and posts were sent to educational, work and leisure institutions. The online protocol was allocated to an academic server (through LimeSurvey platform), and the study protocol was active from September 2018 to July 2019. From the online sample, only 198 were complete. In order to expand the sample collected online, 250 protocols were given to personal contacts of an independent collaborator (not part of the research team) and also to the clients of a work institution to which the collaborator had access. During the months of May 2019 and July 2019, 224 questionnaires were collected and 220 were complete.

Measures

In addition to the newly developed Positive Mental Health Literacy Questionnaire (PosMHLit), and a set of sociodemographic questions, the battery of questionnaires included the following:

Mental Health Literacy Questionnaire (MHLq; Dias et al., 2018). This self-report measure is composed of 29 items ranked in a 5-point Lickert Scale. The scale has a total score and also 4 factors: 1) knowledge of mental health problems; 2) erroneous beliefs/stereotypes; 3) help-seeking and first aid skills; 4) self-help strategies. All subscales presented good internal consistency in the original study, ranging from .72 to .84.

Brief Symptom Inventory (BSI; Derogatis, 1982/1993; Portuguese version Canavarro, 1999). BSI is a widely used measure of psychopathological symptoms, composed of 53 items ranked in a 6-point Lickert-like Scale (from 0 = "not at all" to 4 = "extremely"). The scale measures nine dimensions of psychopathology: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism. In the Portuguese version of the instrument (Canavarro, 1999), alpha levels ranged from .62 to .80.

Mental Health Continuum Short-Form (MHC-SF; Keyes, 2005; 2007). MHC-SF measures mental well-being in 14 items ranked from 0-6 (from 0 = never to 6 = everyday). Items are grouped in 3 factors: emotional well-being; psychological well-being and social well-being. Given that the original authors advise for the testing of two versions of item 6 (Keyes, 2009), we have conducted a preliminary exploratory factor analysis of the MHC-SF in the current sample. Results corroborated the 3-factor solution (explaining 67.05% of variance), all items loaded into the expected factor and presented acceptable communalities (from 0.56: item 5; to 0.87: item 6). The MHC-SF is adapted for the adult Portuguese population as a valid and reliable measure (Fonte et al., 2020). The original study of the MHC-SF found good internal consistency of all three subscales >.80 (Keyes, 2005; 2009) and in the Portuguese version for adolescents the emotional well-being scale has .85, the social well-being scale .80 and the psychological well-being scale .83 (Matos et al., 2010).

Data Analyses

All statistical analyses were conducted using the software SPSS statistics version 23.0 (IBM corp., 2011).

An Exploratory Factor Analysis (EFA) was conducted, using Principal Axis Factoring (PAF) with Direct Oblimin rotation given that the theoretically hypothesized factors underlying the PosMHLit were expected to correlated (Tabachnick & Fidell, 2007). Eigenvalues > 1, as well as the examination of scree-plot points of inflection, guided decisions regarding the number of factors to extract (Johnson, 1998). Additionally, a Parallel Analysis (PA) was conducted to buffer the potential over-extraction from the eigenvalues criterion (Hubbard & Allen, 1987; Zwick & Velicer, 1986). A factor extraction is corroborated by the PA when eigenvalues are greater than the respective randomly generated PA eigenvalues (Franklin et al., 1995). The adequacy of data was assessed through the Kaiser Meyer-Olkin (KMO) test. Data is considered adequate when KMO > 0.80 (Kaiser, 1974; Sharma, 1996). The variance of each item accounted for by the factors were examined through extracted communalities, in which values < .30 suggests the item shares little variance with other variables, thus should be eliminated (Field, 2013; Tabachnick & Fidell, 2007).

Cronbach´s alpha was calculate for each subscale in order to assess the reliability of the PosMHLit. Acceptable reliability was considered when $\alpha > .70$ (Field, 2013), and when item-total correlations >.30 (Nunnally & Bernstein, 1994).

Construct validity was assessed by correlating the PosMHLit with related and/or other relevant measures of mental health literacy and mental health, and examining the Pearson´s correlation coefficients (Cohen et al., 2003).

Results

Preliminary Data Analysis

Results from preliminary analyses suggested acceptable values of skewness and kurtosis (SK < |3| and Ku < |8-10|) and VIF <5 (Kline, 2005), which suggest that normality of distribution was not violated. Six outliers were identified (for the social phobia factor in BSI). However, we decided to retain these participants following the assumption that the assumption that maintaining outliers allows for data to be more likely representative of the variability of the population under study (Kline, 2005; Tabachnick & Fidell, 2007).

Given that the sample was collected using two different strategies (online: n = 198; paper-and-pencil: n = 220), we conducted difference test analyses to explore differences in sociodemographic variables between the subsamples. Results from t-test analyses suggest no

difference in age between strategies of sample collection [t (416) = 1.90, p = 0.058]. Also, in terms of gender, differences found between samples were barely significant [χ^2 (3) = 7.98, p = 0.046]. There were differences in terms of marital status [χ^2 (6) = 36.91, p < 0.001], level of education (χ^2 (13) = 131.84, p < 0.001), and socioeconomic status (χ^2 (6) = 67.47, p < 0.001). Nonetheless, we decided to combine both samples in order to end up with a more diverse sample, given that research has suggested that online recruitment may lead to potential sampling bias (e.g., younger, higher socioeconomic status) (e.g., Trindade et al., 2019).

Exploratory factor Analysis (EFA)

An EFA was initially conducted using Principal Axis Factoring (PAF), with Direct Oblimin rotation, and using the Kaiser criterion (eigenvalues > 1) for extracting factors. Results suggested that data were adequate [KMO = 0.941; χ^2 (435) = 4663. 60, p < 0.001], and the eigenvalues suggested the extraction of five factors, explaining a total of 41.94% of variance. Communalities showed that five items did not meet acceptable values (> 0.30): item 10 (0.239), item 16 (0.145), item 17 (0.161), item 21 (0.267), item 26 (0.188). We have excluded these items and reconducted the PAF. Two new more items did not meet acceptable values for communalities – item 7 (0.298) and item 13 (0.297) – and were excluded before reconducting the PAF. Three more items presented unacceptable communalities - item 1 (0.277), item 2 (0.283), and item 12 (0.299) -, thus a new PAF was conducted without these items. Results suggested that the remaining 20 items presented acceptable values for communalities - lowest: 0.335 (item 3); highest: 0.560 (item 22)]. The eigenvalues suggested the extraction of two factors: factor 1 presented an eigenvalue of 8.48 (39.60% of variance) and factor 2 an eigenvalue of 1.37 (4.17% of variance). In order to control for potential over-extraction, a Parallel Analysis (PA) was conducted. Results corroborated the suggested that two factors could be extracted from the analyses: two eigenvalues from the FAP were greater than the corresponding randomly generated matrix in PA (factor 1: 0.46; factor 2: 0.38). In light of these results, a two factor solution was forced, using the same extraction and rotation procedures above described. Results show good adequacy of data [KMO = 0.946; χ^2 (190) = 3548.34, p < 0.001], the two factor solution explains 43.77% of variance, all items present acceptable communalities (> .30), and factor loadings clearly suggest a two-factor solution (seeTable 2)

Table 2. Complete item pool and factor loadings (N = 418)

Items (Portuguese)	Items (English)	Factor Loadings	
3*. A história do desenvolvimento de cada pessoa (os genes que herdou, a família onde nasceu, os acontecimentos de vida) não condiciona a sua saúde mental.	3. The developmental story of each person (genes, family and life events) doesn´t affect her mental health.	0.105	**0.513**
4. Cada fase do desenvolvimento pode ser uma fonte de aprendizagens sobre o que causa bem-estar e o que causa sofrimento.	Each developmental stage can be a source of learnings about what causes well-being and what causes suffering.	**0.426**	0.265
5. Cultivar relações com pessoas que transmitem apoio, aceitação e respeito pelo outro é benéfico para a saúde mental.	Cultivating relationships with people that transmit support, acceptance and respect is good for mental health.	**0.629**	0.062
6. Ter estratégias para lidar com as emoções é benéfico para a saúde mental.	Having strategies to deal with emotion is good for mental health.	**0.542**	0.169
8. Ao longo da vida é importante obter informação sobre como cuidar da saúde mental.	Across life span it´s important to obtain information about how to take care of mental health.	**0.465**	0.243
9. Para ter boa saúde mental uma pessoa deve cuidar de si e cultivar aquilo que lhe traz bem-estar.	To have good mental health a person must take self-care and cultivate what makes her feel well-being.	**0.584**	0.132
11. Apreciar e agradecer o que se tem de bom, mesmo em momentos difíceis, promove o bem-estar.	Appreciatting and being thankful about the good things one have, even in difficult moments, promotes well-being.	**0.640**	-0.036
14. Lidar com as emoções em vez de fugir destas leva, a longo prazo, a maior bem-estar e menor sofrimento.	Dealing with emoticons in spite of running from it, leads in the long term to higher well-being and less suffering.	**0.543**	0.102
15. A saúde mental é mais do que a ausência de doença mental, implica sentir níveis significativos de bem-estar e ter bom funcionamento.	Mental health is more than the absence of mental illness, it involves feeling significant levels of well-being and having good functioning.	**0.377**	0.302
18. Planear tempo para estar com pessoas com quem se tem interesses em comum é benéfico para a saúde mental.	Planning time to be with people with whom one have common interests is good for mental health.	**0.810**	-0.211
19. Planear tempo para fazer atividades valorizadas promove bem-estar.	Planning time to do valued activities promotes well-being.	**0.752**	-0.174
20. Aprender a reconhecer e gerir as emoções é benéfico para a saúde mental.	Learning to recognize and manage emotions is good for mental health.	**0.598**	0.144
22. A história do desenvolvimento de cada pessoa (os genes que herdou, a família onde nasceu, os acontecimentos de vida) condiciona sua vulnerabilidade para doenças mentais.	The developmental story of each person (genes, family and life events) affects her vulnerability for mental illnesses.	-0.014	**0.756**
23. Reservar tempo para fazer atividades que trazem realização pessoal é benéfico para a saúde mental.	Keeping time to do activities that bring personal fulfillment is good for mental health.	**0.731**	0.004
24. A história de desenvolvimento (os nossos genes, a nossa família, os acontecimentos que não controlámos e que controlámos) condicionam as nossas fontes de bem-estar e influenciam as nossas fontes de sofrimento.	The developmental story (genes, family and events we control and don not control) affect our sources of well-being and affect our sources of suffering.	0.153	**0.533**
25. Para cuidar da saúde mental é fundamental estar-se atento às necessidades e limites pessoais.	To take care of mental health is fundamental to be aware of our needs and boundaries.	**0.506**	0.253

27. Prestar atenção e apreciar as coisas boas que acontecem é benéfico para a saúde mental.	Paying attention and appreciating good things that happen is good for mental health.	**0.715**	-0.041
28. É possível crescer com os momentos de sofrimento na vida.	It´s possible to evolve with moments of suffering in life.	**0.443**	0.204
29. Reconhecer, permitir e regular os estados emocionais é benéfico para a saúde mental.	Recognizing, allowing and regulating emotional states is good for mental health.	**0.608**	0.192
30. Reconhecer e reflectir sobre o que se tem de bom potencia o bem-estar.	Recognizing and reflecting about the good one has promotes well-being.	**0.702**	-0.051

Note. Item 3 is reversed.

The 20 items that compose the final version: items 4,5,6,8,9,11,14,15,18,19,20,23,25,27,28,29,30 (literacy on *characteristics and promoters of mental health and well-being*); items 3, 22, 24 (literacy on *vulnerability factors of mental health and well-being*).

The examination of the pattern of items that compose each factor suggested that the two-factor solution reflects two constructs of Positive Mental Health Literacy: factor 1 "*characteristics and promoters of positive mental health*" (items 4, 5, 6, 9, 11, 14, 15, 18, 19, 20, 23, 25, 27, 28, 29, 30) and factor 2 "*vulnerability factors of positive mental health*" (items 3, 22, 24).

Given that the factor loadings show an unbalanced distribution of items, with factor 1 composed of 17 items, and factor 2 composed of 3 items, we have decided to force a one-factor solution. Results show that, in a one-factor solution, the three items that previously composed factor 2 do not attain acceptable values of communalities: item 3 (0.216), item 22 (0.261), item 24 (0.276). Thus, to calculate the total score of the scale, as unidimensional instrument, the 17 items of factor 1 should be used.

Internal consistency

Cronbach´s alphas were calculated in order to assess reliability. Results suggested both scales presented good internal consistency (see Table 3).

Table 3. Means (*M*), Standard Deviations (*SD*), Corrected item-total correlation (*r*), Cronbach´s alpha (α) if item deleted and Cronbach´s alpha (*α*) of each subscale (N = 418)

	M	*SD*	Corrected item-total *r*	*α* if item deleted	α
Characteristics and promoters of mental health and well-being					**0.92**
Item 4	4.18	0.53	0.58	0.92	
Item 5	4.49	0.57	0.63	0.91	
Item 6	4.37	0.60	0.63	0.91	
Item 9	4.42	0.56	0.64	0.91	
Item 11	4.26	0.61	0.59	0.92	
Item 14	4.20	0.70	0.58	0.92	
Item 15	4.11	0.71	0.55	0.92	
Item 18	4.27	0.56	0.63	0.91	
Item 19	4.30	0.57	0.60	0.92	

Item 20	4.41	0.56	0.65	0.91	
Item 23	4.42	0.53	0.69	0.91	
Item 25	4.18	0.61	0.64	0.91	
Item 27	4.28	0.54	0.65	0.91	
Item 28	4.30	0.62	0.54	0.92	
Item 29	4.27	0.57	0.70	0.91	
Item 30	4.31	0.60	0.64	0.91	
Vulnerability factors of mental health and well-being					**0.70**
Item 3r	3.89	0.99	0.48	0.71	
Item 22	3.99	0.77	0.60	0.51	
Item 24	3.96	0.70	0.52	0.62	

The subscale "*characteristics and promoters of positive mental health*" presented an $\alpha = 0.92$, and the subscale "*vulnerability factors of positive mental health*" had an acceptable $\alpha = 0.70$. Also, results from corrected item-total correlations show that all items present an item-total correlation > 0.30, and that all items were contributing to the internal consistency as evidenced by Chronbach´s alpha if item deleted.

Construct validity

Both subscales from the PosMHLit were significantly correlated with closely related constructs, such as mental health and mental health literacy. See Table 4 for a full depiction of the intercorrelations between all variables in study.

Table 4. Mean, Standard Deviation and Cronbach alpha of all variables, and Pearson´s intercorrelations between all variables in study (N = 418)

Variable	M	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. PosMHLit -CP	68.78	6.36	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. PosMHLit -V	11.84	1.97	0.70	0.56***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.MHLq-K	45.32	4.56	0.79	0.67***	0.46***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.MHLq-EB	32.26	2.94	0.52	0.48***	0.52***	0.45***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5.MHLq-SHSB	23.57	3.56	0.69	0.40***	0.27***	0.35***	0.22***	-	-	-	-	-	-	-	-	-	-	-	-	-
6.MHLq-SHS	17.59	1.77	0.62	0.55***	0.26***	0.50***	0.27***	0.29***	-	-	-	-	-	-	-	-	-	-	-	-
7.BSI-S	0.44	0.55	0.84	-0.05	0.06	0.01	-0.03	0.02	-0.09	-	-	-	-	-	-	-	-	-	-	-
8.BSI-OC	1.04	0.73	0.84	-0.06	0.10*	-0.01	-0.00	-0.01	-0.07	0.60***	-	-	-	-	-	-	-	-	-	-
9.BSI-IS	0.69	0.77	0.84	-0.03	0.08	-0.00	-0.02	0.01	-0.03	0.60***	0.74***	-	-	-	-	-	-	-	-	-
10.BSI-DEP	0.74	0.78	0.89	-0.03	0.12*	0.03	0.04	-0.01	-0.04	0.66***	0.77***	0.80***	-	-	-	-	-	-	-	-
11.BSI-ANX	0.75	0.69	0.86	0.03	0.17***	0.10	0.10*	0.07	-0.06	0.76***	0.71***	0.71***	0.77***	-	-	-	-	-	-	-
12.BSI-H	0.73	0.63	0.81	-0.12*	0.00	-0.02	-0.07	0.01	-0.09	0.56***	0.63***	0.63***	0.67***	0.67***	-	-	-	-	-	-
13.BSI-PA	0.33	0.57	0.83	-0.04	0.11*	0.02	0.02	0.03	-0.10*	0.64***	0.62***	0.62***	0.69***	0.74***	0.52***	-	-	-	-	-
14.BSI-PI	0.85	0.72	0.79	-0.06	-0.01	-0.00	-0.07	0.04	-0.06	0.58***	0.65***	0.65***	0.71***	0.63***	0.65***	0.56***	-	-	-	-
15.BSI-P	0.53	0.66	0.80	-0.02	0.11*	0.02	0.02	0.01	-0.04	0.59***	0.77***	0.77***	0.86***	0.77***	0.67***	0.69***	0.69***	-	-	-
16.MHC-SF-Em	10.86	3.00	0.88	0.08	-0.13*	-0.00	-0.00	0.10*	0.08	-0.34***	-0.44***	-0.41***	-0.59***	-0.49***	-0.38***	-0.38***	-0.39***	-0.51***	-	-
17.MHC-SF-So	10.93	5.62	0.82	0.19***	0.02	0.09	0.00	0.14**	0.14*	-0.29***	-0.35***	-0.29***	-0.40***	-0.36***	-0.31***	-0.29***	-0.30***	-0.34***	0.54***	-
18.MHC-SF-Psy	19.70	6.53	0.88	0.20***	-0.07	0.12**	0.06	0.13**	0.17**	-0.27***	-0.51***	-0.42***	-0.48***	-0.40***	-0.40***	-0.34***	-0.29***	-0.46***	0.63***	0.63***

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

PosMHLit -CP = Positive Mental Health Literacy Questionnaire – Characteristics and Promoters; PosMHLit -V = Positive Mental Health Literacy Questionnaire – Vulnerability; MHLq = Mental Health Literacy questionnaire (K = Knowledge of mental health problems; EB = Erroneous beliefs/stereotypes; SHSB = First aid skills and help seeking behavior; SHS = Self-help strategies); BSI = Brief Symptom Inventory (S = somatization; OC = Obsession-Compulsion; IS = Interpersonal Sensitivity; DEP = Depression; ANX = Anxiety; H = Hostility; PA = Phobic Anxiety; PI = Paranoid Ideation; P = Psychoticism); MHC-SF = Mental Health Continum – Short Form (Em = Emotional well-being; So = Social well-being; Psy = Psychological well-being).

Results showed that both subscales of the PosMHLit were positive and significantly correlated with each other. Also, both subscales of the PosMHLit were found positive and significantly associated with the four subscales of the MHLq, where the magnitude of these association were stronger for "*characteristics and promoters of positive mental health*" subscale of the PosMHLit. Interestingly, a pattern of non-significant associations were found between both subscales of the PosMHLit and all subscales of the BSI, with the exception of a negative and significant association between "*characteristics and promoters of positive mental health*" and hostility, and between "*vulnerability factors of positive mental health*" and obsessive-compulsive, depression, anxiety, phobic anxiety and psychoticism, all of which with a rather small magnitude of correlation (from r = 0.10 to r = 0.17). Finally, the "*characteristics and promoters of positive mental health*" subscale of the PosMHLit was positive and significantly correlated with the subscales of social and psychological well-being of the MHC-SF (but not with the emotional well-being), whereas the "*vulnerability factors of positive mental health*" subscale were negatively and significantly associated with emotional well-being (but not with social and psychological well-being).

Discussion

Recent studies on MHL have established the importance of measuring how to obtain and maintain good mental health (BjØrnsen et al., 2017; Kucther , Wei, & Conglio, 2016), as well as the utility of measuring the acknowledgement that good mental health/well-being is possible even if experiencing mental illness (Mcluckie et al., 2014). Nonetheless, existing instruments of positive MHL are not intended for the adult general population and/or do not target a) the knowledge about the definition of good mental health and of b) its protective or promoting factors. The current study aimed to develop a new measure of MHL that assesses the knowledge on both the definition and the factors that promote positive mental health/well-being. The PosMHLit is a new tool for mental health research that measures knowledge on good mental health, on the difference between mental illness and mental health/wellbeing, and on how to obtain and maintain good mental health and well-being.

Results from the EFA suggested a two-factor solution, with factor 1 (*"characteristics and promoters of positive mental health"*) composed of 17 items and factor 2 (*"vulnerability factors of positive mental health"*) encompass 3 items. This structure appears to reflect the existing literature that asserts that good mental health can be defined and its promoters can be

identified (e.g. BjØrnsen et al., 2017; BjØrnsen et al., 2019; Bolier et al., 2013; Lyubomirsky & Layous, 2014; Schotanus-Dijkstra et al., 2015), and that good mental health can also be impacted by risk factors, namely by genetic, environmental and developmental factors (Røysamb et al., 2018) . It is important to note that when a one dimensional solution was forced, the items of factor 2 did not meet an acceptable solution. Therefore, if a one-factor solution is followed (in order to attain an overall global measure of positive mental health literacy), items 3, 22 and 24 should be excluded from analyses. The factorial structure of this questionnaire suggests that conceptually the mental health definition and its promoters are separate from the causes that put mental health at risk, representing the idea that absence of risk does not equal the presence of promotion. Future studies may replicate the factorial structure of PosMHLit using other samples.

The PosMHLit presents adequate reliability, and factor *"characteristics and promoters of positive mental health"* had higher internal consistency than *"vulnerability factors of positive mental health"*. This result can be influenced by the fact that *"vulnerability factors of positive mental health"* is composed of only three items. The questionnaire was significantly correlated with other relevant instruments, such as MHL assessed by the MHLq. Similarly to the results found in the dual model of mental health/ illness, the constructs assessed by PosMHLit and MHLq, are correlated but do not overlap. This not only assures content validity, but also supports the dual model of mental health and the assertion that MHL as a theory derives related yet different constructs such as literacy about mental illness and positive mental health literacy (Spiker & Hammer, 2019). In this sense, positive MHL and literacy about mental illness must be evaluated differently.

Mental illness and mental well-being symptoms were also assessed. In previous studies, mental health literacy was associated with psychopathology symptoms (Brijnath et al., 2016; Lam, 2014). In the current study, only "*characteristics and promoters of positive mental health*" was related to hostility, while "*vulnerability factors of positive mental health*" was correlated to obsessive-compulsive, depression, anxiety, phobic anxiety and psychoticism. Nonetheless, these associations were weak. One possible explanation for this is that our sample might be a particularly healthy sample, thus the recognition of the vulnerability factors for developing mental health may not be significant related with experiencing symptoms of mental illness. Indeed, the levels of psychopathological symptoms of our sample are below those reported by the original study (Canavarro, 1999). Future studies should explore the nature of the relationship between literacy about positive mental health and psychopathology in both general and clinical samples.

As previous research suggested (BjØrnsen et al., 2019), positive mental health literacy is related to positive mental health. It is interesting to note that the patterns of relationships with the subscales: the *"characteristics and promoters of positive mental health"* is positively associated with psychological and social well-being scales, that are more connected with positive functioning, while *"vulnerability factors of positive mental health"* is negatively related to emotional well-being. Due to the correlational nature of the results one must not infer causality, but one may hypothesize that this negative relationship is operated by other psychological processes: for example, it may be the case that acknowledging risk factors (e.g., the existence of genetic vulnerability factors) may be accompanied by potentially nefarious processes, such as worry, rumination and catastrophizing, which are associated to less emotional well-being. Future studies should examine more thoroughly these relationships, in order to more accurately establish whether those who feel better are less informed or do not feel the need to get information about positive mental health.

The current study presents several limitations, therefore caution should be taken while interpreting the results. Firstly, this study was conducted using self-report measures. Future studies should use independent evaluators to address self-reporting bias. One should also note that one of the measures used for content validation (the MHLq) presented low levels of internal consistency in one of the main variables – MHL (e.g. measured as mental illness literacy). Further studies should cross the PosMHLit with other mental health literacy instruments and assessment tools that measure knowledge about mental illness. The temporal stability of the measure should also be controlled in future studies as this study did not assess the stability and sensitivity of the instrument across time. In terms of sample composition, limitations also arise from the fact that we have an imbalance between sub-samples in education, gender and occupation. Future studies should replicate this study with larger and more homogenous sub-samples. Also, as this study was conducted in a community sample, these results cannot be extrapolated to clinical samples with poor mental health and high levels of psychopathological symptoms. Future studies should replicate this study in clinical samples and/or samples with high risk of developing mental illness.

Nonetheless, the current study present contributes to MHL research and assessment, and presents the strength of a combined strategy in instrument development (e.g. conceptual validation with and expert panel, and empirical validation in a sample of general adult population). Conceptual validation used multiple experts from both clinical and research contexts (Olson, 2010). Empirical validation followed recent methodological guidelines in

MHL research (Spiker & Hammer, 2019; Mansfield et al., 2019; Wei et al., 2016) and used a protocol of valid and reliable questionnaires.

Conclusion

Combining the measurement of positive mental health literacy with the measurement of mental illness literacy allows better designs for research purposes and also for the implementation of mental health programs. Separating literacy about mental health and mental illness has the advantage of studying their distinct impact on well-being and psychopathology, stigma and help-seeking. Also, programs can address separately or in an integrated field mental well-being and mental illness as themes for prevention, management and empowerment in complete mental health, thus assessing more accurately the result of training a dual MHL program.

For the general population, this instrument may track individuals that neglect their mental well-being and positive mental health as an important part of their overall mental health, thus potentially helping them ask for help, even if they do not currently experience symptoms of mental illness.

For mental health professionals, teachers and work psychologists, this instrument may work as a useful screening tool to identify those who would benefit from mental health literacy interventions or programs focusing on mental well-being. By using the PosMHLit with a measure of positive mental health, like the MHC-SF (Keyes, 2005), professionals can also identify those who could improve their mental health through mental health programs designed to promote positive mental health. For instance, in work-related environments, literacy about positive mental health presents particularly promising potential as positive mental health is related to absenteeism (Keyes & Grzywack, 2005). Also, for those recovering from mental illness, literacy about positive mental health may facilitate recovery management, as mental well-being is associated with recovery and relapse prevention (Schotanus-Dijkstra et al., 2017; Wood & Joseph, 2010).

Instead of equipping subjects with literacy about mental illness, future programs can address literacy about complete mental health, where both mental illness and mental well-being deserve attention. The PosMHLit is a valid and reliable scale that captures knowledge about positive mental health and well-being. This instrument can be used to support research

and interventions tailored in the field of MHL, nevertheless future studies should further replicate the study of the psychometric properties of this instrument.

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STUDY III - ADOLESCENTS´ (POSITITVE) MENTAL HEALTH LITERACY - POSMHLIT

Maia de Carvalho, M., Vale-Dias, M.L., & Carvalho, S. (2023). Adolescents´ Mental Health Literacy: Positive Mental Health Literacy Questionnaire, Gender And Mental Health. [Manuscript submitted for publication at TPM journal].

Abstract

Objectives: In this study, the validity of a new measure of positive MHL for adolescents is explored: the Positive Mental Health Literacy Questionnaire - PosMHLit. Method: The instru-ment development combined three stages: literature review; conceptual validation by a panel of experts (focus-group and single analysis); a psychometric study. A sample of 539 adolescents was collected and Exploratory Factor Analysis (EFA) with Parallel Analysis, as well as Pearson´s cor-relations were used. Results: A one dimensional solution with 23 items emerged from EFA. A Confirmatory Factor Analysis corroborated the one-factor solution. PosMHLit has good internal consistency (α = .92) and construct validity, as it was correlated in the expected directions with MHL, mental well-being and psychopathology. Girls reported higher PosMHLit than boys. Flour-ishers and non-flourishers did not differ in terms of PosMHLit.Conclusion: The PosMHLit ap-pears to be psychometrically valid and reliable, and can be used with adolescents to measure posi-tive mental health literacy.
Keywords: Mental health literacy; Positive mental health; Well-being; Psychometric analysis.

Introduction

Adolescence is a critical period of mental and physical changes, in which developmental challenges such as biological maturation, emotional regulation learning, and identity formation occur. Such profound changes can be associated with mental health impairment if adolescents face risk factors like academic and peer pressure, romantic relationships losses, interpersonal violence from peers or adults, and alcohol or drugs consumption (cf. American College of Obstetricians and Gynecologists [ACOG], 2017). Studies estimate that 50% of mental health problems have their start before 14 years old, with short and long-term effects through the entire life-span (World Health Organization [WHO], 2021).

On the other hand, adolescence is particularly fruitful for building cognitive / behavioral resources and implementing healthy lifestyles as foundation for balanced mental health growth. Neuroplasticity is heightened, access to health education is normally made

available at school and adolescents share several worries with their peers reveling the need for mental health support (Fuhrmann et al., 2015). For this reason, empowering adolescents to help themselves and their peers manage mental health challenges can play a significant role in the risk-protection interplay that influences their long-term mental health development (Hart et al., 2018).

Mental health literacy (MHL) is the set of knowledge and skills that facilitate mental health management, by identifying risk factors for mental illness, knowledge on mental illness itself, available treatments, and help giving (Jorm, 2000). It is considered to be a protective factor for mental health given its association with more well-being (BjØrnsen, 2017, 2019; Chao et al., 2020), less psychopathology, improved help-seeking, better adherence to medication, and less mental health stigma (Bonabi et al., 2016; Brijnath et al., 2016; Lam, 2014; Kutcher et al., 2016; Rüsch et al., 2014; Wei et al., 2015).

Important progress in mental health reforms at a public level was possible because mental health literacy inspired the development of mental health literacy surveys at international levels, especially in Western Countries such as Australia, Canada, and the United States (Jorm, 2019; Wei et al., 2016). These surveys helped understand the misinformation and lack of knowledge of the public on mental health (e.g., mental disorders, normative and pathological mental states, help treatment preferences, kinds of self-help strategies used). Additionally, MHL appeared to correlate with mental health outcomes such as psychopathology and mental well-being (Chao et al., 2020). Data regarding help seeking options would later inform programs on the importance of peers as a mental health resource not only during adolescence, but also in adulthood (Hart et al., 2018; Hart et al., 2022). Gender, more than socioeconomic status, would also open the debate regarding mental health literacy disadvantages (Campos et al., 2016), with women presenting significantly more MHL than men (e.g., Hadjima & Furnham, 2017). Lack of MHL was associated with delayed help-seeking, suspicion towards treatments and worst medication uptake (Bonabi et al., 2016; Rüsch et al., 2014). Also, the capacity to help others and social distance from those who have mental illness is present when MHL is low (Bonabi et al., 2016) affecting help-giving (Kirchener & Jorm, 2022). These processes were prompted by mental illness stigma. Lack of information about mental health is associated with more stigmatized beliefs and attitudes and stigma about mental health is connected to worst mental health outcomes such as help seeking and mental health itself (Eisenberg et al., 2009; Lally et al., 2013; Gulliver et al., 2010; Velasco et al., 2020).

Recent reconceptualizations of mental health literacy (Kutcher et al., 2016) added the importance of good mental health development and maintenance reflect the later WHOs´ (2005) definition of mental health as a state of well-being, that is empirically sustained by research from the dual continuum model of mental illness and mental health (Iasiello et al., 2020). Nevertheless, previous research has focused more on mental illness prevention, and the components of MHL that contemplate mental disorders such as the recognition of mental disorders, help-seeking efficacy, and help-seeking strategies or mental stigma (Wei et al., 2013; Nobre et al., 2021). Recent systematic reviews recognize the lack of instruments to measure good mental health (as well as how to develop and maintain it) (Mansfield et al., 2016; Wei et al., 2016), and an absence of interventions targeting this salutogenic component (Nobre et al., 2021) recently recommended by a WHO (2021) report on adolescents´ mental health intervention.

The existing MHL instruments present several limitations, such as lack of clear conceptual foundation, lack of validation, excessive pathogenic focus. Additionally, a significant portion of measures rely on vignette methods, constraining variance analysis (Mansfield et al., 2016; Spiker & Hammer, 2019; Wei et al., 2016; Wei et al., 2017). To our knowledge, only one instrument measures literacy about positive mental health in adolescents – The Mental Health Promoting Knowledge (MHPK-10) (BjØrnsen et al., 2017). This is a one-dimensional scale composed of 10 items, rated on a 6-point Likert type scale. This scale gravitates into knowledge of how to promote good mental health, but it leaves the definition of good mental health unclarified and does not focus on the difference between mental well-being and mental illness, or the importance of mental well-being to mental health as a whole.

The Attitudes and Knowledge Survey is composed of thirty-six items evaluating MHL, divided in two sections, and measures the efficacy of The Guide intervention (Mcluckie et al. 2014). This measure has two items reflecting a dual vision of mental health and mental illness, which the MHPK-10 lacks. On the other hand, it does not capture the factors that promote and protect mental well-being and positive mental health.

Mental Health Literacy Scale for Healthcare Students (Chao et al., 2020) is a more recent measure of MHL, and is composed of 26 items rated on a five-point Likert type scale and a structure of five factors. Authors developed this measure by revising several existing MHL measures, such as the MHPK-10 (BjØrnsen et al., 2017). Therefore, one of the subscales of the Mental Health Literacy Scale for Healthcare Students (Chao et al., 2020) is The Maintenance of Positive Mental Health, and it contemplates illness and health aspects

such as the protection and promotion of well-being. However, this tool is not only limited to the healthcare students and professional's population, but was also exclusively developed for adults.

Recognizing the limitations of the cited measures and studies, we have developed a new measure of literacy about positive mental health and mental well-being – the Positive Mental Health Literacy Questionnaire PosMHLit. This instrument was adapted and validated in a sample of 418 adults of the Portuguese population. The final version for the adult population is composed of 19 items divided into two subscales: Characteristics and promoters of positive mental health (16 items) and Vulnerability factors of positive mental health (3 items), although the final rank of PosMHLit is calculated using only the items from factor 1. Items can be summed to calculate the total. Item 3 and 12 are reversed. The PosMHLit presents an adequate factor structure and suitable psychometric properties such as reliability and validity (Maia de Carvalho et al., 2022). The previous instruments measuring positive mental help focused on its promoters or in its etiology separately as clarified above. This instrument is the first to clearly assess the diference between mental illness and positive mental health, how positive mental health can be promoted and why mental well-being helps prevent mental illness. In the present study, we explore the factor structure and psychometric properties of the Positive Mental Health Literacy Questionnaire in a sample of adolescents.

Method

Measurement development

An in-depth description of the instrument development process is provided in the PosMHLit psychometric study in adults (see Maia de Carvalho et al., 2022). Its development process was based on three steps: measure development through extensive literature review, content validation with a panel of experts (clinicians and academics) and a psychometric study. In the first step, six factors were hypothesized to underlie the items generated. Items generation was conducted using a positive mental health framework: 1) definition of good mental health and mental well-being; 2) beliefs about good mental health and/ mental well-being; 3) four promoters and protectors of mental health: gratitude; positive interrelationships; emotion regulation; valued action. In the second step, clinicans and academics were asked to match items with the hypothesized factors. The psychometric study explored the factorial structure of the instrument and its reliability. Figure 1 outlines the

three stages of questionnaire development: 1) Extensive literature review and measure development; 2) Content validity testing with a panel of experts; 3) Psychometric study. The current study focuses on replicating the third step (psychometric study) of the original study in a sample of adolescents.

Measure development

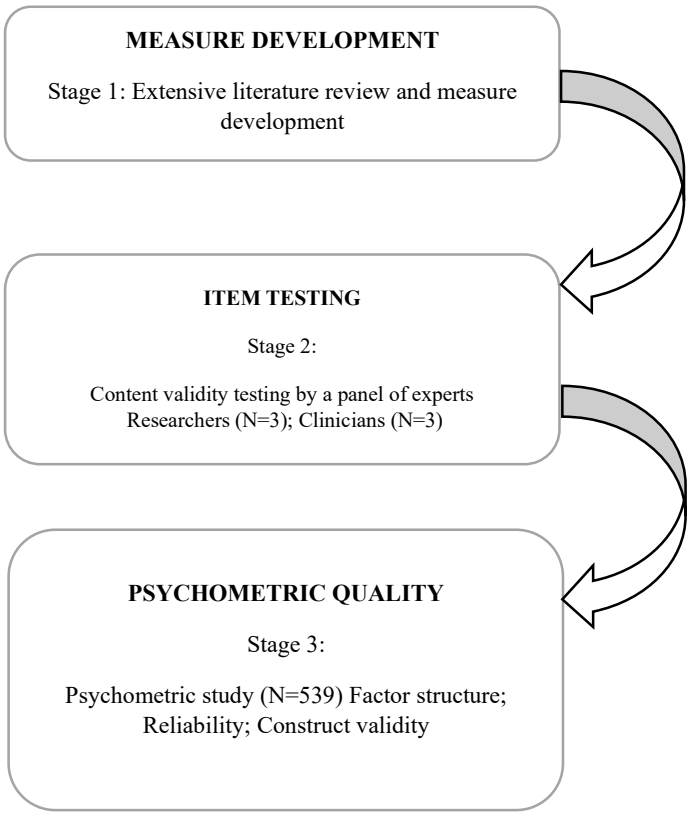

FIGURE 1. Flowchart of the stages of the development of PosMHLit

The following stage of the study, consisting of psychometric study, examined the factor structure and psychometric properties of the scale.

Participants

A community sample of 539 adolescents was collected online and through pencil-and-paper. All participants are Portuguese. Inclusion criteria: being older than 14.
The total sample was composed of 57.2% woman and 42.6% men. The mean age was M= 16.61 (SD= 1.29), ranging from 15 to 23 years old and the mode 15. Regarding relationship status, 31.1% of participants were dating, and 40.3% were not dating. In terms of socioeconomic status, medium status composed the majority of the sample 53.7%, 29.3%

low status, and 16.8% high status. Interesting to note, 42.1% have had counselling/psychotherapy by a psychologist, while 55.9% did not, and 16.2% have had support of a psychiatrist, whereas 78.7% did not. Also, 13.5% of the sample referred having a close family member with mental illness.

Procedure

The present study integrates a larger research project that was approved by the Scientific Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra. Data collection was preceded by informed consent from all participants and their legal tutors (generally their parents). The study presentation explained that all data was confidential and anonymous, participants were participating voluntarily and had the right to withdraw the study any moment.

During March to July 2019, the study recruitment counted 644 participants. Participants (n = 105) were eliminated because of incomplete sections. Considering the analysis needed, questionnaires with full responses to PosMHLit items were considered. The final sample is composed of 205 adolescents collected through paper-and-pencil, and a sample of 334 participants was collected online using the LimeSurvey plataform.

Four independent collaborators (not part of the research team), graduate Psychology students collected the data. Participants were recruited from high schools in Portugal, after the study was authorized by the Ministry of Education and Science – General Directory of Education (RN: 0668400001).

Measures

Demographics. Demographic information collected included age, gender (girl/boy/other_), nationality (open-ended question), education level (in years completed), socioeconomic status (years of education and parents′ occupation), relationship status (single, married or dating), having mental illness in the family, having consulted a mental health professional.

Mental Health Literacy Questionnaire (MHLq; Campos et al., 2016). This measure assesses literacy about mental illness (negative mental health literacy) and is composed of 33 items rated in a 5-point Likert type scale (1- Strongly Disagree to 5- Strongly Agree). Items are distributed in three factors: First aid skills and help seeking (e.g. "If I had a mental disorder I would seek professional help - a psychologist and/or psychiatrist"); Knowledge

and stereotypes (e.g. "*Mental disorders affect peoples thougths*"); Self-help strategies (e.g."*Physical exercise helps to improve mental health*"). All subscales are calculated by the sum of all items that compose each subscale. All subscales present good internal consistency in the original study, ranging from 0.72 to 0.79. A final score is calculated using the referred items, although the questionnaire has also 7 items of nominal recognition of disorders.

Positive Mental Health Literacy Questionnaire (PosMHLq, Maia de Carvalho et al., 2022): This questionnaire is self-rated and assessed literacy about mental well-being and positive mental health. The adolescents′ version is composed of 23 items ranked in 5-point Likert type scale (1- Strongly Disagree to 5- Strongly Agree) and the adult version 20 items. All subscales are calculated by the sum of all items that compose each subscale. It is used as a unidimensional measure. In the original study internal consistency levels of .93 (adolescents) and .92 (adults) are adequate. In this study pretest values were α=.82 for adolescents and α=.67 for adults. Posttest α= 85 to adolescents and α= 81 to adults.

Brief Symptom Inventory (BSI; Derogatis, 1982/1993; Portuguese version Canavarro, 1999): The BSI is used to assess psychopathological symptoms or psychological distress e.g. *"faintness or dizzyness"* which is the focus of MHL about mental illness as measured in the MHLq. The instrument has 53 items ranked in a 6-point Likert type scale from 0- Not at all to 4 – Extremely. Nine dimensions represent the psychopathology subscales: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism. Dimension scores are calculated by summing the values for the items included in that dimension and dividing by the number of items endorsed in that dimension. Internal consistency of the subscales for the Portuguese adaptation range from .62 to .80 (Canavarro, 1999) therefore this is an adequate instrument.

Mental Health Continuum Short-Form (MHC-SF, Keyes, 2005; 2007; Portuguese version Matos et al., 2010): The MHC-SF is one of the most widely instruments used to measure positive mental health or mental well-being, evaluating three domains – emotional well-being (e.g. "*happy*"), psychological well-being (e.g. "*life has meaning or purpose*") and social well-being (e.g. "*people are basicly good*") in 14 items ranked from 0 (Never) to 6 (Always). Subscale scores are calculated by summing the items that comprise its subscale. Scores range from 0 to 15 for the emotional (hedonic) well-being, from 0 to 25 for social well-being, and from 0 to 30 for psychological well-being. A categorical diagnose of flourishing (when having high levels of well-being), and non flourishing (moderate mental health when having moderate levels of well-being and languishing when having low levels of well-being) can be

calculated. The Portuguese adaptation of the scale resulted in good psychometric properties for all subscales: from .80 to .85.

Data analyses

SPSS Statistics Version 23.0 (IBM corp., 2011) software was used to conduct all data analyses.

As we considered theoretically hypothesized factors of PosMHLit to be correlated (Tabachnick & Fidell, 2007) we first executed Exploratory Factor Analyses (EFA), using Principal Axis Factoring (PAF) with Direct Oblimin Rotation to examine factor structure. In order to define the number of factors to extract, we used eigenvalues > 1 and inspected the scree-plot points of inflection (Johnson, 1998). To buffer the potential over-extraction from the Keiser criterion, a Parallel Analyses (PA) followed the referred analyses (Hubbard & Allen, 1987; Zwick & Velicer, 1986). PA corroborates the factor structure when eigenvalues are greater than the corresponding means generated randomly by PA.

Keyser Meyer-Olkin (KMO) criteria was used to assess the adequacy of data. KMO >.70 suggest data adequacy (Kaiser, 1974; Sharma, 1996). Additionally, extracted communalities in which values <. 30 ensure the item shares little variance with other variable, being, therefore, eligible for elimination.

Confirmatory factor analysis (CFA) was conducted with Maximum Likelihood (ML), and followed recommendations by Brown (2006) and by Kline (2005). Model fit was assessed in accordance to several goodness-of-fit indices and respective cut-off recommendations: Chi-Square ($\chi 2$), Comparative Fit Index (CFI $\geq$ .90, acceptable, and $\geq$ .95, desirable; Hu & Bentler, 1999, Tucker-Lewis Index (TLI $\geq$ .90, acceptable, and $\geq$ .95, desirable; Hu & Bentler, 1999), Root Mean Square Error of Approximation (RMSEA $\leq$ .05, good fit; $\leq$ .08, acceptable fit; $\geq$ .10, poor fit; Brown, 2006; Kline, 2005) using a 90% confidence interval. Local model fit was assessed through items´ standardized factor loadings (λ) and individual reliability (R^2), where $\lambda \geq .50$ can be interpreted as the model having factorial validity, and $R^2 \geq .25$ as the items having internal reliability (Hair, Anderson, Tatham, & Black, 1998).

Internal consistency coefficients were calculated with Croanbach´s alpha for each subscale. Reliability was considered acceptable when α >. 70, and when item correlations α >. 30 (Nunnaly & Bernstein, 1994).

Finally, construct validity was explored using Pearsons´ correlation coefficient of PosMHLit with other relevant measures (such as mental well-being, psychopathology, literacy about mental illness) (Cohen et al., 2003).

Results

Exploratory Factor Analyses (EFA)

Results from EFA, using Principal Axis Factoring (PAF), with Direct Oblimin Rotation, indicated the data to be adequate [KMO = 0.949; χ^2 (435) = 6174.402, $p < 0.001$], with eigenvalues suggesting the extraction of two factors, that explain 33.37% of variance. In a second step, as three items did not meet acceptable communalities´ values ($h^2 > 0.30$): item 7 (0.253), item 16 (0.179), item 17 (0.235), we repeated the PAF without these items. In this stage, item 2 (0.182) did not show acceptable values of communalities. After removing this item, the analysis was reconducted as a third step, and items 1 (0.258) and 26 (0.277) did not reach acceptable values of communalities. We have rerun th analysis after eliminating these items, and results suggested that 24 items had acceptable communalities - lowest: h^2 = 0.309 (item 15); highest: h^2 = 0.634 (item 20). Four factors then were identified: factor 1 presented an eigenvalue of 4.86 (33.80% of variance), factor 2 an eigenvalue of .86 (5.97%), factor 3 an eigenvalue of .47 (3.30% of variance), and factor 4 an eigenvalue of .24 (1.69% of variance), suggesting a one factor solution according to the Keiser criterion. Moreover, in a fourth step of examining the psychometric properties of PosMHLit for adolescents, we used a Parallel Analysis (PA) to control potential overextraction. In line with the previous results, four factors were suggested: three eigenvalues from the PAF were greater than the corresponding randomly generated matrix in PA (factor 1: 0.45; factor 2: 0.38; factor 3: 0.33), and factor 4 was suggested to be overextracted (Factor 4: .29). Thus, in a fifth step, we have forced a three-factor solution using the same extraction and rotation procedure. The Results show good adequacy of data [KMO = 0.954; χ^2 (276) = 5520.205, $p < 0.001$]. The three-factor solution explains 43.14% of variance. Item 21 did not reach acceptable values of communalities (.25), so we reran the analysis after excluding this item. Results found all items present acceptable communalities. Nevertheless, factor loadings clearly suggest a one factor solution (see Table 2).

Table 1

Conceptual Validation

Items	Clinicians			Researchers		
Initially hypothesized	1	2	3	1	2	3
1 - D	B	D	D	D	B	D
2 - B	B	D	B	B	B	B
3 - B	B	B	B	B	B	D
4 - B	D	V	B	B	ER	B
5 - SR	SR	SR	SR	SR	SR	SR
6 - ER	ER	ER	ER	ER	B	ER
7 - B	D	D	B	B	B	B
8 - B	B	D	B	B	B	B
9 - B	B	V	V	V	ER	B
10 - B	B	D	D	B	B	B
11 - G	G	G	G	G	G	G
12 - ER	ER	ER	ER	ER	ER	ER
13 - B	B	D	G	B	B	V
14 - ER	ER	ER	ER	ER	B	ER
15 - D	B	D	D	D	B	D
16 - D	B	B	D	D	B	B
17 - D	B	B	D	D	B	D
18 - SR	SR	SR	SR	SR	SR	SR
19 - V	V	V	V	V	V	V
20 - ER	ER	ER	ER	ER	ER	ER
21 - SR	SR	SR	SR	SR	SR	SR
22 - B	D	B	B	B	B	D
23 - V	B	V	V	V	B	V
24 - B	D	B	B	B	B	D
25 - B	D	B	V	B	B	B
26 - V	V	ER	V	V	V	V
27 - G	B	G	G	G	G	G
28 - B	B	D	G	B	B	RE
29 - ER	ER	ER	ER	ER	ER	ER
30 - G	B	G	G	G	B	G

Note. D = Definition; B = Beliefs; SR = Social Relationships; ER = Emotion Regulation; G = Gratitude; V = Values.

TABLE 2

Complete item pool and factor loadings (N = 539)

Items (Portuguese)	Items (English)	Factor Loadings		
		F1	F2	F3
3*. A história do desenvolvimento de cada pessoa (os genes que herdou, a família onde nasceu, os acontecimentos de vida) não condiciona a sua saúde mental.	3. The developmental story of each person (genes, family and life events) doesn´t affect their mental health.	.031	**.493**	-.270
4. Cada fase do desenvolvimento pode ser uma fonte de aprendizagens sobre o que causa bem-estar e o que causa sofrimento.	Each developmental stage can be a source of learning about what contributes to well-being and what contributes to suffering.	**.573**	-.062	.066
5. Cultivar relações com pessoas que transmitem apoio, aceitação e respeito pelo outro é benéfico para a saúde mental.	Cultivating relationships with people that provide us support, acceptance and respect is good for mental health.	**.658**	-.113	-.067
6. Ter estratégias para lidar com as emoções é benéfico para a saúde mental.	Having strategies to cope with emotion is good for mental health.	**.597**	-.027	-.063
8. Ao longo da vida é importante obter informação sobre como cuidar da saúde mental.	It is important to have information about how to take care of our mental health, throughout the life span.	**.607**	-.122	.014
9. Para ter boa saúde mental uma pessoa deve cuidar de si e cultivar aquilo que lhe traz bem-estar.	To have good mental health, a person must have self-care strategies, and cultivate those that provide well-being.	**.763**	-.049	-.104
10. A saúde mental vai variando ao longo da vida e com os desafios do desenvolvimento.	Mental health varies across the life span and according to developmental challenges.	**.574**	.023	.145
11. Apreciar e agradecer o que se tem de bom, mesmo em momentos difíceis, promove o bem-estar.	Being appreciative and grateful about the good things one has promotes well-being, even in difficult moments.	**.649**	.072	-.066
12*. A maneira como se lida como as emoções não influencia o bem-estar e o sofrimento.	The way one manages emotions does not impact on well-being or suffering.	-.074	**.734**	.097

13. É possível crescer com os momentos de bem-estar na vida.	It is possible to grow when having moments of well-being.	**.593**	.088	.036
14. Lidar com as emoções em vez de fugir destas leva, a longo prazo, a maior bem-estar e menor sofrimento.	Dealing with emotions, instead of running from it, leads to higher well-being and less suffering in the long term.	**.605**	.084	-.029
15. A saúde mental é mais do que a ausência de doença mental, implica sentir níveis significativos de bem-estar e ter bom funcionamento.	Mental health is more than the absence of mental illness, it involves feeling high levels of well-being and having good functioning.	**.502**	.024	.108
18. Planear tempo para estar com pessoas com quem se tem interesses em comum é benéfico para a saúde mental.	Planning time to be with people with whom one has common interests is good for mental health.	**.589**	.045	.047
19. Planear tempo para fazer atividades valorizadas promove bem-estar.	Planning time to do valued activities promotes well-being.	**.638**	.058	.039
20. Aprender a reconhecer e gerir as emoções é benéfico para a saúde mental.	Learning to recognize and manage emotions is good for mental health.	**.831**	-.040	-.105
22. A história do desenvolvimento de cada pessoa (os genes que herdou, a família onde nasceu, os acontecimentos de vida) condiciona sua vulnerabilidade para doenças mentais.	The developmental history of each person (genes, family, and life events) affects their vulnerability for mental illnesses.	.131	-.047	**.624**
23. Reservar tempo para fazer atividades que trazem realização pessoal é benéfico para a saúde mental.	Having time to do activities that bring personal fulfillment is good for mental health.	**.663**	-.135	.068
24. A história de desenvolvimento (os nossos genes, a nossa família, os acontecimentos que não controlámos e que controlámos) condicionam as nossas fontes de bem-estar e influenciam as nossas fontes de sofrimento.	Our developmental history (genes, family, and events we control and do not control) affects our sources of well-being and affects our sources of suffering.	.073	-.003	**.692**

25. Para cuidar da saúde mental é fundamental estar-se atento às necessidades e limites pessoais.	Taking care of mental health is fundamental to be aware of our needs and boundaries.	**.550**	-.030	.208
27. Prestar atenção e apreciar as coisas boas que acontecem é benéfico para a saúde mental.	Paying attention and appreciating good things that happen is good for mental health.	**.739**	.050	.065
28. É possível crescer com os momentos de sofrimento na vida.	It is possible to grow from moments of suffering in life.	**.461**	-.146	.059
29. Reconhecer, permitir e regular os estados emocionais é benéfico para a saúde mental.	Recognizing, allowing and regulating emotional states is good for mental health.	**.685**	-.045	.051
30. Reconhecer e reflectir sobre o que se tem de bom potencia o bem-estar.	Recognizing and reflecting about the good things we have promotes well-being.	**.729**	.040	.002

Note. Item 3 and 12 are reversed.

The 20 items that compose the final version: items 3,4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 18, 19, 20, 22,23, 24, 25,27, 28, 29, 30 (literacy on *characteristics and promoters of mental health and well-being*).

Confirmatory Factor Analysis (CFA)

A CFA was conducted to confirm the one factor solution suggested by the fctor loading of the final solution of the EFA. Results suggest a poor model fit (χ^2 (230) = 835.65; $p < .001$; CFI = .88; TLI = .87; RMSEA = .07, $p < .001$). Regarding local fit, results showed that item 3 did not reach acceptable value of standardized regression weights (item 3 $\lambda = .01$; $R^2 = .00$), thus we conducted the analysis again without item 3. The model improved and presented acceptable model fit (χ^2 (209) = 668.92; $p < .001$; CFI = .91; TLI = .90; RMSEA = .06, $p < .001$), although standarized regressions weights shuggested local fit problems of item 12 ($\lambda = -.25$; $R^2 = .06$). Again, we have conducted the analysis without item 12. Model fit did not change considerably (χ^2 (189) = 630.20; $p < .001$; CFI = .91; TLI = .90; RMSEA = .07, $p < .001$), although item 24 presented problems of local fit ($\lambda = .45$; $R^2 = .20$). We eliminated item 24, repated the analysis, and results showed an improved model fit (χ^2 (170) = 492.42; $p < .001$; CFI = .93; TLI = .92; RMSEA = .06, $p = .006$). Item 22 presented local fit issues ($\lambda = .47$; $R^2 = .22$), thus we eliminated this item and repeatd the analysis. Result showed a good model fit (χ^2 (152) = 469.93; $p < .001$; CFI = .93; TLI = .92; RMSEA = .06, $p = .001$), with acceptable values of local fit (i.e., $\lambda > .50$; $R^2 = .25$).

These results corroborate a one-factor solution composed on 19 items (items 4, 5, 6, 8, 9, 10, 11, 13, 14, 15, 18, 19, 20, 23, 25, 27, 28, 29, 30).

Internal consistency

To assess reliability, we have calculated Cronbach alphas and results suggest the scale presents good internal consistency $\alpha = .93$ (Table 3).

TABLE 3.

Means (*M*), Standard Deviations (*SD*), Corrected item-total correlation (*r*), Cronbach´s alpha (α) if item deleted and Cronbach´s alpha (α) of each subscale (N = 549)

	M	*SD*	Corrected item-total *r*	α if item deleted	α
Positive Mental Health Literacy Questionnaire					**.93**
Item4	4.02	.698	.604	.927	
Item5	4.40	.673	.631	.926	
Item6	4.11	.761	.550	.928	
Item8	4.38	.661	.629	.926	
Item9	4.36	.649	.698	.925	
Item10	4.18	.674	.620	.927	
Item11	4.07	.779	.566	.928	
Item13	4.09	.722	.564	.928	
Item14	3.90	.875	.546	.929	
Item15	3.94	.774	.530	.929	
Item18	4.12	.770	.576	.928	
Item19	4.17	.700	.616	.927	
Item20	4.23	.670	.756	.924	
Item23	4.23	.688	.706	.925	
Item25	4.06	.711	.642	.926	
Item27	4.14	.688	.726	.924	
Item28	4.22	.825	.512	.929	
Item29	4.08	.719	.697	.925	
Item30	4.16	.734	.690	.925	

In parallel, results from corrected item-total correlations show that all items present an item-total correlation $r > .30$, and that Cronbach Alphas´ if item deleted reflect the contribution of all items for the internal consistency of the instrument.

Construct validity

Before conducting correlation analysis, a *t*-test difference analysis was conducted to test whether difference in PosMHLit were found between those whose data were collected before (n = 205) versus after (n = 334) the COVID-19 pandemic. Results found statistical significant differences in positive mental health literacy on participants whose data was collected before the COVID-19 pandemia (M= 79.99; SD= 7.67), who reported higher PosMHLit than the post-COVID-19 participants (M = 78.16; SD= 9.96; *t*= -2.246; p = .000) (t[.537] = , *p* < .001).

Given that differences in PosMHLit were found between pre- versus post-COVID-19 participants, we have conducted partial Pearsons´ Correlations to examine the relation between PosMHLit and close constructs while controlling for time of data collection (pre-/post-COVID-19). Intercorrelations can be found in Table 4.

TABLE 4.

Mean, Standard Deviation and Cronbach alpha of all variables, and Pearson´s partial intercorrelations[1] between all variables in study (N = 539)

Variable	M	SD	α	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. PosMHLq	78.86	9.20	.93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2. MHLq-FAS	40.53	4.54	.76	.34***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3. MHLq-KS	61.68	6.22	.69	.59***	.29***	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.MHLq-SH	32.88	3.62	.69	.53***	.47***	.42***	-	-	-	-	-	-	-	-	-	-	-	-	-
5.MHC-SF-Em	10.47	3.39	.89	.13**	.28***	-.07ns	.22***	-	-	-	-	-	-	-	-	-	-	-	-
6.MHC-SF-So	11.89	6.08	.83	.08ns	.33***	-.12*	.20***	.64***	-	-	-	-	-	-	-	-	-	-	-
7.MHC-SF-Psy	17.98	7.12	.85	.17***	.33***	-.08ns	.22***	.71***	.70***	-	-	-	-	-	-	-	-	-	-
8.BSI-SOM	6.72	6.41	.90	-.10*	-.10*	.00ns	-.13**	-.18***	-.06ns	-.20***	-	-	-	-	-	-	-	-	-
9.BSI-OB	9.64	5.50	.87	-.06*	-.12*	.07ns	-.11*	-.20***	-.13*	-.22***	.70***	-	-	-	-	-	-	-	-
10.BSI-SI	5.24	4.13	.84	-.07**	-.15**	.01ns	-.10*	-.23***	-.17***	-.24***	.67***	.75***	-	-	-	-	-	-	-
8.BSI-DEP	8.52	6.31	.83	-.14***	-.17***	-.02ns	-.17***	-.26***	-.18***	-.27***	.68***	.78***	.84***	-	-	-			-
9.BSI-ANX	1.23	.94	.77	-.09*	-.12*	.00ns	-.13*	-.20***	-.08ns	-.21***	.84***	.76***	.74***	.79***	-	-	-	-	-
10.BSI-H	6.70	4.81	.81	-.07ns	-.12**	-.01ns	-.10*	-.15**	-.06ns	-.15*	.70***	.68***	.68***	.72***	.76***	-	-	-	
11.BSI-PA	4.26	4.52	.87	-.034ns	-.07ns	-.00ns	-.07ns	-.14**	-.04ns	-.17**	.75***	.66***	.69***	.65***	.78***	.62***			-
12.BSI-PI	6.76	4.42	.82	-.07ns	-.11*	-.03ns	-.05ns	-.17***	-.12*	-.21***	.66***	.68***	.79***	.76***	.74***	.69***	.67***	-	-
13.BSI-P	5.86	4.67	.85	-.07ns	-.15**	.02ns	-.15**	-.22***	-.15***	-.23***	.72***	.76***	.83***	.83***	.80***	.75***	.70***	.80***	-

Note. * p < 0.05, ** p < 0.01, *** p< 0.001, ns = non-significant

PosMHLq = Positive Mental Health Literacy Questionnaire – Characteristics and Promoters; MHLq = Mental Health Literacy questionnaire (KS = Knowledge and stereotypes; FAS: First aid skills and help seeking; SH:Self-help strategies); MHC-SF = Mental Health Continum – Short Form (Em = Emotional well-being; So = Social well-being; Psy = Psychological well-being); BSI = Brief Symptom Inventory (S = somatization; OC = Obsession-Compulsion; IS = Interpersonal Sensitivity; DEP = Depression; ANX = Anxiety; H = Hostility; PA = Phobic Anxiety; PI = Paranoid Ideation; P = Psychoticism).

[1] Pearson´s particial intercorrelations were conducted while controlling for the COVID-19-related time of data collection: pre-COVID-19 (n = 205), post-COVID-19 (n = 334).

Concerning literacy about mental illness, the closest construct, PosMHLit was positively correlated with the three subscales of MHLq, respectively, First aid skills and help seeking, Knowledge and stereotypes, Self-help strategies. On the other side, from mental illness indicators captured by BSI (Canavarro, 1999), only depression, anxiety and somatization were negatively and significantly correlated with positive mental health literacy. In the context of mental well-being, subjective well-being and psychological well-being were positively related with PosMHLit, while social well-being did not.

Gender Differences in PosMHLit

Concerning gender, girls (M = 80.32; SD = 9.29) reported higher PosMHLit than boys (M = 76.91; SD = 8.72; t[.536] = , $p < .001$). On the other hand, when evaluating differences in flourishing, flourishers (M= 78,97; SD= 8,81) and non-flourishers (M = 79.20; SD = 8.59) did not differ in terms of PosMHLit (t[417.847]) = .281, p = .780).

Discussion

Adolescence is a crucial developmental moment to build psychological resources and to protect mental health. MHL entails the skills necessary in order to manage mental health crisis and promote mental well-being. Nevertheless, much more work has been done in the field of literacy about mental illness than in the promotion of good mental health. This pathogenic tendency is present in most MHL instruments and, although recent measures contemplate items concerning positive mental health (BjØrnsen et al., 2017; Chao et al., 2020; Mcluckie et al. 2014), none targets two fundamental aspects in the comprehension of what is mental health: the distinction between mental health and mental illness, and the importance of mental well-being promoting factors for mental health. We aimed to overcome this significant research gap by developing a new measure of mental health literacy. The PosMHLit was developed with the purpose of it being applicable both adolescents and adults.

We evaluated the factor structure of the measure through Exploratory Factor Analysis and Parallel Analysis, but these procedures did not support our initial six factor structure theoretically outlined, they rather presented a unidimensional solution composed of 23 items. The items that compose the PosMHLit for adolescents are consistent with the adults´ version (Maia de Carvalho et al., 2022), these reflect the definition of mental health

and the promoters and protectors of positive mental health. Other instrument, the MHPK-10 (BjØrnsen et al., 2017), measures Positive Mental Health Literacy in adolescents in one factor. Internal Consistency examined by Cronbach Alphas´, item-total correlation and item deletion procedures suggested the PosMHLit measure presents adequate reliability.

To evaluate construct validity Pearson's correlations were performed. Scores on PosMHLit were significantly correlated with literacy about mental illness, although the PosMHLit and MHLq dimensions did not overlap. This result corroborates the dual nature of mental health and reinforces the need of complementary instruments in the measurement of literacy about mental pathology and mental well-being.

In line with past studies, including the validation of PosMHLit for adults, PosMHLit is significantly correlated in the expected direction with both mental well-being (BjØrnsen et al., 2017, 2019; Chrisholm et al., 2016; Chao et al., 2020) and depression (Lam, 2014), anxiety (Chao et al., 2020), and somatization. Surprisingly, much of the dimensions of BSI were not correlated with PosMHLit, but had significant associations with literacy about mental illness. This finding seems to suggest the dual pathology and mental health nature of MHL. It was expected that positive MHL was more significantly correlated to positive mental health and mental illness, nonetheless there can be differences in samples of adolescents and adults, clinical samples and community samples, countries in which prevention is not present since the early years. Future studies should better test these possibilities using distintc samples from each group. It is also possible that those equiped with litercy about mental illness feel more confident and well to face their challenges. At this stage, hormonal imbalance and social changes enact several psychological symptoms of distress. Literacy about mental illness might be seen as more needed to mental well-being than positive MHL although research suggests mental wellness prevents mental illness.

Corroborating the existing literature (Campos et al., 2016; Dias et al., 2018) girls reported more MHL than boys. This result can be interpreted in light of gender differences in socialization, as girls are more socialized into understanding and taking care of emotional themes, as well as to mental health differences. Women tend to have higher levels of psychopathology; therefore, they may search for more mental health information (Van Droogenbroeck, 2018).

Considering those who would benefit from mental well-being improvement (for example, those living with mental illness but still being able to feel mental well-being, and those with low rates of mental well-being), positive mental health literacy evaluation is considered the first line procedure. An important note, nevertheless, is that flourishers and

non flourishers are not different in terms of PosMHLit. This suggests that although MHL may benefit mental well-being, it does not count as a major factor to distinguish those who flourish and those who do not. Previous studies have suggested other factors, such as personality, positive life events, and social support, as contributors for flourishing, whereas socioeconomic factors such as education are reported to have less predictive effect (Schotanus-Dijkstra et al., 2015).

The present study holds considerable limitations. The psychometric study of PosMHLit did not hold test-retest procedures nor multi-group invariance. Other studies could overcome this gap examining temporal stability and different sample behavior. As our sample was extracted from the general Portuguese population, therefore we suggest future researchers to replicate this work with clinical and multi-cultural samples. Also, given the limitations of having a relatively small sample to conduct two separate analyses (which would implicate a reduction in statistical power, as the PosMHLit was initially composed of 30 items), we have conducted both the EFA and the CFA using the same sample. Future studies should replicate this study and conduct both analyses in independent larger samples. Additioally, although we have tested differeces in PosMHLit between genders and between groups accordig to levels of flourishing, we did could coduct a multigroup confirmatory factor analysis that would test meaurement invariance between these groups due to sample size and power concerns. Future studies should conduct these analyses to definitively conclude whether the same factor structure of the PosMHLit can be applied I different groups of adolecents.

Even though there were some fragilities in the study, some aspects may give strength to our findings. The research design respected recommend suggestions for psychometric studies, such as the use of a mixed methodology (using content validation with clinicans and academic experts and empirical validation with a community sample, different guidelines suggested were integrated Wei et al., 2016), the sample size and the use of valid and reliable instruments. Additionally, we explored the relationship between PosMHLit and literacy about mental illness, mental well-being, and psychopathology, to examine construct validity, a much-needed output in adolescent studies.

These results suggest preliminary evidence of the validity and reliability of the instrument. The PosMHLit seems to be a valid and reliable MHL measure that covers a more recent element of MHL, good mental health protectors/promoters and the dual continua model. More evidence is needed through replication studies. For example, future studies should conduct measurement invariance research of PosMHLit to test whether the factor

structure is invariant in different developmental stages and/or age clusters, thus contributing to new avenues of research on mental health litracy across the lide span.

Adolescents may benefit from positive MHL interventions when having low MHL or low mental well-being, given that positive MHL may enhance mental health, help seeking and self-care and mental well-beng prevents the risk of mental disorder (BjØrnsen, 2017, 2019; Chao et al., 2020). The PosMHLit can be used to evaluate positive MHL at schools or health settings and further recommend at risk adoelscents to MHL interventions. The use of this questionnaire can help national surveys to assess adolescents′ knowledge about well-being.

We recommend researchers interested in promoting mental well-being besides preventing mental illness to evaluate not only literacy about mental illness but also to track and teach literacy about mental well-being. If the PosMHLit is used in complement with a pathogenic MHL instrument, effects of both elements can be controlled and explored. Tracking students with lower PosMHLit allows educators and clinicians to recommend health education interventions such as MHL interventions and positive psychology interventions.

More studies are needed to consolidate the psychometric quality of the PosMHLit, although the findings presented suggest this measure is solid and can be used to examine MHL in adolescents.

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STUDY IV - PSYCHOMETRIC PROPERTIES OF THE BRIEF COPE IN A SAMPLE OF PORTUGUESE ADOLESCENTS

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Resumo:

Enquadramento: O Brief Cope está validado para adultos portugueses, mas não para adolescentes. O presente estudo teve como objetivo superar essa lacuna.

Método: Foi recolhida uma amostra de 534 adolescentes portugueses e dividida ao meio para explorar a estrutura fatorial do instrumento. Para tanto foi calculada uma Análise Fatorial Exploratória (AFE) com Análise de Componentes Principais no SPSS e Análise Fatorial Confirmatória (AFC) em Amos. A validade de construto foi explorada com análise correlacional com variáveis relevantes como saúde mental, autocompaixão e esperança. A consistência interna foi explorada com Alpha Cronbach.

Resultados: Embora a AFE com rotação oblíqua direta, forçando os 14 fatores, encontrou KMO = .805, e todas as comunidades estavam acima de .65, não conseguiu reter 14 fatores. A AFC corroborou a estrutura fatorial original de 14 fatores (28 itens). O ajuste local aceitável (λ = > .50; R^2 > 25) e o ajuste aceitável do modelo (χ^2/df = 1.80; TLI= .87; CFI = .91; RMSEA= .06, p= .113) foram alcançados. Os níveis de consistência interna variaram entre α = .50 (Uso de Suporte Instrumental) e α = .79 (Uso de Substâncias).

Conclusão: Este estudo suporta a validade, fiabilidade e utilidade do Brief Cope para adolescentes portugueses, embora mais investigação deva examinar as propriedades psicométricas deste instrumento.

Palavras-chave: Enfrentamento; adolescentes; Brief Cope; saúde mental; adaptação; estratégias; desenvolvimento;

Abstract:

Background: The Brief Cope is validated for Portuguese adults but not for adolescents. The present study aimed to overcome this gap.

Method: A sample of 534 portuguese adolescents was collected and split in half to explore the factor structure of the instrument. To do so an Exploratory Factor Analysis (EFA) with Principal Component Analysis was calculated in SPSS and Confirmatory Factor Analysis (CFA) in Amos. Construct validity was explored with correlational analysis with relevant variables such as mental health, self-compassion and hope. Internal consistency was explored with Alpha Cronbach.

Results: Although EFA with direct oblimin rotation, forcing the 14 factors, found KMO = .80, and all communalities were above .65, it failed to retain 14 factors. CFA corroborated the original 14- factor (28 items) factor structure. Acceptable local fit (λ = >.50; R^2 > .25) and acceptable model fit ($\chi 2/df$ = 1.80; TLI= .87; CFI

= .91; RMSEA = .06, p = .113) were reached. The internal consistency levels ranged between α = .50 (Use of Instrumental Support) and α = .79 (Substance Use).

Conclusion: This study found evidence for the validity, reliability and usefulness of Brief Cope for Portuguese adolescents, although further research must examine the psychometric properties of this instrument.

Key-words: Coping; adolescents; Brief Cope; mental health; adaptation; strategies; development;

Coping research stems from the observation that individuals can actively manage stressors and life transactions with different results for their mental health, either preventing trauma and mental illness or attaining mental well-being (Lazarus & Folkman, 1984). Therefore, a significant amount of solid research sustains psychological interventions that aim to build a healthy repertoire of coping strategies. Studies relate coping strategies to personality traits (Carver & Connor-Smith, 2010; Carver et al., 1989), mental well-being and physical well-being (Park & Adler, 2003; Tsenkova et al., 2008), less psychopathology (Karademas, 2007; Zhou et al., 2010), positive emotions (Brissette et al., 2002; Carver & Scheier, 2004; Zhou et al., 2010), life quality (Karekla & Panayiotou, 2011).

Coping can be divided into coping strategies (situational coping) or coping styles (dispositional coping), and has been considered to be adaptative/ non-adaptative depending on whether the coping strategies used benefit adaptation and mental health in the short/long term (Carver & Scheier, 2004). In order to evaluate both situational and dispositional coping, Carver et al., (1989) developed COPE, an instrument based on Lazarus and Folkman (1984) Transactional Model of Stress and Coping and Models of Emotion Regulation. Considering the fact that COPE was extense and had redundancy of items, Carver (1997) later adapted this instrument into a 28-item scale composed of 14 factors, each with 2 items. Subscales measure Humor, Using Emotional Support, Using Instrumental Support, Self-Distraction, Planning, Denial, Religion, Behavioral Disengagement, Active Coping, Self-Blame, Positive Reframing, Substance Use, Venting and Acceptance. The first question of the instrument has the purpose of emotional arousal has asks subjects to recall a recent problem. After that, instructions follow for the items that are part of the questionnaire. Subjects are asked to rank each item into 4 options "0 = I haven't been doing this at all (situational coping)/ I usually don´t do this at all (dispositional coping)"; " 1 = I've been doing this a little bit; I usually do this a little bit "; " 2 = I've been doing this a medium amount; I usually do this a medium amount"; "3 = I've been doing this a lot; I usually do this a lot ". No overall score is extracted from this instrument only total subscale scores.

The Brief-Cope is now available in several countries, although mostly adapted for clinical samples of adults. However, structure varies across studies, and some authors report

some psychometric limitations (Nunes, 2021). Although coping is particularly relevant a personal resource for emotion regulation and problem solving in adolescence, the Brief-Cope is not adapted to the Portuguese adolescent population. In this study we aimed to overcome this gap adapting the Brief-Cope in a sample of Portuguese adolescents from the general population.

Method

Participants

The current sample is a community sample composed of 504 adolescents, whose data was collected both online and through pencil-and-paper. In this sample, 56% were woman and 44% men. Age ranged from 15 to 18 years old and the mean age was *M*= 16.50 (*SD*= 1.23). All the participants had Portuguese nationality In this sample, 55.2% of participants have medium socioeconomic status , 27.2% low socioeconomic status, and 17.7% high socioeconomic status. The current study did not established exclusion criteria. Inclusion criteria were a) age between 14 and 23 years of age, and b) portuguese nationality.

Measures

Demographics: we collected data regarding age, socioeconomic status and gender.

Brief Cope (Carver, 1997; Portuguese version for adults - Pais-Ribeiro & Rodrigues, 2004): The first question of the instrument has the purpose of emotional arousal has asks subjects to recall a recent problem. After that, instructions follow for the items that are part of the questionnaire. Subjects are asked to rank each item into 4 options "1 = I haven't been doing this at all (situational coping)/ I usually don´t do this at all (dispositional coping)"; " 1 = I've been doing this a little bit; I usually do this a little bit "; " 2 = I've been doing this a medium amount; I usually do this a medium amount"; "4 = I've been doing this a lot; I usually do this a lot ". Then 28 items assess coping strategies aggregated in Humor, Using Emotional Support, Using Instrumental Support, Self-Distraction, Planning, Denial, Religion, Behavioral Disengagement, Active Coping, Self-Blame, Positive Reframing, Substance Use, Venting and Acceptance. No overall score is extracted from this instrument only total subscale scores. To adapt the Brief Cope for adolescents we used the Portuguese version for adults from Pais-Ribeiro and Tavares (2004). For the purpose of this study dispositional coping was assessed.

Brief Symptom Inventory (BSI; Derogatis, 1982/1993; Portuguese version Canavarro, 1999): The BSI used 53 items ranked in a 6-point Likert type scale from 0 - Not at all to 4 – Extremely to evaluate psychopathology. Nine dimensions compose psychopathology subscales: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism. For the purpose of this study we used Total Score of Positive Symptoms. The reliability of BSI ranges from α = .62 to α = .80 (Canavarro, 1999).

Mental Health Continuum Short-Form (MHC-SF, Keyes, 2005; 2007; Portuguese version Matos et al., 2010): The MHC-SF evaluates positive mental health or mental well-being in three domains – emotional well-being, psychological well-being and social well-being in 14 items ranked from 0 (Never) to 6 (Always). Internal consistency ranges from α = .80 to α = .85 (Matos et al., 2010).

Self-compassion scale – adolescents version (SCS) (Neff, 2003; Portuguese version Cunha et al., 2015) – it is a 6 dimensional scale composed of 26 items scored in a 5-point Likert-type scale. Self-compassion is divided into self-kindness, mindfulness and common humanity and reversed factors – isolation, overidentification and self-judgement. Each scale functions independently or within a total score. The Portuguese version has good reliability α from α = .70 to α = .79 (Cunha et al., 2015).

Hope-trait scale (HTS) (Snyder et al., 1991; Portuguese version Marques et al., 2014) – this instrument is a self-report measure based on Hope theory and measures hope as a trait using 2 factors (Agency and Pathways) and a total score. The scale is composed of 12 items ranked in 8 options. The reliability of the scale ranges from α = .79 to α = .86 (Marques et al., 2014).

Procedure

This study followed a cross-sectional design, and is part of a larger study that aims to study explore the role of mental health literacy in promoting mental health. The Ethics Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra (May, 2018) and the Ministry of Portuguese Education - Direction of general Education (RN: 0668400001) approved this study. Ethical procedures in data collection respected the collection of informed consent from all participants and their legal tutors (generally their parents). Participants were informed that all data was confidential, anonymous and that they could interrupt their participation any time without any

consequence. All data collected is stored anonymously at an institutional data base and professional pen drives accessed only by the researchers team.

Data collection took place during March 2019 and June 2021, after school directors approved the study and legal tutors gave their informed consent. Participants were assessed through paper-and-pencil and online (using the LimeSurvey platform) after being contacted at nationwide high-schools and professional schools. Four students doing their masters in psychology (Psychology students) and trained in psychological evaluation collected the data.

Data analyses

The data was analyzed using SPSS Statistics Version 23.0 and AMOS 22.00 (IBM corp., 2011) software. Preliminary data analysis (Skweness and Kurtosis, Multicollinearity, Mahalanobis Distance) were performed to examine the adequacy of data.

In order to explore Brief Cope factor structure we used Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The Maximum Likelihood estimation method guided the CFA. To do so, the sample was randomly split by in half using SPSS software.

Internal Consistency was then measured using Alpha Cronbach calculation. Finally, we assessed convergent validity with Pearsons´ Correlations between the Brief Cope and related constructs such as mental well-being, psychopathology, self-compassion and hope.

Results

Exploratory Factor Analysis (EFA)

In the first step, we conducted EFA using Principal Component Analysis (PCA) with Direct Oblimin Rotation, in half of the sample (N = 248). The Keyser Meyer-Olkin (KMO) criteria values suggested that the data was adequate [KMO = .80; χ^2 (378) = 2914.813; $p <$ .001]. Eigenvalues, nevertheless, did not corroborate the original 14-factor structure of Brief Cope. Rather, 22.04% of the variance was explained by a solution of 5 factors, with items exhibiting adequate communalities (> .30). In order to test the original structure, we forced the model to test a 14-factor structure. The eigenvalues suggested that only 6 factors would be retained (59.62%). When looking into the loadings of items, the matrix showed that two

factors were clearly identified (with 25 items), but the remaining factors presented either one or no items loading in it.

---------- Insert Table 1----------

Given that the EFA failed to corroborate the original 14-factor structure, a CFA was conducted (*N*= 256).

Confirmatory Factor Analysis

Results suggested the original 14-factor structure presented adequate model fit. The first model replicated the original 14- factor (28 items) factor structure with acceptable local fitness (λ = >. 50; R^2 > 25), and acceptable model fit ($\chi 2/df$ = 1.94; TLI = .85; CFI = .90; RMSEA = .06, p = .113) (Figure 1). Nevertheless, modification indexes suggested correlating errors of items 14 and 28, and 4 and 24. An improved model fit ($\chi 2/df$ = 1.80; TLI= .87; CFI = .91; RMSEA = .06, p = .113) was found.

---------- Insert Figure 1 ----------

Internal Consistency

To assess reliability, Alpha Cronbach was calculated, the *Use of Instrumental Support* subscale had the lowest consistency value (a = .51), and the *Substance Use* subscale the highest (a = .80). Overall, all factors presented acceptable internal consistency.

---------- Insert Table 2 ----------

Construct Validity

Finally, convergent and divergent construct validity was examined through Pearson Coefficients with related constructs, such as mental well-being, psychopathology, self-compassion and the scores of Pathways and Agency subscales. All constructs were significantly correlated in the expected directions with most Coping subscales. Only Denial and Active Coping were significantly related with psychopathology.

Venting was not correlated with any other construct.

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Discussion

Although the use of coping is of most relevance in the context of adolescent development, adaptation and mental health, the Brief Cope, a widely used instrument to measure situational and dispositional coping, is not validated to adolescents in most countries, including in Portugal.

This study is the first to contribute to fill the gap in the knowledge on the psychometric structure of the portuguese version of the Brief Cope for adolescents, using a Portuguese community sample. Our findings from EFA did not support the 14-factor model. Nonetheless, results from the CFA showed an appropriate model fit for the proposed 14-factor structure. Additionally, the Brief Cope presented reliability, convergent validity with related constructs. These results are consistent with other findings from Portuguese older samples (Brasileiro et al., 2016; Nunes et al., 2021; Oldberg, 2021; Pais-Ribeiro & Rodrigues, 2004).

As expected, most subscales were significantly correlated with mental well-being, hope and self-compassion which corroborates the importance of adequate coping strategies for mental well-being promotion. In this study, only Denial and Active Coping were related to psychopathological symptoms. This finding raises the question of whether coping has a stronger effect in mental well-being promotion or in mental illness prevention. Nevertheless, it would be important to explore this result replicating the study with larger samples, especially clinical samples, and with longitudinal designs that allowed for a more accurate study of the temporal relationship between different dimensions of coping and mental health. The limitations of this study should be acknowledged: 1) we did not measure temporal stability, 2) our instruments were mainly self-report measures, and 3) the reliability of some subscales were low. Future studies should replicate these findings and overcome these limitations with larger samples and using different moments for temporal stability assessment.

The Portuguese version of Brief Cope is a valid and reliable measure to assess the use of coping as style or strategy in adolescence. This tool can be used with adolescents for prevention or intervention purpose, or for research. However, researchers should carefully examine the psychometric properties of the instrument when using it with not yet studied samples.

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TABLES

Table 1

Table 1. Exploratory Factor Analysis – Complete item pool and factor loadings (N= 248)

Items		Factors					
English version (Carver, 1997 – items written for situational coping)	Portuguese version Adapted from Pais Ribeiro & Rodrigues (2004) items written for dispositional coping	1	2	3	4	5	6
1. I've been trying to get advice or help from other people about what to do.	1.Peço conselhos e ajuda a outras pessoas para enfrentar melhor a situação.	.63					
2. I've been making jokes about it.	2.Enfrento a situação levando-a para a brincadeira.					.53	
3. I've been turning to work or other activities to take my mind off things.	3.Refugio-me noutras atividades para me abstrair da situação.						.52
4. I've been trying to come up with a strategy about what to do.	4.Tento encontrar uma estratégia que me ajude no que tenho que fazer.	.55					
5. I've been saying to myself "this isn't real."	5.Digo a mim próprio(a): "Isto não é verdade".		.54				
6. I've been trying to find comfort in my religion or spiritual beliefs.	6.Tento encontrar conforto na minha religião ou crença espiritual.	.41					
7. I've been getting emotional support from others.	7.Procuro apoio emocional de alguém (família, amigos).	.59					
8. I've been giving up the attempt to cope.	8.Desisto de me esforçar para obter o que quero.		.76				
9. I've been concentrating my efforts on doing something about the situation I'm in.	9.Concentro os meus esforços para fazer alguma coisa que me permita enfrentar a situação.	.64					
10. I've been criticizing myself.	10.Faço críticas a mim próprio(a).				.56		
11. I've been trying to see it in a different light, to make it seem more positive.	11.Tento analisar a situação de maneira diferente, de maneira a torná-la mais positiva.	.53					
12. I've been using alcohol or other drugs to make myself feel better.	12.Refugio-me no álcool ou noutras drogas (comprimidos etc) para me sentir melhor.		.69				
13. I've been expressing my negative feelings.	13.Fico aborrecido(a) e expresso os meus sentimentos (emoções).	.50					
14. I've been accepting the reality of the fact that it has happened.	14.Tento aceitar as coisas tal como elas estão a acontecer.	.51					
15. I've been looking for something good in what is happening.	15.Procuro algo positivo em tudo o que está a acontecer.	.64					

16. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.	16.Faço coisas para pensar menos na situação, tal como ir ao cinema, ver TV, ler, sonhar, ou ir às compras.	.45	
17. I've been expressing my negative feelings.	17.Sinto e expresso os meus sentimentos (emoções) de aborrecimento.	.55	
18. I've been learning to live with it.	18.Tento aprender a viver com a situação.	.63	
19. I've been getting comfort and understanding from someone.	19.Procuro o conforto e compreensão de alguém.	.58	
20. I've been using alcohol or other drugs to help me get through it.	20.Uso álcool ou outras drogas (comprimidos) para me ajudar a ultrapassar os problemas.		.77
21. I've been giving up trying to deal with it.	21.Simplesmente desisto de tentar atingir o meu objetivo.		.77
22. I've been refusing to believe that it has happened.	22.Recuso-me a acreditar que isto esteja a acontecer desta forma comigo.		.66
23. I've been thinking hard about what steps to take.	23.Penso muito sobre a melhor forma de lidar com a situação.	.52	
24. I've been trying to get advice or help from other people about what to do.	24.Peço conselhos e ajuda a pessoas que passaram pelo mesmo.	.63	
25. I've been praying or meditating.	25.Costumo rezar ou meditar.	.39	
26. I've been blaming myself for things that happened.	26.Costumo culpar-me pelo que está a acontecer.		.53
27. I've been making fun of the situation.	27.Costumo enfrentar as situações com sentido de humor.	.48	
28. I've been taking action to try to make the situation better.	28.Costumo tomar medidas para tentar melhorar a minha situação (desempenho).	.67	

Figure 1. Factorial Structure of Brief Cope

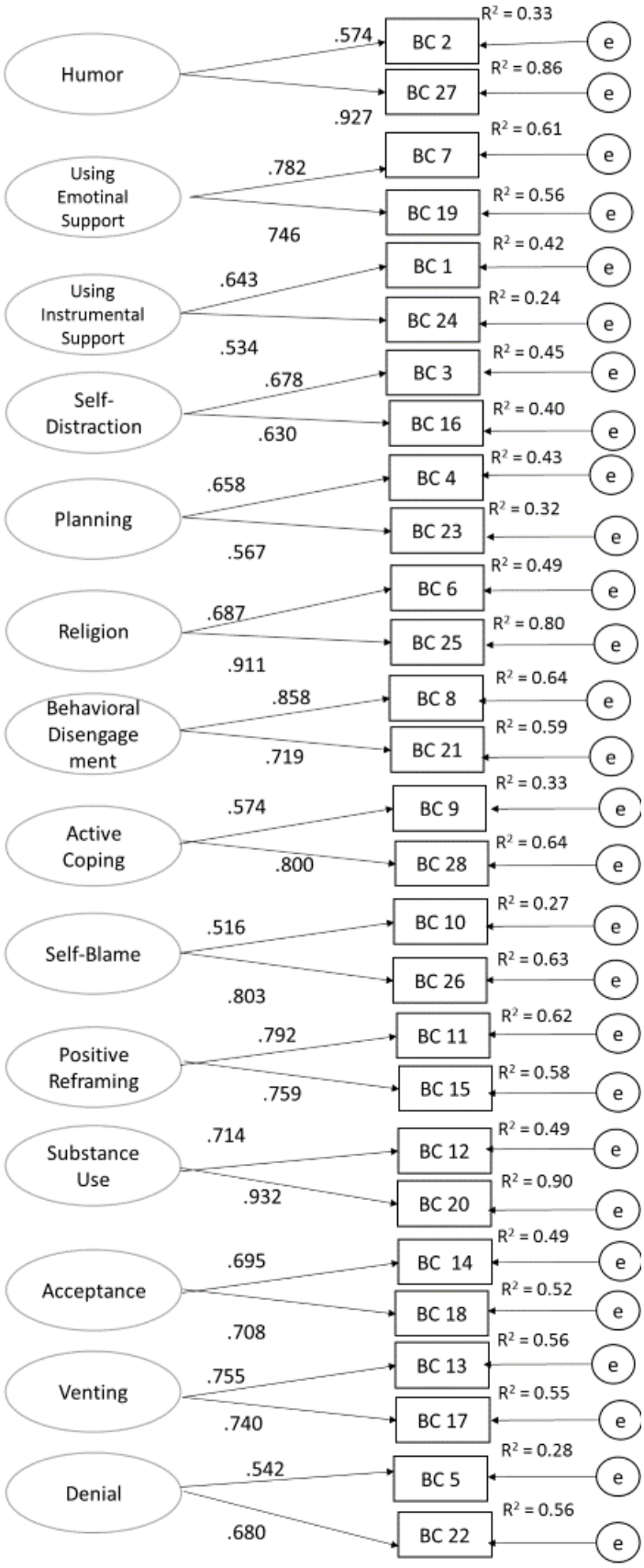

Table 2

Table 2. Means (*M*), Standard-Deviation (*SD*) and Alpha Cronbach (*a*) for each subscale (N= 256)

Variable	*M*	*SD*	*a*
1. Humor	2.64	1.62	.69
2. Using Emotional Support	3.21	2.67	.74
3. Using Instrumental Support	2.86	1.99	.51
4. Self-Distraction	3.31	2.21	.60
5. Planning	3.61	1.97	.54
6. Denial	1.89	2.14	.56
7. Religion	1.56	3.08	.77
8. Behavioral Disengagement	1.60	2.27	.76
9. Active Coping	3.16	2.08	.63
10. Self-Blame	3.00	2.59	.59
11. Positive Reframing	3.02	2.61	.75
12. Substance Use	.50	2.05	.80
13. Venting	2.57	2.30	.72
14. Acceptance	3.37	2.16	.67

Table 3

Table 3. Pearson correlations between all variables (N= 256)

Variable		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1.	Humor	-	.06	.05	.28**	.15*	.05	-.03	.09	.22**	.12	.33**	.15*	.07	.18**	.10	-.05	.19*	.25**	.15
2.	Using Emotional Support		-	.57**	.26**	.41**	.14**	.26**	-.10	.42**	.12*	.30**	-.05	.41**	.28**	.29**	-.10	.37**	.32**	.11
3.	Using Instrumental Support			-	.18**	.34**	.13*	.24**	-.03	.34**	.06	.30**	.06	.36**	.25**	.21**	-.06	.34**	.28**	.14
4.	Self-Distraction				-	.44**	.21**	.11	.01	.34**	.17**	.41**	.00	.21**	.29**	.06	.08	.39**	.38**	.07
5.	Planning					-	.07	.17**	-.24**	.63**	.00	.48**	-.09	.25**	.45**	.29**	-.06	.51**	.44**	.29**
6.	Denial						-	.21**	.42**	.03	.25**	.00	.27**	.20**	.01	-.14**	.21**	.02	.01	-.17*
7.	Religion							-	.12*	.20**	.16**	.17**	.26**	.14*	.05	.08	-.01	.05	.06	.01
8.	Behavioral Disengagement								-	-.23**	.38**	-.20**	.45**	.10	-.18**	-.30**	.09	.45**	.32**	-.34**
9.	Active Coping									-	.01	.53**	.01	.23**	.45**	.35**	-.00	.46**	.50**	.23**
10.	Self-Blame										-	-.12*	.23**	.22**	.02	-.36**	.15*	.27**	.16*	-.63**
11.	Positive Reframing											-	.00	.09	.46**	.43**	-.02	.49**	.47**	.48**
12.	Substance Use												-	.02	-.03	-.15*	.06	.18*	.07	-.09
13.	Venting													-	.24**	.12	.00	.13	.04	-.01
14.	Acceptance														-	.27**	-.00	.46**	.41**	.28**
15.	Mental Well-Being (MHC-SF)															-	-.10	.55**	.34**	.64**
16.	Psychopathology (BSI)																-	-.05	-.06	-.04
17.	Hope Pathways (HTS)																	-	.73**	.41**
18.	Hope Agency (HTS)																		-	.32**
19.	Self-Compassion (SCS)																			-

Note . *$p < 0.05$; ** $p < 0.01$

STUDY V - MENTAL HEALTH LITERACY AND COPING STRATEGIES ACROSS THE LIFE-SPAN

Maia de Carvalho, M., & Vale-Dias, M.L. (2021). Mental Health Literacy and Coping Strategies across the Life-Span, *International Journal of Developmental and Educational Psychology INFAD Revista de Psicología*, *2* (2), 281-290.

Abstract

Introduction: Mental health literacy is associated with better mental health outcomes and believed to improve the way people cope with life challenges and manage mental health issues. Nevertheless, no study has yet empirically examined the relationships between mental health literacy and the use of coping strategies. **Aims:** This study aims to describe and compare the levels of mental health literacy (literacy about mental illness and literacy about positive mental health) and the use of coping (coping styles) in adolescents, young-adults and adults; to explore the relationship between coping and mental health literacy in each age group; to compare if patterns of significant correlations vary across groups. **Methods:** This is a cross-sectional / exploratory design study. We have collected online and through paper-pencil method three developmental samples: adolescents aged between 15-18 years old (N=240), young-adults aged between 19-36 (74) and adults aged between 37-75 (N=105). Measures used were: Positive Mental Health Questionnaire PosMHLitq (Maia de Carvalho et al., in preparation) to evaluate literacy about positive mental health; the Mental Health Literacy Questionnaire MHLq (Campos et al., 2016; Dias et al., 2018) and the Portuguese adaptation of the Brief Cope by Pais Ribeiro and Tavares (2004) to control coping styles. **Results:** Across the three developmental groups, most coping styles are associated with both literacy about mental illness and literacy about mental well-being, but with different patterns of correlation between coping/literacy about mental well-being/coping/literacy about mental illness and between groups. The Use of Emotional Support is the only coping style significantly associated with both mental health literacy about mental illness and literacy about mental well-being in adolescents, young-adults and adults. **Conclusions:** Future research should examine this findings with longitudinal design.

Keywords: Mental health literacy; Coping; Adolescents; Young-Adults; Adults;

Introduction

Mental health literacy (MHL) has been framed as a multi-construct theory that entails both literacy about mental illness and positive mental health (Spike & Hammer, 2019). The

original definition of MHL integrated seven skills: recognizing and labelling adequately mental disorders; processing valid mental health information; exhibiting knowledge about risk factors; beliefs and information about the origins of mental illness; types of self-help available; types of professional help available and adequate help seeking actions (Jorm et al., 1997). This first approach was more oriented towards the identification, prevention and management of psychopathology, reflecting the pathogenic paradigm of mental health in which it has emerged (Wu et al., 2021). A later definition was influenced by World Health Organization´ (WHO, 2005) salutogenic conceptions of mental health and solid knowledge about dual nature of mental health and mental illness (Iasiello et al., 2020) and integrates Kutcher´ et al., (2016): knowledge about how to obtain and maintain good mental health. This was coined as positive mental health literacy (BjØrnsen et al., 2017) and emphasizes the importance of mental well-being for good mental health and prosperous development.

MHL is currently considered as an empowering tool for communities, as it enables people to prevent stigma (Lally et al., 2013), manage mental suffering and promote mental well-being, help-seeking (BjØrnsen et al., 2017, 2019; Bonabi et al., 2016; Chao et al., 2020; Lam, 2014; Rüsch et al., 2014) and help-giving (Rossetto et al., 2016), through the life-span. In this sense, MHL interventions lead to increased knowledge about mental disorders and mental well-being so as to less stigma and better help-seeking outcomes (BjØrnsen, 2019; Lo et al., 2017; Lubman et al., 2020; Xu et al., 2018).

Mental health is considered by WHO (2014) as a cumulative developmental process where risk and protective factors play competing roles. In this process, MHL can work as a protective factor that build cognitive and behavioural resources to cope with risk factors. For example, adolescence is characterized by multiple transformations that result in an increased sense of identity but can also be accompanied by the first onset of mental disorder (WHO, 2021). Hormonal transformations, a new body image, academic performance and vocational options may intensify levels of stress. Also, affective relationships with peers, in some cases, involve resisting peer pressure and avoiding bullying. In this context, MHL can establish the bounderies between healthy and unhealthy coping, normal mental health flows and pathology, or languishing (BjØrnsen et al., 2017; Lam, 2014).

In a later life stage, emerging-adulthood, developmental tasks continue to demand appropriate knowledge and coping in order to protect mental well-being. Generally, young-adults face elevated academic pressure, seek romantic relationships, try to find a job and conquer monetary autonomy in order to conduct their life project (Hutteman et al., 2014). This normative tasks reflect higher levels of responsibility that individuals have to cope with,

while becoming adults. Considering this context, MHL interventions have been delivered in university settings to promote support and autonomy balance in mental health management (Lo et al., 2017).

Although in general this is a period of greater stability, normative adulthood also involves significant stressful moments for mental health, such as managing romantic relationship flows, dealing with losses, normative biological changes or diseases, taking care of family members and finances, while trying to find work-life balance (Hutteman et al., 2014). Considering that the prevalence of depression and anxiety disorders, at this age, is expressive (Westerhof & Keyes, 2010), having knowledge to identify mental health risks and protect mental well-being may lead to using appropriate coping strategies (Zhou et al., 2010).

Based on the Transactional Model of Stress and Coping by Lazarus and Folkman (1984), it is considered that subjects are not passive while experiencing moments of stress but cope to minimize the effects of the situation. Indeed, developmental tasks can be framed as transactional moments of stress, in which individuals cope with contextual demands in order to maintain their well-being and minimize damages, losses or threats to their mental health (WHO, 2014). Numerous studies associate coping strategies to better mental health outcomes (Karademas, 2007; Park & Adler, 2003; Zhou et al., 2010) and reinforce the role of coping in normative and non-normative development.

Although much is known about the prevalence of mental disorders and mental well-being across the life-span (Westerhof & Keyes, 2010), the same can not be stated about the prevalence of mental health literacy, coping strategies and their correlates in different age stages. Additionaly, despite MHL´s theoretical premise that better knowledge leads to better coping, no study has yet examined the relationship between MHL and coping or the mechanisms making interventions work. This study aimed to overcome this gap comparing adolescents, young-adults and adults mental health literacy and coping.

Aims

This study aims to a) describe and compare the levels of mental health literacy (literacy about mental illness and literacy about positive mental health) and the use of coping (coping styles) in adolescents, young-adults and adults; b) to explore the relationship between coping and mental health literacy in each age group; c) to compare if patterns of significant correlations vary across groups.

Sample

This study counted 419 participants from a community sample of the Portuguese population. Two samples were collected in order to assess different developmental groups: a sample of adolescents aged between 15-18 (N=240) and a sample of adults older than 18 (N=179), but the sample of adults was split in young-adults (N=74) for subjects aged between 19-36 years old and adults (N=105) for subjects older than 36. The minimum age in this study is 15 and the maximum age is 75.

In the adolescents sample 54.6% are woman and 45.4% are men, 24.1% are low socioeconomic status (SES), 57.5% are medium SES, 18.3% high SES, 68.3% were collected online (during pandemic) and 31.7% pencil-paper (before pandemic).

In the young-adult sample 75.7% are woman and 24.3% are men, 45.9% medium SES and 54.1% high SES. All subjects were assessed online, during pandemic.

In the adult sample 70.5% are woman and 29.5% are men, 1% low SES, 58.1% medium SES, 40% high SES. All subjects were assessed online, during pandemic.

Methods/Instruments

This is a cross-sectional / exploratory design study. We used quantitative measures with reliable measures validated for the Portuguese population.

Demographics: we assessed gender, SES, age.

Adolescents:

Mental Health Literacy Questionnaire (MHLq, Campos et al., 2016): This is a self-report measure that evaluated mental health literacy, that in the multi-construct theory of mental health literacy, reflects literacy about mental illness. The instrument is composed of 33 items ranked in 5-point Likert type options. The items are divided in three factors: First aid and help-seeking; Knowledge and stereotypes; Self-help strategies. A total rank can be extracted. In the original study internal consistency levels range from 0.72 to 0.79. Although 7 additional questions measure the recognition of 7 disorders in vignette model we did not used these part of the questionnaire.

Positive Mental Health Literacy Questionnaire (PosMHLq, Maia de Carvalho et al., in preparation): This questionnaire is self-rated and assessed literacy about mental well-being and positive mental health. It is used as a unidimensional measure of 20 items rated in a 5-point Likert type scale. In the original study internal consistency levels of .93 are adequate.

Brief Cope (Carver, 2007; portuguese adaptation for adolescents by Maia de Carvalho et al., in preparation): This is a self-report measure of 28 items divided in 14 subscales: Humor, Using Emotional Support, Using Instrumental Support, Venting, Behavioral Disengagement, Acceptance, Positive Reframing, Active Coping, Self-Blame, Religion, Substance Use, Planning, Denial, Self-Distraction. Items are rated in four options from "I haven´t been doing this at all" to "I have been doing this". The researcher can adapt items to measure situational or dispositional coping. In this study we evaluated dispositional coping. In the adaptation study for the Portuguese adolescent population internal consistency levels ranged from .50 to .79.

Young adults and Adults:

Mental Health Literacy Questionnaire (MHLq, Dias et al., 2018): This instrument is the adaptation of MHLq (Campos et al., 2016) for adults. The instrument is composed of 29 items ranked in 5-point Likert type options.

The items are divided in four factors: Knowledge mental health of problems; Erroneous beliefs and stereotypes; Help-seeking and first aid; self-help strategies. A total rank can also be extracted. In the original study internal consistency levels range from 0.72 to 0.84.

Positive Mental Health Literacy Questionnaire (PosMHLq, Maia de Carvalho et al., in preparation): This questionnaire so as its version for adolescents, mentioned above, is self rated. Answers are ranked in 5-point Likert type options. The adults version has two subscales: Characteristics and Promoters of Positive Mental Health (composed of 17 items) and Vulnerability Factors of Positive Mental Health (integrating 3 items). The Characteristics and Promoters of Positive Mental Health subscale should be used to calculate the total sum of the measure. In the original study internal consistency levels of .92 are adequate.

Brief Cope (Carver, 2007; portuguese adaptation for adults by Pais Ribeiro & Tavares, 2004): In the adaptation study for the adult Portuguese population internal consistency levels were adequate from .55 to .84.

Procedure

This study is part of a larger research about mental health and well-being. It was approved by the Ethics Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra and the Ministry of Education and Sciences – General Direction of Education.

Data collection had different moments. The adolescent sample was collected from March 2019 to June 2021, online (LimeSurvey) and paper-pencil. Secondary schools were contacted after the study was approved by the Ministry of Education and Sciences. First, we presented the study scope, its´ procedure and aims. After school directors authorized the study, legal tutors (parents)and participants gave their informed consent for data collection. Participants and legal tutors received information concerning the nature and ethics of the study specifically the anonymous and confidential character of the study, the right to withdraw the study, the voluntary nature of participation. Four graduation students (not part of the research team) performed data collection. The adults sample was collected from March 2021 to July 2021 exclusively online, using a secure link from LimeSurvey platform. Information regarding the ethics of the study was also conceived before participants gave their informed consent. This sample was collected using snowball technique.

Results

Description and comparison of MHL, Coping in adolescents, young-adults and adults

Table 1.

Mean (*M*) and Standard-Deviation (*SD*) of MHL and Coping for each subsample: adolescents (N=240), young-adults (N=74), adults (N=105)

	PosMHLq	MHLq	H	UES	UIS	A	PR	AC	P	R	V	SB	SU	BD	D	SD
Adolescents																
M	78. 29	135.07	2.54	3.06	2.90	3. 24	2. 94	3. 13	3.30	1.66	2. 40	2. 99	1. 18	1.65	1. 71	3.25
SD	9. 85	10.77	1.56	1.65	1.57	1. 45	1. 50	1. 39	1. 34	1. 72	1. 50	1.64	1.64	1.61	1. 49	1.45
Young-Adults																
M	78.60	123.36	2.57	3.82	3.55	3.50	3.15	3.84	3.91	1.84	3.08	2.57	.42	.82	.81	3.18
SD	6.26	9.34	1.65	1.63	1.44	1.36	1.64	1.44	1.32	1.77	1.56	1.37	1.06	1.20	1.04	1.44
Adults																
M	74.44	120.45	1.99	3.29	2.95	3.56	3.44	3.96	4.06	3.11	2.70	2.26	.23	.74	.80	2.58
SD	6.81	8.94	1.46	1.60	1.42	1.28	1.54	1.28	1.25	2.09	1.39	1.16	.65	.94	.96	1.20

PosMHLq= Positive Mental Health Literacy Questionnaire total; MHLq= Mental Health Literacy Questionnaire total; H= Humor; UES= Using Emotional Support; UIS= Using Instrumental Support; A= Acceptance; PR= Positive Reframing; AC= Active Coping; P= Planning; R= Religion; V= Venting; SB= Self-Blame; SU= Substance Use; BD= Behavioral Disengagement; D= Denial; SD= Self-Distraction.

Levels of MHL (both positive mental health literacy and literacy about mental illness) are similar in the three developmental groups (cf. Table 1). Concerning coping styles, the major differences in the use of coping are in Religion, Substance Use, Behavioral Disengagement and Denial. Adults report increased levels of Religious coping compared to adolescents and young- adults, adolescents refer significantly higher levels of Substance Use, Behavioral Disengagement and Denial.

Correlates of MHL and Coping in different age groups

Table 2

Pearsons´ intercorrelations across MHL and coping styles in the subsamples

	Adolescents (N=240)		Young-Adults (N=74)		Adults (N=105)	
	PosMHLq	MHLq	PosMHLq	MHLq	PosMHLq	MHLq
Humor	.011	.091	.212	-.004	.089	-.090
UsingEmotionalSupport	.240**	.305**	.261*	.238*	.382**	.417**
UsingInstrumentalSupport	.239**	.339**	.312**	.171	.235*	.314**
Acceptance	.251**	.253**	.143	-.006	.275**	.107*
PositiveReframing	.131*	.127	.249*	.126	.226*	.107
ActiveCoping	.262**	.275**	.231*	.095	.312**	.186
Planning	.304**	.270**	.240*	.140	.264**	.194*
Religion	-.060	.021	.216	.190	.274**	.135
Venting	.139*	.214**	.205	.198	.234*	.329**
SubstanceUse	-.218**	-.160*	-.070	-.036	.005	.038
Self-Blame	.135*	.176**	.039	.018	.074	.072
BehavioralDisengagement	-.122	-.054	-.174	-.049	-.129	-.058
Denial	-.183*	-.114	.028	.066	-.045	.049
Self-Distraction	.234**	.235**	.204	.110	-.004	.090

Note. * $p < 0.05$, ** $p < 0.01$

Mental health literacy and coping styles are related in all groups. Nevertheless, different patterns of correlates were found.

In adolescents, Humor, Behavioral Disengagement and Religion were not significantly related to PosMHLq or to MLHq. Positive Reframing (r= .131; $p < 0.05$) and Denial (r= .- 183; $p < 0.05$) were significantly correlated with PosMHLq, but not with MHLq. Using Emotional Support (r= .240; $p < 0.01$), Using Instrumental Support (r= .239; $p < 0.01$), Acceptance (r= .262; $p < 0.01$), Active Coping (r= .262; $p < 0.01$), Venting(r= .139; $p < 0.05$), Self-Blame(r= .135; $p < 0.05$), Substance Use(r= -.218; $p < 0.01$), and Self-Distraction (r= .234; $p < 0.01$) correlated significantly with PosMHLq and MHLq (Using Emotional Support r= .305; $p < 0.01$; Using Instrumental Support r= .339; $p < 0.01$; Acceptance r= .253; $p < 0.01$; Active Coping r= .275; $p < 0.01$; Venting r= .214; $p < 0.01$; Self-Blame r= .176; $p < 0.01$; Substance Use r=-.160; $p < 0.05$; Self-Distraction r=.235; $p < 0.01$).

In young-adults, only Using Emotional Support was correlated with both PosMHLq (r= .261; $p < 0.05$) and MHLq (r= .238; $p < 0.01$). Using Instrumental Support was correlated with PosMHLq (r= .312;. $p < 0.01$) but not with MHLq. Also Active Coping (r= .231; $p < 0.05$), Positive Reframing (r= .249; $p < 0.05$) and Planning (r= .240; $p < 0.05$) were positively and significantly correlated with PosMHLq but not with MHLq.

In the adults sample Using Emotional Support (r= .382; $p < 0.01$), Using Instrumental Support (r= .235; $p < 0.05$), Acceptance (r= .275; $p < 0.01$), Positive Reframing (r= .226; $p < 0.05$), Planning (r= ; $p < 0.05$) and Venting (r= .234; $p < 0.05$) were correlated with PosMHLq and MHLq (Using Emotional Support r= .417; $p < 0.01$; Using Instrumental Support r= .314; $p< 0.01$; Acceptance r= .107; $p< 0.05$; Planning r= .194 ; $p< 0.05$; Venting r= .329; $p< 0.05$).

Active Coping (r= .312; $p < 0.01$) and Religion (r=.274; $p < 0.01$) were only correlated with PosMHLq.

Across the three developmental subsamples, the only coping style correlated with both PosMHLq and MHLq is Using Emotional Support.

Using Instrumental Support, Positive Reframing, Active Coping and Planning are correlated with PosMHLq in all subsamples.

Using Instrumental Support is correlated with MHLq in adolescents and adults but not young-adults. Acceptance, Venting and Planning are related with PosMHLq and MHLq in adolescents and adults but not in the younger adults´ group.

Discussion

This study was a first attempt to observe the interaction between mental health literacy and coping, so as their correlates across different developmental stages.

In terms of use of coping, religious coping was higher among the adults´ sample, reflecting cultural changes in religious adherence in adolescents and young-adults. Substance Use, Behavioral Disengagement and Denial were used less frequently by adolescents than other adaptative strategies. Nevertheless adolescents´ use of these styles, considered elsewhere as avoidance coping styles is higher than the pattern referred by young-adults and adults, suggesting that adolescents show higher risk of substance abuse and behavioral problems (WHO, 2021). Nonetheless two notes should be made. First, low SES was more prevalent in the adolescent sample than in the young-adult and adult sample, which can influence the type of coping used, as well. On the other hand, as we used self-report measures, we should also consider that young-adults and adults may be more ashamed to report using avoidance coping strategies than adolescents. Future studies should examine these findings using external measures.

Concerning the correlates of coping and MHL, Using Emotional Support was the only coping style related to positive mental health literacy and literacy about psychopathology in all developmental groups. Previous research has shown MHL was associated negatively with loneliness (BjØrnsen et al., 2019) and influences help-seeking behavior (Chao et al., 2020; Lubman et al., 2020; Xu et al., 2018). Our finding indicates that Using Emotional Support may be influenced by both the drive to promote mental well-being and to prevent mental illness.

As expected, positive mental health literacy is related to more adaptative forms of coping like Using Instrumental Support, Positive Reframing, Planning and Active Coping in all subsamples. People who know more about mental well-being may feel more capable and competent to face life challenges and protect their well-being. Qualitative research has suggested previously the relationship between MHL and adaptative coping (Wholoshyn & Savage, 2021) but this was the first empirical study to explore it.

Interestingly, adolescents and adults who know more about mental illness use more instrumental support, Active Coping, Planning, Venting but not young-adults. We suspect that this finding must be explained by the reduced size off the young-adults sample, in this sense, these results should be replicated with bigger and more balanced samples.

Adolescents with higher levels of MHL report less use of Denial and Substance Use or Behavioral Disengagement. MHL appears to have a protective effect concerning risk behavior and emotion regulation strategies (Lubman et al., 2020) in this developmental period but not in subsequent ages. Futures studies should examine if there is a "loss" effect using longitudinal designs.

Unexpectedly Self-Blame was positively associated to MHL. Once MHL should have a anti-stigma effect and clarify how self-criticism is a detrimental strategy for mental health this result was not consistent with MHL theory. Nevertheless, with awareness about mental health issues and mental well-being may come more responsibility and the drive to behave more adaptatively, explaining the relation with Self-Blame. Qualitative studies should explore these findings.

Finally, it is important to note that PosMHLq, more than MHLq, was associated to most coping styles. Literacy about positive mental health and well-being may help, at least, community samples, to cope better with normative events than literacy about mental illness. It would be worthy to replicate this study with clinical samples, and controlling life events.
This study adds important findings to MHL and coping research, so as to developmental theory. Nevertheless, caution should be taken while interpreting the results. We used self-report measures, the size of the samples is not the same and our design is cross-sectional. Future studies should overcome these limitations by using different measures, as interviews, bigger and more balanced samples and longitudinal design.

The predictive effect of MHL on the use of coping and mental health should be further explored.

Conclusion

Mental health literacy is related to the use of coping styles. Interventions promoting MHL should invest in positive mental health literacy and literacy about mental illness in order to increase adaptative coping. Futures studies should control the effect of MHL initiatives on coping and mental health.

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STUDY VI - HOPE AND SELF-COMPASSION MEDIATE THE RELATIONSHIP BETWEEN MENTAL HEALTH LITERACY AND MENTAL HEALTH

Maia de Carvalho, M., Vale-Dias, M.L., & Carvalho, S. (2023). Hope and self-compassion mediate the relationship between mental health literacy and mental health. [Manuscript submitted for publication at Journal of Prevention and Mental Health Promotion].

Abstract

Introduction: Research suggests mental health literacy (MHL) is related to mental health, including increased flourishing and less psychopathology. Nonetheless, the mechanisms through which MHL is conducive of mental health are not clear. To our knowledge, no study has examined the role of self-compassion and hope in the relationship between MHL and mental health, though some evidence suggests they might relate to both MHL and mental health. Also, studies on MHL and its impact on mental health/illness mainly focus on mental illness literacy, and less on positive MHL. The current cross-sectional study sought to explore whether self-compassion and hope mediate the relationship between MHL and mental health.

Method: Participants from the general adult population (N=181) responded to an online survey assessing: positive mental health literacy (PosMHLit), mental illness literacy (MHLq), mental well-being (MHC-SF), psychological distress (BSI), self-compassion (SCS) and hope (HS). Four models analyzed whether positive mental health literacy and literacy about mental illness predicts positive mental health and mental illness through self-compassion and hope.

Results: In the four models tested, MHL (both positive MHL and MHL about mental illness) is a stronger predictor of positive mental health than of psychological distress, and these relationships occur indirectly through self-compassion and hope. Although hope does not mediate the relation of MHL and mental health independently, it adds to the effect of self-compassion in this mediation.

Conclusion: Interventions targeting MHL may benefit from investing in self-compassion training and positive mental health promotion as MHL appears to be more effective predictor of positive mental health.

Key-words: Mental health literacy; Self-compassion; Hope; Mental health; Positive mental health;

Introduction

Good mental health is operationalized as encompassing both the presence of high levels of positive mental health and the absence of mental illness (Iasiello et al., 2020; World

Health Organization, 2021). Evolving research on dual models of mental health (Goodman et al., 2018; Keyes, 2002; 2005) suggests that fluctuations on psychopathology symptoms and positive mental health are common across the lifespan (Westerhof & Keyes, 2010), contributing to more, or less, proneness to mental illness. For that reason, mental healthcare should acknowledge not only the prevention of psychopathological symptoms but also the promotion of positive mental health. Research in the domain of mental health promotion and mental illness prevention has highlighted the importance of increasing mental health literacy (MHL). The construct MHL has become more popular in the media and public, as World Health Organization (2021) and (inter)national health institutions call for an investment in MHL to empower citizens.

MHL is an evolving construct that currently includes a) knowledge and skills necessary to identify risk factors, symptoms and treatments of mental illness, b) ways to promote and maintain good mental health, c) diminished mental illness stigma, and d) help-seeking and self-care efficacy (Jorm et al., 1997; Kutcher et al., 2016). The first conceptualizations of MHL by Jorm et al. (1997; 2000) reflect an illness-oriented perspective of MHL by which most measures and interventions on MHL are guided (Spiker & Hammer, 2019). However, recent updates (e.g., Kutcher et al., 2016) have contributed to revisions of the MHL construct from illness to positive mental health, which integrates positive mental health. It is increasingly acknowledged that MHL is composed of mental illness literacy as well as positive mental health literacy (BjØrnsen et al., 2017; Carvalho et al., 2022; Mansfield et al., 2020; Sampaio et al., 2022). Different measures are used to assess MHL, many focused on mental illness literacy (e.g., Campos et al., 2016) and few on positive MHL (BjØrnsen et al., 2017; Carvalho et al., 2022). Research provides support to the argument that both positive MHL and MHL for illness are associated with better mental health outcomes such as less psychopathology and higher well-being (BjØrnsen et al., 2017, 2018; Bonabi et al., 2016; Chao et al., 2020; Kurki et al., 2021; Lam, 2014; Rüsch et al., 2014).

Important progress in mental healthcare reforms at a public level was possible because the term mental health literacy inspired the development of mental health literacy surveys, especially in Western Countries such as Australia, Canada and the United States (Mansfield et al., 2020). Research on MHL has been conducted in samples of adolescents and adults, almost entirely in cross-sectional studies (e.g., using vignette-based methods or questionnaires) (Mansfield et al., 2020). Most studies have been conducted with young participants, which calls for more studies with adults. Research has helped to understand the misinformation and lack of knowledge in the public sphere: types of mental disorders,

distinction between normative and pathological mental states, treatment preferences, and the poor variety of self-help strategies. Some portuguese studies have evaluated MHL levels in adolescents (e.g., Campos et al., 2016) or adults (e.g., Carvalho et al., 2022; Dias et al., 2018), being the largest and closest to representativeness that of the study conducted by Loureiro et al. (2016), who surveyed a sample of 4938 teens and young adults on MHL. To our knowledge, a national survey of MHL in Portugal is lacking, studies overall suggest moderate levels of MHL in the Portuguese population. Institutionally, Portugal has only recently acknowledged the importance of MHL, mental illness prevention and the promotion of positive mental health (Direção Geral da Saúde, 2016), even though approximately 22.9% of the population suffer from mental illness according to epidemiological studies (Caldas de Almeida & Xavier, 2013). Mental illness stigma, which prevents help-seeking (Rüsch et al., 2014), is high in Portugal, ranking among the highest rates of stigma in Europe (Lopes et al., 2021).

Some studies have suggested that MHL can be fostered through literacy interventions (Brijhnat et al., 2016; Fretian et al., 2021), and that MHL is related with mental health outcomes. Nevertheless, not many studies have focused on the mechanisms underlying the relationship between MHL and mental health. One hypothesized mechanism builds upon the foundation for health literacy or health education (Nutbeam, 2000) and posits that those who have more accurate mental health-related knowledge are better equipped to recognize the need to take action, such as help-seeking, when experiencing mental health challenges (e.g., psychological symptoms, reduced mental well-being, and languishing; see Xu et al., 2018 for a systematic review). A somewhat different perspective argues that having knowledge on the (biopsychosocial) etiology and severity/prognosis of mental health conditions may contribute to a) perceptions of mental illnesses as treatable and temporary (as opposed to viewing it as innate and immutable), and b) improve the internal dialogue and attitude a person establishes towards the experience of suffering (Hart et al., 2016), with less overidentification and criticism (Dschaak et al., 2021).

Hope is a cognitive-motivational process that pertains to the belief that personal goals can be achieved, and different pathways safeguard the resolution of problems (Snyder et al., 1991). Therefore, hope has affective and behavioral manifestations, often as a future-oriented process that opens possibilities for change in a positive way (Corn et al., 2020). People exhibiting a hopeful attitude, in opposition to hopelessness, believe in their capacity to find solutions and support for their problems (Garcia et al., 2021). Thus, the hopeful process manifests in increased feelings of vitality and energy, and in behavioral activation.

Additionally, feeling hopeless, usually a symptom of depressive states, is associated with less energy, entrapment, or despair (Fraser et al., 2014). Hence, hope manifests cognitive manifestations such as automatic thoughts, "I am capable of overcoming this" (e.g., when feeling hopeful) or "I lost hope, this is hard to change" (e.g., when feeling hopeless), affective expression that effects behavior (e.g., more or less energy), and motivation or willingness to engage in action through plans or pathways (Pleeging et al., 2021). Thus, hope has been associated with coping (Folkman, 2013) and has been studied in health contexts (e.g., Corn et al., 2020). The benefits of hope for health, in general, and mental health, in particular, have been largely documented in positive psychology studies (Chan et al., 2019; Kaleta & Mróz, 2020; Mistretta et al., 2020; Pleeging et al., 2021; Wang et al., 2020; Weis & Speridakos, 2011). The association between hope and mental health relates mainly to emotional well-being and adaptative behavior (Folkman, 2013; Garcia et al. 2021), but Gallagher et al. (2020) suggest that hope is a transdiagnostic mechanism of change in psychotherapy as it predicts decreases in anxiety and recovery.

The first symptoms of mental illness can activate beliefs and heuristics associated with mental illness, including the fear of being mentally ill (Link et al., 2001; Lally et al., 2013) or the sense of helplessness and entrapment that is common in disorders such as depression (Fraser et al., 2014). Persons with strong MHL recognize help seeking options and possess information and strategies on how to manage symptoms and brings examples of recovery. Folkman (2013) posits that hope is an appraisal-based process that is influenced by information and the capacity to interpret events in the face of challenges. From this framework, hope works as an outcome of appraisal of events and coping strategies to manage, what would support the theoretically hypothesized premise that MHL may buffer the feeling of entrapment with a belief in problem resolution and help availability (Jorm, 2000). A recent study by Dermott et al., (2021) found that hope predicts intentions to seek help when facing mental health crisis. An important aspect of agency, a component of hope, is the wisdom brought by past experience (Snyder et al., 1991) in preparing for the future. Hence, mental health knowledge fosters hope and brings not only agency, but also reveals pathways towards the future and resources to manage challenges. Different components of MHL and their roles have been studied. Recent research suggests negative stereotypes play a key role in mental health stigma and the wish for social distance, even when knowledge about mental disorders is high (Doll et al., 2022). On the other hand, MHL is hypothesized to foster hope during recovery as individuals acknowledge the prevalence of mental disorders and their rate of recovery. It is theoretically suggested that MHL may increase hope, as

persons who know the etiology of mental illness and mental well-being may feel empowered to act in face of mental health needs (Jorm, 2000). However, no study has yet examined the relationship between MHL and hope, nor the role of hope in the relationship between MHL and mental health. By providing motivated agency as a putative active ingredient of literacy, hope can be hypothesized to facilitate the effect of MHL on mental well-being and mental illness recovery.

Self-compassion is the ability to stay tuned to oneself during moments of suffering and perceived failure or inadequacy (Neff, 2003a) with an attitude of internal warmth and openness, non-judgement, and the motivation to reduce and/or prevent suffering (Gilbert, 2019). Self-compassion is a present oriented process of recognizing suffering as part of a common human experience and has been associated with better mental health outcomes, such as improved well-being and less psychopathology (Kirby, 2017; MacBeth & Gumley, 2012; Neff et al., 2018; Sommers-Spijkerman, et al., 2018; Trompetter et al., 2017). Self-compassion is also positively related with health promoting behaviors (Sirois et al., 2015) and help-seeking for mental health problems (Dschaak et al., 2021).

Feelings of self-compassion can come from being mindfully aware that one does not choose certain circumstances in life (e.g., genes, events, some family relations, the nature of our minds; Gilbert, 2019) that affect how one thinks, feels, and behaves. Research in MHL has suggested biogenetic models alone tend to stigmatize mental illness, as psychosocial explanations, on the contrary, buffer stigma (Doll et al., 2022). Therefore, MHL currently integrates a combination of biogenetic and psychosocial factors in explaining mental illness. This rationale about the mind can potentially help improve self-compassion in relation to mental health problems, setting ground for common humanity and the shared conditions that affect how one feels and thinks. Studies report that mental illness is often stereotyped as a sign of weakness, unworthiness, economic or spiritual problems (Campos et al. 2016; Jorm, 2000; Lally et al., 2013; Link et al., 2001). Increasing awareness of both the biological and contextual foundations of mental health problems has been related to reduced stigma (Janouska et al., 2017), as people understand that having mental illness is not a choice and that seeking treatment for mental illness demonstrates personal responsibility and action in the presence of mental suffering.

Practicing self-compassion has been related to increased awareness about self-care behavior (Neff & Costigan, 2014), tolerance to mental suffering (Kirby, 2017), and less self-stigma (Neff et al., 2018). Additionally, a study using a clinical sample of patients with diabetes found that self-compassion was a predictor of well-being and better self-

management behavior (Ferrari et al., 2017). Other studies found self-compassion to be negatively related with self-stigma and positively correlated with help-seeking behavior (Heath et al., 2018; Yang & Mak, 2016). Self-compassion has also been found to partially mediate the relationship between self-stigma and mental health in people with obesity (Hilbert et al., 2014). Jiang and collaborators (2022) found that hope and gratitude predicted less non-suicidal self-injury in adolescents through self-compassion and family experiences. Also, self-compassion and hope predicted less body image dissatisfaction and mental illness symptoms in breast cancer patients (Todorov et al., 2019). A study by Tran et al., (2022) with university students suggested that hope mediates the relationship between self-compassion and emotional well-being. In the face of challenges and lack of predictability, both hope and self-compassion help maintain the necessary resources for adaptation, providing emotion regulation skills, a positive orientation towards the present and the future (rather than the past), and an attitude of warmth towards suffering (Folkman, 2013; Jiang et al., 2022). Cumulatively, this research suggests that self-compassion is related to both MHL and mental health outcomes through its association with hope.

Aims

This study aims to explore the relationships between hope, self-compassion, MHL and mental health. We hypothesize that MHL (literacy about mental illness - MHLq -, and positive MHL - PosMHLit) positively predicts positive mental health (MHC-SF) and negatively predicts psychological distress (BSI). We expect hope and self-compassion to be positively related to MHL and positive mental health and negatively related psychological distress. Finally, we hypothesize hope and self-compassion mediate the relationship between MHL and mental health. As previous studies suggest that MHL is related to both psychological distress and positive mental health, we want to test whether: a) hope and self-compassion mediate the relationship between positive mental health literacy and positive mental health; b) hope and self-compassion mediate the relationship between positive mental health literacy and psychological distress; c) hope and self-compassion mediate the relationship between literacy about mental illness and positive mental health; d) hope and self-compassion mediate the relationship between literacy about mental illness and psychological distress.

Methods

Participants

This study was conducted with a sample of 181 adults from the general population who responded to an online self-report assessment protocol (LimeSurvey platform https://limesurvey.fpce.uc.pt/limesurvey/index.php/admin/). LimeSurvey is a secure online platform provided by the institution where the authors are affiliated. It enables surveys, questionnaires, data collection through different templates. Study inclusion criteria were a) to be 18 years old or above; b) to have Portuguese nationality. No exclusion criteria were considered. Data collection occurred from March 2021 to July 2021.

Descriptive analyses were conducted to assess the sociodemographic characteristics of the sample. The sample is composed of 132 women (72.9%) and 49 men (27.1%) with a mean age of 43.29 (SD =15.28) and ranging from 19 to 75 years old. In terms of socioeconomic status (SES), one participant presented Low SES (6%), ninety-seven presented Medium SES (53.6%), and eighty-two have High SES (45.3%). SES was calculated through an estimate of work position and years of education.

Procedure

This study is part of a larger PhD research about complete mental health and mental health literacy. It was approved by the Scientific Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra approval (N:24032018). The sample used in this study was collected exclusively for the purpose of this study, other studies used different samples. Information regarding the nature and ethics of the study regarding anonymity, confidentiality, the right to withdraw, and the voluntary nature of participation was communicated before participants gave their informed consent. This sample was collected using snowball technique (e.g., authors started to share the link through several emails, social media platforms and asked respondents to share with at least one person).

Instruments

The Mental Health Literacy Questionnaire (MHLq, Dias et al., 2018) is a self-report measure that evaluates literacy about mental illness based on the multi-construct theory of

mental health literacy. This instrument was developed for adolescents (Campos et al., 2016) and latter adapted and validated with a sample of 356 Portuguese adults (Dias et al., 2018). The instrument is composed of 29 items ranked in 5-point Likert-type options (1= "Strongly disagree"; 5 = "Strongly agree") (e.g., "Mental disorders affect people's thoughts"). The items are divided in four factors: Knowledge of mental health problems (e.g., "Highly stressful situations may cause mental disorders"); Erroneous beliefs and stereotypes (e.g., "Depression is not a true mental disorder"); Help seeking and first aid skills (e.g., "If I had a mental disorder I would seek a psychologists help"); Self-help strategies (e.g., "Physical exercise contributes to good mental health"). A total score can be extracted, where higher scores mean higher MHL. Internal consistency in the present study was α= .81.

The Positive Mental Health Literacy Questionnaire (PosMHLq, Maia de Carvalho et al., 2022) is a self-rated instrument that assesses literacy about emotional well-being and positive mental health. It is used as unidimensional measure, consisting of 20 items rated on a 5-point Likert-type scale (1= "Strongly disagree"; 5= "Strongly agree"), where higher levels mean more positive mental health literacy (e.g., "To have good mental health a person must take self-care and cultivate what makes her feel well-being."; "Dealing with emotions in spite of running from it, leads in the long term to higher well-being and less suffering."; "Mental health is more than the absence of mental illness, it involves feeling significant levels of well-being and having good functioning."). A sample of 418 Portuguese adults was used to develop and validate this instrument, through a multi-stage psychometric process. Internal consistency in the present study was α= .92.

The Hope Scale (HS) (Snyder et al., 1991; Portuguese version Marques et al., 2014) is a self-report measure that evaluates hope, adapted to the Portuguese population with a sample of 1012 high school students. The scale is composed of 12 items rated along 8 options (1= "Totally false"; 8 = "Totally true") (e.g., "Any problem has many solutions"). Hope is measured as a trait composed of 2 factors (Agency "My past experiences have prepared me well for my future" and Pathways "Even when others get discouraged, I know I can find a way to solve the problem") and a total hope score can be extracted by summing all items, with higher scores indicating more hope. The reliability of the scale in the present study was α = .87.

The Self-Compassion Scale (SCS) (Neff, 2003; Portuguese version Castilho & Gouveia, 2015) is a self-report measure composed of 26 items scored on a 5-point Likert-type scale (1= "Almost never"; 5 = "Almost Always") (e.g., "I try to be understanding and patient towards those aspect of my personality that I don´t like"). The self-compassion scale

encompasses six factors: mindfulness, self-kindness, common humanity, overidentification, self-judgement and isolation. Some studies use a six-factor structure (Neff, 2003), and others use a two-factor structure (Murus & Petrochi, 2017): self-compassionate attitude (a composite of mindfulness, e.g. "If something painful happens I try to keep a balanced view of the situation", self-kindness, e.g., "I´m tolerant with my own flaws and inadequacies", and common humanity, e.g., "When I´m down, I remind myself that there are lots of people in the world feeling like I am") and self-critical attitude (a composite of overidentification, e.g., "When something upsets me I get carried away with my feelings", self-judgement, e.g., "When times are difficult I tend to be tough on myself"and isolation, e.g., "When I fail at something that is important to me I tend to feel alone at my failure"). We used the two-factor structure solution, selecting the self-compassionate attitude factor (SCA) for the analysis. Higher scores of SCA indicate higher self-compassion. Internal consistency in the present study was α= .93.

The Brief Symptom Inventory (BSI; Derogatis, 1982/1993; Portuguese version Canavarro, 1999) measures psychopathological symptoms in a self-report format with 53 items ranked on a 5-point Likert-type Scale (from 0 = "not at all"; 4 = "extremely") (e.g., Feeling sad"). The scale measures nine dimensions of psychological distress: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, a total of positive symptoms, a total score of symptoms and a global severity index. In the present study we used the total of positive symptoms to measure psychopathology. Internal consistency in the present study was α= .92.

The Mental Health Continuum Short-Form (MHC-SF; Keyes, 2005; 2007; Portuguese version Fonte, 2021) is a self-report instrument that assesses positive mental health through 14 items rated using a 0 to 6-point scale (from 0 = never to 6 = everyday) (e.g., Feeling Happy). Items are grouped in 3 factors: emotional well-being "happy"; psychological well-being "I feel confident to express my ideas and opinions" and social well-being "people are basically good". A total score can be calculated with higher scores indicating greater positive mental health. A categorical composite can calculate three diagnose categories: flourishing (when having high levels of positive mental health), languishing (when having low levels of positive mental health) and moderate mental health (when having levels of positive mental health in between flourishing and languishing). Internal consistency in the present study α = was .97.

Data Analyses

All statistical procedures were conducted using SPSS software (v. 21, SPSS, Chicago, IL, USA), and the PROCESS computation tool for SPSS (Hayes, 2013). Preliminary analyses were conducted to assess normality of the data distribution. No severe violations of normality were considered if skewness and kurtosis are within acceptable normality values (SK<|3| and Ku<|8-10|) (Tabachnick & Fidell, 2014). The associations between variables were tested through bivariate correlation analysis. The strength of the association between variables was interpreted according to Cohen´s (1988) guidelines: small if close to r close to .10, medium if close to .30, and large if higher than .50. The indirect effects of mental health literacy on psychopathology and mental health through self-compassion and hope were conducted using the SPSS macro Process (serial mediation Model 6). Indirect effects were calculated using the Bootstrap procedure with 5000 resamples, with a 95% confidence interval (CI) and Bias Corrected method. Indirect effects were considered significant when zero was not contained in the interval between the lower and upper CI (Hayes, 2013).

Results

Preliminary Analyses

Preliminary analyses assessing the adequacy of data, namely normality and outliers, revealed no severe violation of normality.

Correlation Analyses

Bivariate correlations between variables are reported in Table 1. All variables are correlated in the expected directions, except for hope and literacy about mental illness, and positive mental health and positive mental health literacy that are above statistical significance levels.

Indirect Effects

Mediation models were tested through the SPSS macro PROCESS (Model 6) (Hayes, 2013). Bootstrap procedure with 5000 resamples was calculated to explore the indirect

effects, with a 95% confidence interval (CI) and Bias Corrected method. Although our sample is large enough for a small number of parameters tested in our four models, the decision to use bootstrap was based on its reliability in assessing the significance of indirect effects, providing statistical power and confidence interval precision regardless of sample size, effect size or level of statistical significance (Hayes, 2009; Mallinckrodt et al., 2006). Indirect effects were found significant when the interval between the lower and upper CI did not contain zero (Hayes, 2013; Kline, 2005).

Four mediation models were evaluated to test if hope and self-compassion mediate the association between MHL and mental health (Table 2). The first model tests whether a) positive mental health literacy (PosMHLit) predicts positive mental health (MHC-SF) through the indirect effect of self-compassion (SCA) and hope (HS); the second model tests whether b) positive mental health literacy (PosMHLit) predicts psychological distress (BSI) through the indirect effect of self-compassion (SCA) and hope (HS); the third model tests whether c) literacy about mental illness (MHLq) predicts positive mental health (MHC-SF) through the indirect effect of self-compassion (SCA) and hope (HS); the fourth model tests whether d) literacy about mental illness (MHLq) predicts psychological distress (BSI) through the indirect effect of self-compassion (SCA) and hope (HS).

See Table 2 for a full report on results. The first mediation model explained 49.46 % of positive mental health (b = -.10, p= .337), with the indirect effect (b = .12) being statistically significant 95% CI (LLCI = .044; ULCI = .233). Results show that self-compassion is the sole mediator of the relationship between positive MHL and mental health, while hope mediates the relationship between self-compassion and positive mental health in the model. The second mediation model explained 29.83 % of psychological distress (b = -.18, p = .134), with the indirect effect (b = -.07) being statistically significant 95% CI (LLCI = -.156; ULCI = -.026). Self-compassion is the sole mediator of the relationship between positive mental health and psychological distress, while hope mediates the relationship between self-compassion and psychological distress in the model. The third mediation model explained 49.28% of positive mental health (b = -.04, p = .568), with the indirect effect (b = .07) being statistically significant 95%CI (LLCI = .012; ULCI = .140). Self-compassion mediated the relationship between mental illness literacy and positive mental health, while hope mediated the relationship between self-compassion and positive mental health in the model. The fourth model of mediation explained 29.71 % of psychological distress (b = -.12, p = .164), with the indirect effect (b = .04) being statistically significant 95% CI (LLCI = -.100; ULCI = -.008). Self-compassion mediated the relationship between mental illness literacy and

psychological distress, while hope mediated the relationship between self-compassion and psychological distress in the model.

Discussion

To our knowledge, this was the first study that tested the hypothesis that MHL, both positive MHL and MHL for illness, predicts mental health through the indirect effect of self-compassion and hope. The rationale behind our hypotheses is based on existing evidence showing that self-compassion is related to some outcomes of MHL, such as help-seeking and stigma, as well as to hope, and that self-compassion is related to mental health, independently and associated with hope (Dschaak et al., 2021; Jiang et al., 2022; Sirois et al., 2015). It also follows the theoretical proposition that MHL may increase hope, which is related to better mental health outcomes.

Results from correlational analyses corroborated previous studies suggesting that MHL about mental illness being associated with mental health (Chao et al., 2020; Lam, 2014) as well as with self-compassion (Dschaak et al., 2019; Ferrari et al., 2017). One hypothesis is that knowledge about mental illness might not only help mental health self-management, but also promote a kinder compassionate attitude.

Hope was not significantly associated with literacy about mental illness but was correlated with positive MHL. Maybe individuals feel more informed to set goals and plans to promote their positive mental health but less capable of managing mental illness, which they might view as requiring professional help. Future qualitative studies should explore how knowing more about mental illness changes the perception of agency and the pathways to manage it. It can be that individuals feel less hopelessness with the possibility of getting professional help but not more hopeful as recovery depends on several aspects that are not only their agency, but depend on genetics, external events, medication. Positive MHL was related to psychological distress and self-compassion as expected (Neff & Costigan, 2014) but no association was found with positive mental health. This was an unexpected result given that in the mediational models, positive MHL predicts positive mental health. Future research should clarify whether positive MHL predicts solely positive mental health or only in the presence of mediating variables.

While self-compassion was significantly correlated to all variables, hope is associated with positive MHL, psychological distress, positive mental health and self-compassion. In

face of suffering, agency and pathways (hope) might generate mental well-being and self-care attitude that can reduce psychological distress. Mediational studies with clinical samples should further explore this hypothesis.

To shed some light on the processes that regulate the relationship between MHL and mental health, four mediation models were tested. Our hypotheses were theoretically and empirically driven and to test for mental health outcomes we used positive mental health and psychological distress measures based on established evidence that mental health regards both positive mental health and psychopathology (Isaiello et al., 2021). In the first two models we assessed through the PosMHLit the effect of positive MHL in positive mental health (a) and psychological distress (b). In the following models we explored through the MHLq the effect of literacy about mental illness on positive mental health (c) and psychological distress (d). The mediators in all models were self-compassion and hope.

In the four models, relationship between MHL (both positive MHL and MHL for illness) and mental health outcomes occurred through the indirect effect of self-compassion. This suggests that the relationship between MHL (literacy on mental health and on mental illness) and positive mental health and psychological distress occurs through the ability to be self-compassionate. Although the cross-sectional nature of the current study does not allow us to draw causal conclusions, these results seem to preliminary and tentatively suggest that those who present more positive mental health and mental illness literacy also present better indicators of mental health because they are more self-compassionate. This goes in line with previous literature suggesting the necessity that MHL programs adopt a non-stigmatizing and non-stereotypical stance towards mental illness and mental health (Doll et al., 2020; Janouska et al., 2017), such as self-compassionate strategies presented as a useful adaptive coping repertoire.

Our results did not fully affirm the hypotheses that MHL could lead to more hope, as self-compassion emerged as the main process or mediator between MHL and mental health in our model(s). Nonetheless, it should be noted that this study was conducted in a community sample, and it is possible that hope might play a stronger role in clinical samples, where psychopathological symptoms are more active and feelings of hope might counterbalance the hopelessness underlying several psychopathological presentations, such as depression or rumination (Sun et al., 2014). Another mediating pathway was more consistent with the existing research (Chan et al., 2019; Pleeging et al, 2021; Wang et al., 2020) on the relationship between hope and mental health. In the four models, hope significantly predicts positive mental health and psychological distress. When considered

independently, hope does not work as a mediator of the relationship between MHL and mental health. Nonetheless, results show hope plays an indirect effect in the relationship between self-compassion and mental health. Although MHL does not predict mental health solely and indirectly through hope, hope significantly adds to the process through which MHL relates to self-compassion and mental health. This finding corroborates other studies where the protective effect of self-compassion in mental health outcomes has hope as a significant underlying process (Jiang et al., 2022, Todorov et al., 2019; Umphrey & Sherblon, 2014; Yang et al., 2016).

These results add useful information to MHL research and practice. First, results tentatively suggest that MHL is a contributor of self-compassion, which in turn seem to strongly relate to more hope, more positive mental health, and less psychological distress. The rationale for using psychoeducation to teach about the nature of the mind and suffering is strengthened by our finding of a link between MHL and self-compassion. Teaching the psychosocial and biogenetic causes of positive mental health and mental illness experiences might facilitate an understanding and acceptance attitude towards suffering and the shared condition of humanity. The results also suggest a sequence: when a present oriented process of emotional regulation through self-compassion is facilitated, hope, as a future oriented process becomes possible. Nonetheless, the correlational nature of the study suggests caution when interpreting these results. Another possible explanation is that individuals with more hope and self-compassion may seek more mental health knowledge and professional aid, which would explain higher MHL. It could also be the case that the relationship between MHL and mental health outcomes is conditional on different levels of hope and self-compassion (e.g., the strength of the relationship could be hypothesized to be higher when hope and self-compassion reach certain values), which calls for future studies to test robust moderated mediation models.

When looking at the two constructs used for measuring mental health outcomes (positive mental health and psychological distress), it is interesting to note that the amount of variance predicted is greater when explaining positive mental health using both PosMHLit and MLHq than when explaining psychological distress. Positive MHL predicts less psychological distress, but the variance predicted by MHL about mental illness is higher for positive mental health. This result appears to reiterate the importance of investing in the promotion of positive mental health through MHL (Bjørnsen et al., 2019) and compassion interventions (Sommers-Spijkerman, et al., 2018). Although itself an important aspect for

overall mental health, positive mental health or flourishing also buffer mental illness vulnerability (directly) and trough the effect of self-compassion (Trompetter et al., 2017).

Although our findings bring some insights into the measurement and practice of MHL, the context of this research should acknowledge its limitations. This study holds some limitations such as the cross-sectional and self-reported nature of the data that does not allow causality inferences. Also, conclusions should be drafted with caution in terms of generalizability of the findings, as this study used a convenience sample of Portuguese, mostly privileged and female participants. However, it should be noted that the recruitment of a community non-clinical sample may help reduce the limitations of clinically based studies (e.g., biased results due to low seeking of medical care, higher severity, complexity and comorbidities (e.g., Braunack-Mayer & Avery, 2009), thus providing more generalizable data. Taking a preventive perspective, the results found in a community sample suggest MHL promotion holds promising opportunities for the general population to enhance positive mental health and prevent mental illness. MHL interventions with a strong positive MHL component can be used to promote flourishing and reduce risk to develop mental illness in the general population. A stepped-care approach could fit the purpose of helping differentiate those with different levels of positive mental health and mental illness literacy and approach each level of needs. This model would be an appropriately fit approach to target populations at risk of mental illness as well. To better clarify the suggestions drawn, future research should replicate these findings in longitudinal or experimental designs, using more diverse samples, including clinical samples, samples from diverse cultural backgrounds, and samples more balanced in terms of gender and SES. Results have not fully supported our hypothesis that hope is an underlying mechanism through which MHL and mental health are related. In the four models tested, hope is only predicted by MHL through the indirect effect of self-compassion. It is important to note, however, that we used a classical hope scale that does not specifically relate to mental health problems, which can limit the assessment of hope in the context of mental illness. Future studies could replicate this study, using an instrument that specifically measures hope associated with recovery (Herth, 1992) or with the experience of having mental health problems.

Conclusion

Our findings add to the theory of MHL that both literacy about positive mental health and literacy about mental illness promote positive mental health and buffer

psychological distress through the indirect role of self-compassion and hope. These results found support for the significance of MHL and psychoeducation as promotors of increased self-compassion and hope, suggesting its usefulness as therapeutic strategies in clinical and community settings that aim to promote postive mental health.

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Table 1

Mean (M), Standard Deviation (SD), Cronbach Alpha (a), and Pearsons´ intercorrelations of all variables in the study

Variable	M	SD	Range-Score	α	1	2	3	4	5
1.MHLq	121.60	9.20	98-141	.81	-				
2.PosMHLit	76.12	6.86	61-85	.92	0.67***	-	-	-	-
3.SCA	43.14	9.70	13-65	.93	0.18*	0.24**	-	-	-
4.HS	48.58	8.90	13-64	.85	0.14ns	0.22**	0.61***	-	-
5.MHC-SF	58.28	13.43	19-82	.97	0.16*	0.13ns	0.61***	0.64***	-
6.BSI	25.06	12.65	3-51	.92	-0.18*	-0.23**	-0.48**	-0.48***	-0.61***

Note. * p < 0.05, ** p < 0.01, *** p< 0.001, ns = non significant.

MHLq = Mental Health Literacy Questionnaire Total; PosMHLit = Positive Mental Health Literacy Questionnaire Total; SCA = Self-Compassionate Attitude; HS = Hope Scale Total; MHC-SF= Mental Health Continuum Short-Form Total; BSI = Brief Symptom Inventory Total – Positive Symptoms Total.

Table 2

Direct and indirect effects of positive and negative mental health literacy on mental health and psychopathological symptoms through self-compassion and hope (N = 181)

Model 1. PosMHLit → SCA → HS → MHC-SF					
Direct effects	B	SE	*p*	R^2	
Self-compassion					
Positive Mental Health Literacy	.33	.10	.001	5.57%	
Hope					
Self-compassion	.54	.06	< .001	37.42%	
Positive Mental Health Literacy	.10	.08	.210		
Mental Well-Being					
Self-compassion	.50	.09	< .001		
Hope	.66	.10	< .001	49.46%	
Positive Mental Health Literacy	-.10	.11	.337		
Indirect effects	B	SE	LLCI		ULCI
PosMHLit → SCA → MHC-SF	.16	.07	.046		.326
PosMHLit → HS → MHC-SF	.06	.06	-.039		.199
PosMHLit → SCA → HS → MHC-SF	.12	.04	.044		.233

Model 2. PosMHLit → SCA→ HS → BSI				
Direct effects	B	SE	*p*	R^2
Self-compassion				

Positive Mental Health Literacy	.33	.10	.001	5.57%	
Hope					
Self-compassion	.54	.06	< .001	37.42%	
Positive Mental Health Literacy	.10	.08	.210		
Psychopathological Symptoms					
Self-compassion	-.37	.10	< .001		
Hope	-.40	.11	< .001	29.83%	
Positive Mental Health Literacy	-.18	.12	.134		
Indirect effects	B	SE	LLCI		ULCI
PosMHLit → SCA → BSI	-.12	.05	-.251		-.044
PosMHLit → HS → BSI	-.04	.04	-.127		.021
PosMHLit → SCA → HS → BSI	-.07	.03	-.156		-.026

Model 3. MHLq → SCA → HS → MHC-SF					
Direct effects	B	SE	*p*	R^2	
Self-compassion					
Mental Health Literacy	.19	.08	.014	3.35%	
Hope					
Self-compassion	.55	.06	< .001	37.00%	
Mental health Literacy	.03	.06	.603		
Mental Health					
Self-compassion	.48	.09	< .001		
Hope	.65	.10	< .001	49.28%	
Mental health literacy	.04	.08	.568		
Indirect effects	B	SE	LLCI		ULCI
MHLq → SCA → MHC-SF	.09	.05	.010		.209
MHLq → HS → MHC-SF	.02	.04	-.052		.108
MHLq → SCA → HS → MHC-SF	.07	.03	.012		.140

Model 4. MHLq → SCA → HS → BSI					
Direct effects	B	SE	*p*	R^2	
Self-compassion					
Mental Health Literacy	.19	.08	.014	3.35%	
Hope					
Self-compassion	.55	.06	< .001	37.00%	
Mental Health Literacy	.03	.06	.603		

Psychopathological Symptoms					
Self-compassion	-.38	.10	< .001		
Hope	-.42	.11	< .001	29.71%	
Mental Health Literacy	-.12	.09	.164		
Indirect effects	B	SE	LLCI		ULCI
MHLq → SCA → BSI	-.07	.04	-.250		-.016
MHLq → HS → BSI	-.01	.03	-.076		.032
MHLq → SCA → HS → BSI	.04	.02	-.100		-.008

Note. PosMHLit = Positive mental health literacy total; MHLq = Literacy about mental illness total; HS = Hope total; SCA = Self-compassionate attitude total; MHC-SF = Mental well-being total; BSI = Brief Symptom Inventory Total – Positive Symptoms Total.

STUDY VII - CAN ADOLESCENTS AND ADULTS RECOGNIZE POSITIVE MENTAL HEALTH LIKE MENTAL ILLNESS?

Maia de Carvalho, M., Vale-Dias, M.L., & Keyes, C. (2023). Can adolescents and adults recognize positive mental health like mental illness? An experimental mixed methods study. [Manuscript submitted for publication at Journal of Technology and Behavioral Science].

Abstract

Mental health literacy (MHL) entails literacy regarding both positive mental health and mental illness. Nevertheless, most of MHL programs and measures neglected positive mental health. In positive mental health operationalizations, flourishing and languishing are distinct diagnoses from mental illness. But, no study has yet examined the capacity for the identification of these diagnoses in vignettes. This study followed an experimental design and aimed to 1) validate four video based vignettes of the dual mental illness and mental health model: flourishing, languishing, mental disorder (depression) and moderate mental health (anxiety symptoms and well-being symptoms) developed and adapted for adolescents and adults; 2) tested the efficacy of the videos, accompanied by expert explanations, as an intervention, to promote- MHL. A sample of n = 30 adolescents and n = 30 adults responded to sociobiographic data, the Positive Mental Health Literacy Scale (PosMHLit), the Mental Health Literacy Questionnaire (MHLq), and several questions regarding each video presented. Most adolescents and adults in the experimental groups were able to identify flourishing and depression, but not languishing and moderate mental health. Differences were not found though *t-test* statistics between nor within groups, except for PosMHLit in adolescents. The results suggest this intervention did not improve general MHL, nevertheless, the sample size could have influenced this finding. This research should be replicated with larger samples.

Key-words: Positive Mental Health; Mental Health Literacy; Adolescents; Adults; Intervention;

Introduction

The high prevalence of mental illness and mental health challenges across the globe demands serious attention (WHO, 2021). Additionally, low mental well-being, even in the absence of mental illness, impairs normal functioning, school attendance, productivity at work, and the use of health services (Keyes & Grzywack, 2005; WHO & Caloust Gulbenkian Foundation, 2014). Many people experience silently under-detected mental illness and

underrecognized lack of mental well-being or positive mental health, but do not seek professional help due to mental health stigma (Eisenberg et al., 2015). Given the burden of mental health problems to society and individuals, mental health illness prevention and mental well-being empowerment have been accompanied by efforts to promote mental health literacy (MHL) (Kelly et al., 2007; Kutcher et al., 2016). MHL encompasses knowledge about mental disorders and good mental health, decreased stigma, and increased help-seeking and self-care or self-help behavior (Kutcher et al., 2016). Indeed, MHL has been associated with better mental health outcomes such as less mental distress and more mental well-being (Chao et al., 2020; BjØrnsen et al., 2019). There is recent evidence suggesting that a more self-compassionate attitude (Dschaak et al., 2021), less mental illness stigma and higher MHL predict increased help-seeking (Rüsch et al., 2014; Xu et al., 2018). Contrarily, personal stigma is associated with decreased future intention of help-seeking (Lally et al., 2014).

The well-established evidence about the dual continnum of mental health and illness (Iasiello et al., 2020) suggests that efforts to promote mental health should target both mental well-being promotion and mental illness prevention, as mental well-being is itself an independent output of mental health. Historically, MHL programs preferentially approached mental disorder recognition and prevention, but more recently some MHL interventions already integrate mental well-being contents (BjØrnsen et al., 2018; Kurki et al., 2021; Kutcher et al., 2016; Perry et al., 2014). Nevertheless, mental well-being continues to be unequally evaluated and targeted (Mansfield et al., 2019), and no study has yet portrayed flourishing mental well-being or languishing mental well-being (Keyes, 2005) as categories for diagnose of high mental well-being (i.e. Flourishing) or absence of mental well-being (i.e. Languishing). This is an important gap, as flourishing mental well-being is associated with mental illness and risk of relapse prevention (Schotanus-Dijkstra et al., 2018), and languishing is correlated with less productivity, more impairment at work, and major risk for mental illness (Keyes & Grzywack, 2005). Therefore, the mental well-being continuum and its categorical evaluation should be part of programs and overall research on MHL.

The development and use of digital media to raise awareness about mental health issues increased in the recent years. Video interventions, for example, are referred as advantageous as it demands few financial resources, are easy to access, do not take much time, and are able to reach a generation that prefers image to text (Latif et al., 2016).

The use of videos to promote knowledge about mental disorders and mental well-being has documented efficacy (Skre et al., 2013). Video intervention may facilitate the emergence of empathy (Janouskova et al., 2017) and the reduction of mental illness stigma

(Clement et al., 2012; Ito-Jaeger et al., 2021; Withley et al., 2020), as well as attitude change and increased help-seeking (Gonçalves & Moleiro, 2014). Nevertheless, most videos are illness oriented, focusing on depression (Duran et al., 2020), substance use (Latif et al., 2016) and cyberbullying (Akbulut, 2014), and do not include contents depicting positive mental health or mental well-being.

Recommendations for successful video-interventions include the use of first-person narrative, accompanied by an expert explanation (doctor or clinical information combining biological and psychosocial aspects about the vignette presented), messages oriented towards the recovery and possibility to live a good life even having mental illness (Janouskova et al., 2017). Nonetheless, to the best of our knowledge, no study has yet portrayed both mental ill-health continuums to assess and promote MHL.

This study aims to: a) Develop and validate 4 videos for adolescents and 4 videos for adults representing flourishing, languishing, moderate mental health and mental illness; b) Evaluate if the videos and expert explanations altogether as intervention promote MHL.

Method

Procedure for video development

First stage: Video development and validation

We first reviewed relevant literature to develop the scripts for the videos and its expert explanations. Using the Two-Continuum Model of Mental Health and Mental Illness as a framework, we hypothesized four vignettes - Flourishing; Languishing; Mental Illness and Moderate Mental Health. In the Mental Health Continuum (Keyes, 2005) flourishing is diagnosed when having high levels of well-being in at least one item/measure of hedonic well-being and in six or more items/measures of positive functioning every day or every day during the past month. The first vignette (for both adolescents and adults) had flourishing mental health and absence of mental illness. Languishing, in the Mental Health Continuum, happens when having low levels of one item/measure of hedonic well-being and in six or more items/measures of positive functioning. Languishers are feeling empty, stagnant, with no engagement. In the second vignette there was languishing mental health and absence of mental illness as well. Mental illness, representing the Mental Illness Continuum, was the third vignette, as there were symptoms for the diagnose of major depression and absence of mental well-being. The mental illness vignette was depression, considering its prevalence

across the globe (WHO, 2021). Finally, moderate mental health is when between participants are between flourishing and languishing (Keyes, 2002; 2005). Moderate mental health vignette integrated mental health symptoms and mental illness symptoms (of anxiety) considering the normative prevalence of anxiety in community.

The scripts were written for adolescents and for adults (cf. Table 1). Although the mental health symptoms represented in each vignette category were the same for both adolescents and adults, the content of each vignette has to be coherent with each character developmental task, so it was adapted to its age.

----------Insert Table 1----------

The scripts were written by one researcher that conducted 2 focus groups using a semi-structured interview guide to ask for feedback and improve the scripts. A group of 4 adolescents (2 girls and 2 boys) read, commented and helped to improve the scripts. A group of 4 adults (3 women and 1 men) distributed in two pairs of 2 adults also read, commented and helped to improved these scripts.

Mixed methods content analysis on participants responses was performed, and the scripts were later readjusted according to each participants′ comments. (cf. Table 2). For the linguistic aspects, focus-groups suggestions were essential. It was clear that both adolescents and adults could connect with each vignette content but considered the need of language or form alterations. Flourishing was the vignette most discussed. Adolescents pointed some language alterations to represent Flourishing in adolescence as "being cool" and "feeling safe at home, school and with peers". For example, one adolescent highlighted "*if you want to transmit self-acceptance say it like – when I look at the mirror I like what I see, that is young speech*". Adults suggested language alterations to represent this vignette as showing "positivity" in adult speech.

---------- Table 2----------

Interesting to note, the Flourishing script was the one that was harder to identify and clarify for the adolescents and adults interviewed. The scripts were sent to the research team that revised it and approved its final version.

Second stage: Video production

During this process the first author contacted several artistic institutions to produce the videos. The producer responsible for producing the videos also revised and adjusted the scripts. 8 voluntary actors (2 girls, 2 boys, 2 women, 2 men) collaborated with this research study, giving their informed consent to participate in the study playing the role of the

characters. Informed consent for voluntary actors regarded an explanation of the study and ethical aspects.

After the videos were recorded, the research team met to conclude the videos and decide which neutral content videos the control group would watch. The neutral videos selected were two cooking videos of the same length of the 4 videos and 2 recipes. These videos were the same for adolescents and adults.

Third stage: materials conceptual validation by clinicians and pilot-tests

After videos and expert explanations were finalized three clinicians viewed the videos and the respective expert explanations. Clinicians were asked to give feedback whether the expert explanations were accurate, easy to understand from a public user perspective and rigorous. Expert explanations integrated: a definition of each diagnose and identification of symptoms; a biological and psychosocial explanation of its etiology and risk or protector factors.

Finally, the full procedure was tested. One adolescent collaborated in the pilot-testing phase, performing the full study procedure and one adult testing the adult version of the study.

Empirical study

Sample

A sample of adolescents (n = 30) enrolled the study. Inclusion criteria were a) age between 15 and 18 years old and b) to speak and read Portuguese.

The adolescent sample was composed of 30 adolescents aged between 16 and 18 years old. In the Experimental Group - EG 6 participants (40%) were men and 9 (60%) were woman, 1 Low SES (6.7%), 5 (33.3%) Medium SES and 9 (60%) High SES. Regarding consulting a mental health professional in the past, 73.3% (11) never consulted a psychologist, 26.7% (4) has consulted a psychologist, 93.3% (14) never consulted a psychiatrist and 6.7% (1) consulted a psychiatrist. In the Control Group - CG 5 participants (33.3%) were men and 10 (66.7%) were woman, 4 (26.7%) Medium SES and 11 (73.3%) High SES. Regarding consulting a mental health professional in the past, 60% (9) never consulted a psychologist, 40% (6) has consulted a psychologist, 93.3% (14) never consulted a psychiatrist and 6.7% (1) consulted a psychiatrist.

The adults sample was composed of 31 adults that enrolled the study, although one subject was excluded as his responses were not valid (i.e. he did not seen the videos and continued to answer in automatic pilot). Inclusion criteria were a) to be older than 19 years old and to b) speak, read, and understand Portuguese.

In the EG 6 participants (40%) were men and 9 (60%) were woman, 9 (60%) Medium SES and 6 (40%) High SES. Ages ranged between 35 and 59 years old. Regarding consulting a mental health professional in the past, 60% (9) never consulted a psychologist or a psychiatrist, 40% (6) has consulted a psychologist and a psychiatrist. In the CG 7 participants (46.7%) were men and 8 (53.3%) were woman, 6 (40%) Medium SES and 9 (60%) High SES. Ages ranged between 22 and 59 years old. Regarding consulting a mental health professional in the past, 53.3% (8) never consulted a psychologist, 46.6% (7) has consulted a psychologist, % (11) never consulted a psychiatrist and % (4) consulted a psychiatrist.

Instruments

The Mental Health Literacy Questionnaire (MHLq, Campos et al., 2016): is a self-report measure and evaluates MHL, mostly literacy about mental illness. The adolescents′ version is composed of 33 items ranked in 5-point Likert type scale. The items are divided in three factors: First aid and help-seeking; Knowledge and stereotypes; Self-help strategies. Although 7 additional questions measure the recognition of 7 disorders in vignette model we did not used these part of the questionnaire. The adults version (Dias et al., 2018) is composed by 29 items that compose the factors Knowledge of Mental Health Problems, Erroneous beliefs and Stereotypes, Help-Seeking Strategies and Self-Help. In this study total ranks were used. In the original study internal consistency levels range from 0.79 (adolescents) to .81 (adults). In this study pretest values were α=.82 for adolescents and α=.67 for adults. Posttest α= 85 to adolescents and α= 81 to adults.

Positive Mental Health Literacy Questionnaire (PosMHLq, Maia de Carvalho et al., 2022): This questionnaire is self-rated and assessed literacy about mental well-being and positive mental health. The adolescents version is composed of 23 items ranked in 5-point Likert type scale and the adults version 20 items. It is used as a unidimensional measure. In the original study internal consistency levels of .93 (adolescents) and .92 (adults) are adequate. In this study pretest values were α=.82 for adolescents and α=.67 for adults. Posttest α= 85 to adolescents and α= 81 to adults.

Sociobiographic data and questions regarding the videos: sex, age, NSE, past psychologist use, past psychiatrist use were controlled. After each video visualization participants had to identify each character diagnose "What do you think this person has?" (Participants could select one item: High mental health and absence of mental illness – Flourishing; Absence of mental health and absence of mental illness – Languishing; Presence of Mental Illness and Absence of Mental Health – Depression; Moderate Mental Health and Moderate Mental Illness – Moderate Mental Health) and select advices "What would you recommend to this person?" (Participants could select multiple recommendations: I would recommend going to a psychologist; going to a psychiatrist; tacking self-care; not to be ashamed; to share their well-being; to see their suffering as transitory; to drink alcohol; take natural products).

Ethics and study design

This study is part of a larger one that aims to explore complete mental health and mental health literacy. It was approved by the Scientific Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra (N:12032018) and the Ministry of Education and Science – General Directory of Education (RN: 0668400001).

Adolescents were recruited in schools and adults in workplaces.

Although this study was started in 2019 when several institutions were contacted to participate, in was interrupted due to the pandemic during 2020. After that, only four institutions were still available to collaborate. The data collection started in January 2021 and finished at March 2022.

An explanation of the study containing its aims, procedure, duration, ethical aspects were sent to school and workplace directors. After the study was approved, institutions advertised the study to their students or workers, and those interested in participating could express their interest.

In the days planned by the main author and the institution, each participant guaranteed their informed consent and began the study.

All subjects were assessed face to face, in a room with one researcher, a computer and silent conditions. Randomization of participants was previously performed using RANDOMIZER (www.random.org).

The study had four steps and a follow-up moment: The first step (pretest) was questionnaire responding (in a computer, using Lime Survey platform). The second step was videos watching. The experimental group watched the four videos, responded to a set of

questions regarding vignette identification and help strategies to use and after that, they would read its expert explanation. The control group watched two neutral content videos with the same time duration and its explanation. The videos chosen for the control group were two cooking videos and to replace expert explanation they would read its recipe. The last step (posttest) was post-test questionnaire responding (Figure 1). After the full procedure, one week later (follow-up), a link was sent by email to the participants so that they would fill in the follow-up measures.

Results

Data analysis

IBM SPSS 22.00 software was used to analyze the data. In order to assess the normality and distribution of the data we have conducted *Kolmogorov-Smirnoff* tests with *Shapiro-Wilk* correction. Descriptive statistics were performed to characterize the sample and its response rates, reliability with *Cronbach Alpha*, Independent Samples *T-tests* and Paired Samples *T-Tests* to assess between and within groups differences of the effect of the intervention.

Adolescents

Videos development and validation: Vignette recognition rates

In the adolescents′ sample, Flourishing (N=14; 93.3%) and Mental Illness (N=15 participants ; 100%) were the vignettes with better response rates (cf. Table 3). Recommendations were different from adults (cf. Table 4).

---------- Table 3----------

---------- Table 4----------

Effects of videos and expert explanation on MHL

Independent Samples *t*–tests were performed for the adolescents´ sample, comparing EG and CG. No differences were found between groups for MHLq at pretest GC (*M*= 141.00; *SD* = 8.29) and GE (*M* = 143.67; *SD*= 10.46) (*T* [28]= -.774; *p*= .445) or posttest GC (*M*= 140.47; *SD*= 8.56) GE (*M*= 144.13; *SD*=11.15) (T [28]= -1.010; *p*= .321). The

same for PosMHLit at pretest no differences were found between CG (*M*= 89.20; *SD*= 6.06) and EG (*M*= 92.07; *SD*= 6.17) (*T* [28]= - 1.284; *p*= .210). A significant difference was found at posttest between CG (*M* = 89.73; *SD*= 6.40) and EG (*M*= 95.60; *SD*= 6.98) (*T* [28]= -2.400; *p*= .023).

In the control group, Paired *t-tests* did not find differences between pretest (*M*= 141.00; *SD*= 2.29) and posttest (*M*=140.47 ; *SD*= 8.56) (*T* [14] = 1.054; *p* = .310). Differences in PosMHLit were not significant between pretest (*M*= 89.20; *SD*= 6.06) and posttest (*M*= 89.73; *SD*= 6.40) (*T* [14]= -.752 ; *p* = .465). Paired *t-tests* did not found differences between pretest (*M*= 143.67; *SD*= 10.46) and posttest (*M*= 144.13; *SD*= 11.15) in the EG (*T* [14] = -.259; *p* = .800) for MHLq. The pretest (*M*= 92.07; *SD*= 6.17) and the posttest (*M*= 95.60; *SD*= 6.98) were significant different (*T* [14] = -3.029; *p* = .009) for PosMHLit, effect size 0.651 that is moderate.

Adults

Videos development and validation: recognition rates

In the adults sample, participants correctly identified better Flourishing (N=9; 60%), 4 (26.7%) and Mental illness (N= 14 ; 93.3%) vignettes (cf. Table 5).

Recommendations can be seen in Table 6.

----------Table 5 ----------

----------Table 6----------

Effects of videos and expert explanation

Independent *t-tests* were performed for the adult sample comparing EG and CG. No differences were found for MHLq comparing CG (*M*= 120.87; *SD*= 10.58) and EG (*M*= 120.87; *SD* = 7.40) (*T* [28]= .000; *p* = 1.000) at pretest or posttest for CG (*M*= 121.53 ; *SD*= 9.84) and EG (*M*= 119.87; *SD*= 6.46) (*T* [28] = .548; *p* = .588). PosMHLit found no differences comparing CG at pretest (*M*= 72.67; *SD*= 6.42) and EG (*M*= 71.73; *SD*= 5.64) (*T* [28]= .423; *p* = .676) . The same for posttest CG (*M*= 72.20; *SD*= 5.36) and EG *(M*= 71.73*; SD*= 5.96) (*T* [28]= .226; *p*=. 823).

Differences were not significant in MHLq between pretest (*M*= 120.87 ; *SD*= 10.58) and posttest (*M*= 121.53; *SD*= 9.84) (*T* [14] = -.775; *p* = .451) or in PosMHLit at pretest (*M*= 72.67; *SD*= 6.42) and posttest (*M*= 72.20; *SD*= 1.38) (*T* [14] = .435; *p* = 670) for control group. Paired samples *t-tests* did not found differences between pretest (*M*= 120.87; *SD*=7.40) and posttest (*M*= 119.87; *SD*=6.46) in the EG (*T* [14] = .779; *p* = . 449) for

MHLq. Paired samples *t-tests* for PosMHLit found no differences between pre (M= 71.73 ; SD= 5.64) and posttest (M= 71.73; SD= 5.96) (T= [14] .000; p = 1.000) in this group.

Discussion

Recent developments of MHL definitions encompass the importance of good mental health. Nevertheless, no study has yet operationalized good mental health as the presence of mental well-being, or portrayed vignettes such as Flourishing and Languishing mental health to exhibit the presence or absence of this element. This study aimed to develop four videos-vignettes based on the Mental Health Continuum (Keyes, 2005; 2007), that allow the evaluation of MHL or the promotion of MHL through the explanation of the visualized videos.

The development of the videos and expert explanations followed a multi-stage strategy that resulted in qualitative data from focus-groups with adolescents, adults, clinicians, the research team and quantitative data from pilot test.

An important finding from the focus group procedures is the need to consult the public. All participants suggested language alterations to the vignettes, as they understood the contents but felt that the language form was not illustrative of reality. MHL interventions are communicating science and should therefore be sensitive to form besides content and structure.

The design of the study allowed a first step of the evaluation of MHL using vignette recognition. Before reading the expert explanations, participants gave their responses to a set of questions concerning the diagnose of each character and the advice they would give to them. In the adolescents sample, most adolescents recognized Flourishing. That was a surprising result, because Flourishing was extensively debated during the focus-groups as a "utopia" vignette. Also, all adolescents recognized Mental Illness, that was Depression. It was interesting to note that in both focus-group procedures with adolescents and adults, expert validation stage with clinicians, empirical testing with adolescents and adults, Depression, the Mental Illness vignette was the best recognized case. This result suggests that literacy about depression might be better than other vignettes (Loureiro, 2016). Depression is one of the most prevalent mental disorders and is approached in several media platforms what might help improve depression literacy.

Adolescents had some difficulty at recognizing Languishing and Moderate Mental Health. This result suggests less literacy about lack of mental well-being or positive mental health. One important aspect regarding the operationalization of good mental health (Kutcher et al., 2016) is that the presence of mental illness does not exclude the possible presence of mental well-being or Flourishing, just as the absence of mental illness is not a condition to have good mental health as it is necessary to have mental well-being (Iasiello et al., 2020; Maia de Carvalho et al., 2022).Positive mental health literacy evaluation and promotion in adolescents appears to be in its early start (BjØrnsen et al., 2018; 2019) and should consider both the importance of recognizing the presence and absence of mental well-being.

As suggested by previous studies adults could recognize Depression (Farrer et al., 2008). Adults were more accurate at recognizing Languishing than adolescents. This result matched the focus-group experience and suggests that age may benefit the differentiation between the presence or absence of mental well-being. Mental well-being tends to variate with age, but it is important that people don´t normalize the absence of well-being as a developmental consequence of getting older. More adolescents recognized Flourishing and Moderate Mental Health, than adults, although the identification was high among both samples.

Future studies should explore the capacity of men for vignette recognition. Research suggests men have worst MHL levels than woman (Campos et al., 2016; Dias et al., 2018).

As most MHL has been around community samples, it would also been interesting to explore whether health professionals, especially mental health professionals, have the same capacity for recognizing mental well-being vignettes as mental disorders vignettes. If professionals fail to identify languishing like adolescents and adults it will be difficult to recommend psychological treatment for mental well-being improvement. Future studies should compare the ability of psychologists and psychiatrists to evaluate mental well-being and refer patients languishing.

Academic curriculums have been more oriented towards mental illness than to mental well-being. Only recently positive psychology has been integrated as a course module. For this reason, is possible that some professionals might struggle to identify lack of well-being.

A curious result was that adolescents and adults would recommend more "Going to a psychologist" than "Going to a psychiatrist" in general. Previous studies suggested confidence in mental health professionals as well as sources of informal help (Loureiro, 2016;

Morgado et al., 2022). Adolescents suggested professional help to the characters with lack of mental well-being and the characters with mental illness, which is an important mark of MHL. Adults only suggested "Going to a psychiatrist" to the character that had Depression, which is probably due to a more pathologized idea of mood disorders. Nonetheless, in the adults sample, Languishing was not seen as a case for recommendation to psychologist or psychiatrist consultation by many participants. These results alerts to the need of improving awareness of Languishing consequences in overall mental health and productivity. Professional help can improve mental well-being as there are several Positive Psychology Interventions developed and tested. In this sense it is not only important to recognize Languishing but also to suggest professional help to languishers or at risk of languishing samples.

Taking "Self – care" as perceiving "Suffering as transitory" was the preferred recommendation from both samples. In these samples, "Not being ashamed" was very much recommended, while "Not to play the victim" was not. This result suggests compassionate responses were the most prevalent. Self-Compassion is related to less stigma and better help-seeking (Dschaak et al., 2021; Heath et al., 2018; Hilbert et al., 2014). Drinking alcohol had a low rate of response in general, so not only recognition was high but also the actions participants would perform were adequate.

Results from pre-post analyses using paired and independent samples *t*-tests suggested that the intervention did not improve MHL in the collected samples, except for positive MHL in adolescents. Nevertheless, this result might be associated with the baseline levels of MHL from the participants, that were quite above the medium for both adolescents and adults. There was less space for increase in MHL. But on another perspective, this intervention might be more useful for improving positive mental health literacy than literacy about mental illness, as the majority of videos focus on the presence or absence of mental well-being. Future studies, should, therefore, replicate this research using samples with lower levels of MHL.

The fact that positive MHL was enhanced in the adolescents′ sample, even though their levels were already high, must be interpreted considering their developmental stage. It is possible that mental disorders are taught in classes whereas mental well-being not. In this sense, students might have a better awareness of mental illness than mental health. But if teachers are unaware of the importance of mental well-being for mental health it will be more difficult to educate students. Mental well-being is particularly important during adolescence as it is a protector factor from mental illness and the first onset of mental disorders start

during adolescence (WHO, 2021). If adolescents have low mental well-being literacy, their ability to recognize low levels of mental well-being and ask for help is limited.

No adolescent has responded to the follow-up email. In the adults sample only 8 answered. In this sense, the sample size of the follow-up moments did not allow further and more robust analyses.

This study presents several limitations. The first and more important limitation was the sample level of MHL and the sample size. This study should be replicated with bigger and less educated samples. It was an initial goal to collect a bigger sample, but as COVID pandemic started the study had to be on pause for a long period of time and once it was started the research team has defined it would be a pilot-testing design with smaller sample. It would also have been important to have follow-up data. While pre-post moments were face-to-face, follow-up measures were sent by email. As the research team could not control this assessment, several participants dropped out.

Even though there were limitations, some strengths also support the design of the study. This is the first study developing and testing four vignettes in video reflecting Flourishing, Languishing, Mental Illness and Moderate Mental Health, that may be used as instrument of evaluation alone or part of an intervention for MHL promotion if used with expert explanations. All video-vignettes were adjusted to the developmental phase of the participants (Mansfield et al., 2020). There was a multi-stage and mixed method strategy for the development of the intervention. Randomization and control group were used respecting experimental design. Finally, two developmental groups were compared using reliable instruments (Wei et al., 2016), allowing for the hypothesis that this intervention might be proper to promote literacy about mental well-being in adolescents but future studies are needed to explore this intervention with adults.

Conclusion

This pilot-study suggests future research is needed to allow the efficacy of this video intervention to promote MHL.

Although it may be useful to increase literacy in mental well-being in adolescents, the sample collected does not allow the assumption that the intervention is not adequate to promote mental well-being literacy in less educated adults and literacy about mental illness

in several developmental groups. Follow-up assessment should be strengthened as it would be an important measure to compare with pre-test.

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The first and the second author had the idea for the article. All authors contributed for the conception and design of the study. The first author performed the literature review, data collection, preparation and analysis and wrote the first draft. The second, the third and the last author revised the manuscript.

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Tables

Table 1

Scripts for the four videos per developmental group

Adolescents	Adults
Flourishing/lack of mental illness	**Flourishing/lack of mental illness**
My name is Joana, I am 18 years old and I feel good (positive affect). When I look at the mirror I like what I see. It hasn't always been like this, but as I grow older I accept myself more and relativize more (self-acceptance). Not all things are good in my life but I always try like to look at the bright side. At school, I feel good in my group of friends (positive relations) (social integration) and I notice that teachers appreciate when I participate in class (social contribution). I have my opinion, no matter what others think, and I like to share it (autonomy). I started doing volunteer (social growth) and this experience has been changing the way I see things (personal growth): I see that any person, at any age, can be useful for society and that I like to help others. I also see that anyone, at any age, can go throw hard times. And you know what? We shouldn´t be ashamed of being helped. If I am sad I talk with my friends/my parents or I do things that I like.	My name is Inês, I am 65 years and I feel good (positive affect). It hasn't always been like this, but as I grow older I accept myself more and relativize more (self-acceptance). Not all things are good in my life but I always try like to look at the bright side. As I am getting retired soon and my daughters live abroad I started preparing this next phase. In free time I started going to the Senior University and I feel good there (social integration). It´s a nice place, we debate ideas and community projects, my participation is appreciated (social contribution). I have my opinion, no matter what others think, and I like to share it (autonomy). I started doing volunteer (social growth) and this experience has been changing the way I see things (personal growth): I see that any person, at any age, can be useful for society and that I like to help others. I also see that anyone, at any age, can go throw hard times. In those moments we shouldn´t be ashamed of being helped. If I am sad I talk with my friends/family or I do things that I like.
Languishing	**Languishing**
My name is Philip, I am 15 years old and I feel my life is stagnant. In my daily routine I feel like if I was on automatic pilot mode, I go from school to home and from home to school, I go throw the same places and people and I don´t feel anything. I am not suffering, I have a normal life, good friends,	My name is Richard, I am 40 years old and I feel my life is stagnant. In my daily routine I feel like if I was on automatic pilot mode, I go from work to home and from home to work, I go throw the same places and people and I don´t feel anything. I am not suffering, I have a normal life, good friends, good work, a

good school grades, a spectacular family but I just don´t feel and satisfaction or passion. It´s like "I am here just being" and not knowing what I want to do after secondary school looks like a reflex of that. Sometimes I just wonder what´s the purpose of all of this. I never shared this emptiness with anyone.

spectacular family, a nice home but I just don´t feel and satisfaction or passion. It´s like "I am here just being" and not having a life beyond routines looks like a reflex of that. Sometimes I just wonder what´s the purpose of all of this. I never shared this emptiness with anyone.

Mental illness/ lack of well-being

My name is Ana, I am 16 years old and I don't know how I got here. I am different from most people of my age. While everyone enjoys going to school and hanging out at night for me everything is so difficult.

Everyday it´s hard to wake up. I feel sad, with no energy, I don´t want to eat or to be with people, I just feel like sleeping. Going out of my room makes me anxious and I don´t have motivation or concentration to study. I wanted to give up on school. But nobody understands that and I feel everyone is criticizing me. When someone from school or my family says anything about me, I keep hours and hours thinking about it and I feel irritated that I didn't respond to that. I am ashamed of all of this…and I don´t want nobody to know it so I try to be unnoticed.

Mental illness/ lack of well-being

My name is Laura, I am 50 years old and I don´t know how I got here. I know I am different from most people of my age. Some had an easy life and for me everything became difficult. Everyday it´s hard to wake up. I feel sad, with no energy, I don´t want to eat or to be with people, I just feel like sleeping. Going out of my home makes me anxious and I don´t have motivation or concentration to study. I wanted to get retired. But nobody understands me and I feel everyone is criticizing me. When my sons or my husband says anything about me, I keep hours and hours thinking anout it and I feel irritated that I didn't respond to that. I am ashamed of all of this…and I don´t want nobody to know it so I try to be unnoticed.

Moderate mental health and mental illness

My name is Afonso, I am 17 years old, since I was a kid I am perfectionist and I get nervous when I don´t do things as I wanted. If I had a paper to present in front of the class, in the days before, I would start eating

Moderate mental health and mental illness

My name is Guilherme, I am 58 years old, since I was a kid I am perfectionist and I get nervous when I don´t do things as I wanted. If I had an important meeting with by director, in the days before, I would start eating worse, thinking a lot

worse, thinking a lot whether I was going to fail and I rehearsed till I got exhausted (environmental mastery). I became equally demanding on others because I thought… "If I give everything, so should do them!". But in a certain moment I understood that if I push boundaries to much it doesn´t work well … It makes feel bad and puts others away. That moment I became more aware of myself (personal growth), that this is my difficulty cause everyone has their own. I am often still struggling with this, but I have been learning to take a step back at those moments, not to being so harsh on me and others (positive relations)… And taking care in spite of just demanding actually feels good, you know? (positive affect)

Also, I noticed that when I am stressed I´m not 100% like that. Stress goes and comes and goes again. That has been allowing me to feel more peaceful and not take things so seriously (self-acceptance). I must be more patient with me, others still love me even if I fail (social acceptance).

whether I was going to fail and I rehearsed till I got exhausted (environmental mastery). I became equally demanding on others because I thought that If I give my best, so should do them. But in a certain moment I understood that if I push boundaries to much it doesn´t work well… It makes feel bad and puts others away. I think my divorce was a result of that. That moment I became more aware of myself (personal growth), that this is my difficulty cause everyone has their own. I am often still struggling with this, but I have been learning to take a step back at those moments, not to being so harsh on me and others (positive relations)… And taking care in spite of just demanding actually feels good, you know?

Also, I noticed that when I am stressed I´m not 100% like that. Stress goes and comes and goes again. That has been allowing me to feel more peaceful and not take things so seriously (self-acceptance). I must be more patient with me, others still love me even if I fail (social acceptance).

Table 2

Content analysis from focus-group

Developmental Group	Vignette	Categories	Language suggestions
Adolescents			
	Flourishing/lack of mental illness	Unrealistic (4)	Several
		Superficiality of Flourishing (1)	
		Lack of purpose in adolescents (1)	
	Languishing/ lack of mental illness	Depression (2)	Several
		Not depression (1)	
		Depressing (1)	
		Autism (1)	
		Nihilism (1)	
	Mental illness/lack of mental well-being	Realistic (4) Depression (4)	No
	Moderate mental health and mental illness	Realistic (4)	No
Adults			
	Flourishing/lack of mental illness	Positivity (1)	Several
		Resilience, perseverance, values (1)	
		Fake (1)	
		Realistic (1)	
	Languishing/ lack of mental illness	Depression (2)	Several
		Not depression (1)	
		Lack of satisfaction, motivation (1)	
		Boredom (1)	
	Mental illness/lack of mental well-being	Realistic (4) Depression (4)	No
	Moderate mental health and mental illness	Realistic (4)	No
		Strange (1)	

Table 3

Vignette recognition in the adolescent sample (N=15)

Answers	Vignette 1 (Flourishing)	Vignette 2 (Languishing)	Vignette 3 (Mental Illness)	Vignette 3 (Moderate Mental Health)
Flourishing	14	0	0	1
Languishing	0	10	1	4
Mental Illness	0	0	15	0
Moderate Mental Health	1	1	0	13

Table 4

Vignette recognition in the adults sample (N=15)

Answers	Vignette 1 (Flourishing)	Vignette 2 (Languishing)	Vignette 3 (Mental Illness)	Vignette 3 (Moderate Mental Health)
Flourishing	9	0	0	5
Languishing	0	12	0	3
Mental Illness	0	3	12	0
Moderate Mental Health	1	5	1	8

Table 5

What would you recommend to this person? Adolescents responses (N= 15)

	Vignette 1 (Flourishing)	Vignette 2 (Languishing)	Vignette 3 (Mental Illness)	Vignette 3 (Moderate Mental Health)
Adolescents				
I would recommend going to a psychologist	0 (100%)	10 (66.7%)	14 (93.3%)	5 (33.3%)
I would recommend going to a psychiatrist	0 (100%)	1 (6.7%)	7 (46.7%)	1 (6.7%)
I would recommend taking self-care	0 (0%)	10 (66.7%)	9 (60%)	5 (33.3%)
I would recommend not to be ashamed	2 (13.3%)	3 (20%)	13 (86.7%)	4 (26.7%)
I would recommend to share their well-being	15 (100%)	1 (6.7%)	1 (6.7%)	3 20%
I would recommend to see suffering as transitory	3 20%	9 (60%)	11 (73.3%)	5 (33.3%)
I would recommend to take natural products	0	0	0	0
I would recommend to drink alcohol	0	1 (6.7%)	0	1 (6.7%)
I would recommend not to play the victim	0	0	0	0

Table 6

What would you recommend to this person? Adults responses (N= 15)

	Vignette 1 (Flourishing)	Vignette 2 (Languishing)	Vignette 3 (Mental Illness)	Vignette 3 (Moderate Mental Health)
Adults				
I would recommend going to a psychologist	2 (13.3%)	5 (33.3%)	8 (53.3%)	5 (33.3%)
I would recommend going to a psychiatrist	0	0	5 (33.3%)	0
I would recommend taking self-care	0 (%)	2 (13.3%)	7 (46.7%)	0 (%)
I would recommend not to be ashamed	1 (6.7%)	2 (13.3%)	9 (60%)	7 (46.7%)
I would recommend to share their well-being	11 (73.3%)	2 (13.3%)	0	5 (33.3%)
I would recommend to see suffering as transitory	4 (26.7%)	1 (6.7%)	3 (20%)	7 (46.7%)
I would recommend to take natural products	0	0	0	0
I would recommend to drink alcohol	0	1 (6.7%)	0	0
I would recommend not to play the victim	0	0	1 (6.7%)	0

STUDY VIII - PILOT TESTING THE EFFICACY OF A MENTAL HEALTH LITERACY PROGRAM ON MENTAL HEALTH, SELF-COMPASSION, COPING, AND HOPE

Carvalho, M., Vale-Dias, M.L., Sckvarc, D., & Carvalho, S. (2023). Pilot testing the efficacy of a mental health literacy program on mental health, self-compassion, coping, and hope. [Manuscript submitted for publication at Journal of Adult Development].

Abstract

Literature suggests mental health literacy (MHL) programs effectively promote good mental health indicators. Nonetheless, MHL programs have not successfully integrated good mental health and mental illness contents and efficacy studies have overlooked coping, hope, and self-compassion, which are key to mental health. This study aims to test the efficacy of a 4-session MHL program.

This controlled pilot study compares results of experimental condition (MHL program; n = 19) and control condition (wait-list control; n =14) in three assessment moments (pre-intervention, post-intervention, 3-month follow-up) using Intention to Treat (ITT) analysis and Reliable Change Index (RCI). Participants: adults working in unemployment centers. Primary outcomes: negative MHL; positive MHL; Secondary outcomes: mental health, coping, self-compassion, hope.

ITT analysis did not find interaction (Time x Group) effects, except for anxiety and positive symptomatology, which seemed to be significantly lower in the control condition. Within-group changes were found over time, particularly significant increases in emotional and instrumental support coping in the experimental condition and decreases in psychopathological symptoms in the control condition. RCI found more participants significantly increased compassionate responding in experimental condition, and more participants increased uncompassionate self-responding in the control condition.

Implications for future research and preventive practice are discussed.

Public significance statement: Self-compassion, using instrumental support coping and social and emotional support coping improved after this complete mental health literacy intervention for adults.

Key-words: Mental health literacy; Positive mental health literacy; Coping; Self-Compassion; Hope;

Introduction

Mental health literacy (MHL; Jorm et al., 1997) has become outstandingly popular to the general public and increasingly present in different media outlets, while concomitantly the scientific community alerts to the concerning growth in mental health (Bjørnsen et al., 2017; Chao et al., 2020; Maia de Carvalho et al., 2022).

MHL initial definition contemplated elements referring to mental illness identification, prevention, and management, which included the acknowledgment and ability to identify different mental disorders and mental distress, the recognition of its risk factors and etiology, the ability to engage in help-seeking and help-giving behaviors, and decreased mental illness stigma and self-help strategies (Jorm et al., 1997). More recently, this mental illness-focused conceptualization was expanded to include the acknowledgement of positive mental health indicators, such as mental well-being, the ability to identify and sustain good mental health, and the importance of self-care (Kutcher et al., 2016).

Several MHL interventions were developed and tested under the hypothesis that MHL was associated with better help-seeking, with help-giving, and with positive mental health outcomes (Bjørnsen et al., 2018; Kutcher et al., 2016; Rüsch et al., 2014; Wei et al., 2015). Research suggests people with low levels of MHL present more stigmatizing attitudes towards their own mental illnesses, which mat contribute to the reported delay in help-seeking among people with mental illness (Eisenberg et al., 2009; Lally et al., 2013; Gulliver et al., 2010; Velasco et al., 2020). Growing evidence from systematic reviews and meta-analyses suggest the long-term efficacy of MHL interventions (Alonso et al., 2019; Lo et al., 2017; Xu et al., 2018), in at least one component of MHL (e.g., knowledge and recognition, help-seeking efficacy, stigma; Ito-Jaeger et al., 2021) whether through face-to-face (Frétian et al., 2021) or digital formats (Brijnath et al., 2016). When it comes to digital MHL interventions, studies on mechanisms of change seem to suggest that the ingredients that make them work are content-related. MHL programs seem to effective when they are a) structured, b) with interactive resources (e.g., videos and exercises), c) evidence-based, d) when contents combine psychosocial and biogenetic explanations of mental ill-health, e) when it provides a hopeful stance towards mental illness (e.g., when the possibility of recovery in presented), and f) when personal narratives from people with mental illness are included (Brijnath et al., 2016; Janoušková et al., 2017). The key ingredients of face-to-face programs are still underexplored.

As MHL appears to be particularly important for a healthy development (Kutcher et al., 2016), and schools are a developmental context for mental health promotion (Cairns & Rosseto, 2021), numerous MHL programs were designed for children. These include the Mental Health for Everyone (Skre et al., 2013), Finding Space for Mental Health (Dias et al., 2018), and School Space (Chisholm et al., 2016). Adolescents have also been a target of several MHL interventions such as HeadStrong (Perry et al., 2014), Deep, Making the Link (Lubman et al., 2016) and ProlisMental (Morgado et al., 2022). However, there is a knowledge

gap on the impact of MHL in real world settings (Cairns & Rossetto, 2021), particularly their benefits to the mental health of adults who are not in educational fields nor prospected to deliver MHL programs to their students.

Adulthood is when most mental ill-health problems occur. Research suggests that not only mental illness rates continue to grow in the adult population, the treatment gap (i.e., true prevalence versus treated prevalence) itself have not disappeared (Henderson et al., 2013). Mental problems are associated with many costs in quality of life and work performance. Additionally, mental illness stigma limits access to health care, education, employment, and increases the risk for several forms of abuse (Eisenberg et al., 2013; Gronholm et al., 2017). Studies suggest that the benefits of MHL interventions increase with age (Campos et al., 2018), which may be interpreted as a result from increased complex cognitive skills and personal experiences inherent in adulthood that may facilitate the understanding of many aspects of MHL.

The Guide (Kutcher et al., 2016) and the Mental Health First Aid (Kitchener & Jorm, 2002) are two exceptions to the relatively small attention currently paid by MHL research with samples of adults. The Guide is a curriculum based MHL intervention that targets both mental well-being and mental illness, help-seeking, and stigma. Nonetheless, the Guide presents limited generalizability as it was developed and adapted for school settings (e.g., teacher training, students training) and thus not easily transferable to community or institutional settings. On the other hand, the Mental Health First Aid was tailored to target specifically adults, and was implemented in a community sample with results suggesting its feasibility and efficacy (Jorm & Reavley, 2019). It is a program designed to educate first aiders on how to provide help to someone experiencing a mental health crisis. Therefore, it focuses on empathic and interpersonal skills, as well as on promoting the ability to identify mental illness symptoms. But a common problem regarding Mental Health First Aid and other MHL programs refers to the overfocus on mental illness literacy, and a lack of positive mental health elements of MHL.

Most MHL interventions address a significant higher percentage of mental illness topics than mental well-being contents, therefore neglecting the current definition of MHL (Kutcher et al., 2016), which highlights good mental health and self-care as core ingredients. To make up for this downside, a few researchers have developed MHL interventions exclusively targeting positive mental health contents. For example, Nest is a positive MHL intervention for adolescents exclusively focused on good mental health with promising

results (Bjørnsen et al., 2018), but nonetheless neglecting the mental illness element of a complete MHL conceptualization (Keyes, 2005).

The lack of balance in mental health and mental illness contents is consistent with the absence of a clear conceptual framework for the operationalization of mental health in most MHL interventions. Mental disorders are defined and differentiated as part of mental health, and mental well-being is approached as an essential element of mental health. However, these interrelated dimensions of mental health are not always portrayed as part of one construct. This is also reflected in the design and measurement of MHL interventions. MHL is known to be associated with mental high well-being and low mental distress (BjØrnsen et al., 2017, 2018; Bonabi et al., 2016; Chao et al., 2020; Lam, 2014; Rüsch et al., 2014). Nevertheless, the main outputs of MHL interventions are MHL, help-seeking, stigma, and few studies control mental health outcomes (e.g., mental well-being and mental illness) and secondary coping-related outcomes, such as self-care skills. For example, studies suggest that MHL is related to coping strategies (Maia de Carvalho & Vale-Dias, 2021). Research also seems to emphasize the mental health protective role of hope, due to its relationship with increased personal agency, goal-oriented behavior, and recognition of strategies to attain those goals (e.g., Gallagher & Lopez, 2009). Nevertheless, although hope is recognized as a relevant output of MHL (e.g., Dermott et al., 2017; Laranjeira & Querido, 2022), studies have not tested its role in MHL programs. Additionally, self-compassion, a construct derived from Buddhist traditions (see Feldman & Kuyken, 2011 for an in-depth discussion) and defined as a sensitivity to personal suffering and motivation to prevent and/or alleviate it (Dalai Lama, 2001; Gilbert, 2005), has been vastly studied in the context of mental health promotion. There is growing evidence that self-compassion positively impacts both physical and mental health (e.g., Dunne et al., 2018; MacBeth & Gumley, 2012) through the activation of brain regions associated with positive affect and affiliation (e.g., orbitofrontal cortex, putamen, pallidum, and ventral tegmental area; Klimecki et al., 2013). This suggests that MHL programs may benefit from including contents targeting self-compassionate strategies as preventive measures against mental illness and as overall fosters of well-being. Nonetheless, although self-compassion is associated with less stigma, and more help-seeking and self-help (Dschaak et al., 2021; Heath et al., 2018; Hilbert et al., 2014), to our knowledge MHL efficacy studies have neglected self-compassion in their content design and output measurement.

The current study aimed to develop and pilot test the efficacy of a MHL for adults; control primary (MHL) and secondary outcomes (mental health, coping, hope and self-compassion); explore the relation between demographic variables and outcomes.

Method

Study design and procedure

This study is part of a larger project aiming to test the impact of MHL on mental health and well-being in different age groups. The study was submitted to and approved by the [masked university] (N:24032018).

The study follows a quasi-experimental non-randomized controlled design and compared results from an experimental condition (MHL program; EC) and a control condition (CC) in three time points of measurement: pre-intervention, post-intervention, and 3-month follow-up.

The research team was contacted by a Professional Rehabilitation Center in Portugal, that delivers education to adults that are temporarily in unemployment because of major life crisis such as having work or traffic accidents, chronic illnesses, displacement. The team was asked to deliver an intervention program covering the topics of MHL and mental health promotion in the workplace to the work staff (non mental-health professionals that work as teachers, managers, physical educators, physiotherapy professionals). The study was advertised by the organization, and participants who were interested in taking part of the study received a link that forward to an information sheet where the study aims and ethical considerations were provided, as well as the online battery of questionnaires (through the Limesurvey platform). There were no exclusion criteria since the study was a request from all working staff. All participants gave informed consent, knew about their right to withdraw the study and that data collected was confidential. Participants received the announcement of the study and could choose to enroll or not enroll, without consequences for their career if they choose not to participate. The participation took place during working hours. If participants failed one or more sessions their absence was registered.

The MHL intervention was implemented by the first author and consisted of four weekly three-hour sessions that took place in a workroom at the participants´ workplace. Additionally, there was a pre-intervention focus-group to assess participants expectations about the intervention, to collect their experiences and needs regarding MHL and mental

health promotion. There was also a booster session one month after the intervention finished to rethink of the program and clarify remaining questions.

The control group was recruited from other two institutions of rehabilitation and education in Portugal contacted by the research team. After the directors authorized the participation in the research, participants received an email informing about the study aims and duration and all ethic procedures. Participants enrolling in the study and giving informed consent received an email with the questionnaires at the same measurement points moments the EG did.

MHL Program

The MHL intervention was developed based on an extensive literature review on developmental psychology, clinical psychology, and positive psychology. The conceptual framework underlying the tested MHL program includes Keyes′ complete mental health model (2005, 2007) and Compassion-based models (Gilbert, 2009; Neff, 2003), with a developmental and ecological stance towards mental health, as well as evidence from clinical psychology studies on the biopsychosocial factors that shape the brain and the mind. The intervention also puts great focus on risk and protective factors to mental ill-health. Compassion-based models of mental health, as well as overall positive psychology, are the foundations of the last sessions focused on stigma reduction, help-seeking, and self-care competencies.

The intervention consisted of four sessions. Each session included psychoeducation, videos with different mental health scenarios and case discussion, exercises in groups and pairs, individual exercises (e.g., meditation practices, reflection exercises). Supplementary materials to support the sessions (e.g., spreadsheets that compose the manual of the intervention and exercises) were sent by email to the participants on the day of each session (see Supplementary Material 1).

Participants

The sample of the EC was composed of 19 participants and the CC 14 participants. All participants of EC and CC worked as non-mental health professionals (e.g., teachers, physical educators) working in Education and Professional Rehabilitation Centers for unemployed people, thus potentially interacting with individuals who might experience

mental health challenges (see Supplementary Material 2 for information on participants´ sociodemography)

Instruments

Primary Outcomes.

The Mental Health Literacy Questionnaire (MHLq, Dias et al., 2018) measures MHL using 29 items rated in a 5 Likert-type option scale (rated from 1- Strongly Disagree to 5- Strongly Agree). The MHLq measures MHL in four dimensions: Knowledge of mental health problems; Erroneous beliefs and stereotypes; Help seeking and first aid skills; Self-help strategies. The original study found acceptable internal consistencies ranging from α = .72 to α = .84. The current sample found acceptable Cronbach´s alphas: Knowledge of mental health problems α = .67, Erroneous beliefs and stereotypes α = .55, Help seeking and first aid skills α = .73, Self-help strategies α = .60, and an α = .77 for the total scale.

The Positive Mental Health Literacy Questionnaire (PosMHLit) measures literacy about positive mental health and well-being in 20 items rated in a 5 Likert-type option scale (rated from 1- Strongly Disagree to 5- Strongly Agree). It includes two factors: 1) Characteristics and promoters of positive mental health and well-being, and 2) Vulnerabilities of positive mental health. However, the total rank is extracted from the first factor. The original study suggested a good internal consistency with a Chronbach´s alpha of α = .92. The current sample also suggested a good reliability (α = .93).

Secondary Outcomes.

The Mental Health Continuum Short-Form (MHC-SF; Keyes, 2005; 2007; Portuguese version Fonte, 2021) evaluates positive mental health in three factors: emotional well-being, psychological well-being, and social well-being. The questionnaire encompasses 14 items rated in a 6-point scale (0 – Never; 6 – Everyday). The original study found good levels of internal consistency with Cronbach´s alphas for the Portuguese population of α = .90 for emotional well-being; α = .89 for psychological well-being, α = .85 for social well-being and α = .93 for the total MHC-SF. In the current study good levels were found with Cronbach´s alphas of α = .87 for emotional well-being, α =.89 in psychological well-being and α = .86 in social well-being. Internal consistency of α = .93 was the value for MHC-SF total.

The Brief Symptom Inventory (BSI; Derogatis, 1982/1993; Portuguese version Canavarro, 1999) has nine dimensions of psychopathology: somatization, obsessive-

compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism, a total of positive symptoms, a total symptom, and a global severity index. It uses 53 items ranked in a 5-point type Likert option Scale (rated from 0 = Not at all to 4 = Extremely) to measure psychopathology. The original study found good levels of internal consistency with Cronbach´s alphas for the Portuguese population of α = .80 for somatization; α = .77 for obsessive-compulsive; α = .76 for interpersonal sensitivity; α=.73 for depression; α = .77 for anxiety; α =.76 for hostility; α = .62 for phobic anxiety; α = .72 for paranoid ideation and α = . 62 for psychoticism. In the current study good levels were found with Cronbach´s alphas of somatization α = .90; obsessive-compulsive α = .87; interpersonal sensitivity α = .90; depression α = .88; anxiety α =.82; hostility α = .75; phobic anxiety α = .73; paranoid ideation α = .83; psychoticism α = .82; a total of positive symptoms α =.98.

The Hope Scale (Snyder et al., 1991; Portuguese version Marques et al., 2014) assesses hope as a trait composed of two factors – Agency and Pathways. The instrument has 12 items rated in 8 options (rated from 1- Totally False to 8 – Totally True). The original study found good levels of internal consistency with Cronbach´s alphas for the Portuguese population of α = .79 for Agency; α = .81 Pathways; α = .86 for Total Scale. In the current study acceptable levels were found with Cronbach´s alphas of Agency α =. 57 and Pathways α= =.80 and Hope Total α = .84.

The Brief Cope (Carver, 2007; Portuguese adaptation for adults by Pais-Ribeiro & Tavares, 2004) assesses coping as strategy or style. In this study coping styles were the focus. The instrument has 28 items (rated from 0 – Never do this to 3 – I always do this) that are divided in 14 coping styles – Humor, Using Emotional Support, Using Emotional Support, Self-Distraction, Planning, Denial, Behavioral disengagement, Active Coping, Self-Blame, Positive Reframing, Substance Use, Venting, Acceptance. The original study found acceptable levels of internal consistency for most subscales with Cronbach´s alphas for the Portuguese population of α =.83 for Humor; α =.79 Using Emotional Support; α = .81 Use Instrumental Support; α = .67 Self-Distraction; α= .70 Planning; α= 72 Denial; α= .78 Behavioural Disengagement; α =.65 Active Coping; α =.62 Self-Blame; α =.75 Positive Reframing; α = .81 Substance Use; α = .84 Venting; α = .55 Acceptance; α = .80 Religion. In the current study acceptable levels for most subscales were found with Cronbach´s alphas of α = .87 Humor; α = .83 Using Emotional Support; α = .75 Using Instrumental Support; α = .68 Self-Distraction; α =.66 Planning; α = .89 Denial; α = .65 Behavioral Disengagement;

α =.75 Active Coping; α =.68 Self-Blame; =.68 Positive Reframing; α =.93 Substance Use; α =.81 Venting; α =.63 Acceptance; α = .70 Religion.

The Self-Compassion Scale (SCS) (Neff, 2003; Portuguese version Castilho & Pinto-Gouveia, 2011) is a self-report measure of self-compassion. It is composed of 26 items distributed in 6 factors: Self-Kindness, Common Humanity, Mindfulness, Self-Judgement, Isolation, Over-Identification, Self-Criticism and rated in a 4-point type scale ranging from "0 - Almost Never" to "4 – Almost Always". A total score results from the sum of all 26 factors after reversing scores of self-judgment, isolation and overidentification. The original study found good levels of internal consistency with Cronbach´s alphas for the Portuguese population α= .84 Self-Kindness; α= .77 Common Humanity; α= .73 Mindfulness; α= .82 Self-Judgement; α=.75 Isolation; α=.78 Overidentification and α= .84 for the total. The current study found good values of internal consistency with Cronbach´s alphas of: α =.94 Self-kindness; α = .87 Common Humanity; Mindfulness α = .85; α = .89 Self-judgement; α = .63 Isolation; α = .81 Overidentification, and total Self-Compassion α = .95.

Data Analysis

Data we analyzed for outcome efficacy primarily through two methods. First, we attempted to fit linear mixed models to examine for statistically significant change over time, moderated by allocation. Due to the exploratory nature of the analyses, we examined for possibility of linear and non-linear (quadratic) simple effects and post-hoc differences, adjusted for multiple comparisons using the Bonferroni technique. We performed normality assumption testing for skew, kurtosis, outliers, and linearity on all outcomes before analyses were performed. No significant deviations were detected, and so no transformations or other manipulations were required. Intraclass correlation analysis revealed that the data was sufficient for linear models in all outcomes.

Second, we calculated the reliable change index (RCI) for each outcome for baseline to post-intervention and baseline to follow-up timepoints. The RCI is calculated as a participant score at pre-intervention minus score at post-intervention divided by the standard error of the difference (Jacobson & Truax, 1991). Reliability coefficients were obtained from published materials or estimated from expected standard deviations (*see method section for sources*). RCI values are considered clinically significant when exceeding ±1.96. For each of the outcome variables analyzed in this dataset, negative RCI values represent a decline in score from pre-to-post intervention, and positive values an increase. Finally, we performed bivariate correlations for demographic variables and RCIs for each outcome variable to

examine for trends towards change after interventions, that is, from baseline to post-intervention and from baseline to follow-up. This final analysis was limited to participants in the experimental condition (n = 19).

Results

Baseline differences between conditions

We observed few differences between the experimental and control conditions at baseline. Participants in the experimental condition were more likely to report having a history of mental health education and current thriving, and higher levels of erroneous beliefs and self-distraction, but lower levels of denial, interpersonal sensitivity, and paranoid ideation compared to controls (see Supplementary Material 3).

Intention to Treatment

We observed a small number of significant effects across the range of outcomes examined. We observed a significant interaction of condition and time for anxiety (F [2, 43.57] = 4.213 , p = .0212), driven predominantly through a significant linear decline for the control group (b = -0.32, t [44] = -3.6, p <.001). No decline is observed within the experimental group for this outcome. We also observed a significant interaction of condition and time for overall symptomatology (F [2, 42.5] = 4.7235, p = .014), driven predominantly through a significant linear decline for the control group that is not present for the experimental group (b = -0.25, t (43) = -3.87, p <.001). A few within-groups changes also were observed for numerous outcomes without reaching constituting significant interaction effects with condition allocation. For example, ITT results suggest within-group increase of erroneous beliefs in the control condition at T2 (t [50] = -2.13, p = .04), as well as increase in positive reframing at T3 (t [45] = -2.34, p = .024). In the experimental condition, significant increases occurred at T3 in coping with humor (t [43] = -2.34, p = .024), emotional support (t [42] = -2.63, p = .012), and instrumental support (t [43] = -2.51, p = .016). Interestingly, a within-group decrease in hope was found in the experimental condition from T2 to T3 (t [44] = 10.98, p <.001), and a decrease of overall symptomatology was found in the control condition at T2 (t [42] = 3.12, p <.001) (see ITT complete results in Supplementary Material 4).

Reliable Change Index (RCI) and correlations with sociodemographic variables

Participants' RCI

We observed some evidence for reliable change of outcomes between pre-intervention and post-intervention, as well as pre-intervention and follow-up. We observed little difference in the number of participants reporting a reliable change (either negative or positive) across most outcomes, with the notable exception of self-compassion (see columns 7 to 13, Supplementary Material 5). Results show that at both post-intervention and follow-up, more participants in the experimental condition presented reliably increased levels in the total and positive dimensions of the self-compassion scale (self-kindness, common humanity, mindfulness) than in the control condition. Contrarily, more participants in the control condition presented increased levels in the negative dimensions of the self-compassion scale (self-judgment, isolation, overidentification).

Reliable change index correlates

We observed significant correlations between female gender and increased positive RCI for somatization ($r = 0.786$, $p<.001$), depression ($r = 0.657$, $p<.05$), and global symptom severity ($r = 0.704$, $p<.05$). Significant negative correlation for age and substance use coping ($r = -0.631$, $p<.001$), and a positive for obsessive compulsive symptoms ($r = 0.614$, $p<.05$). Prior experience with mental health education was positively correlated for greater RCI for self-distraction coping ($r = 0.681$, $p<.05$). Past psychologist consultation was negatively correlated with RCI for mental health literacy knowledge ($r = -0.691$, $p<.05$), erroneous beliefs ($r = -0.631$, $p<.05$), and self-help ($r = -0.632$, $p<.05$), and overall mental health literacy ($r = -0.662$, $p<.05$). It was also negatively correlated with positive mental health literacy ($r = -0.733$, $p<.001$), self-distraction coping ($r = -0.651$, $p<.05$), and emotional wellbeing ($r = -0.667$, $p<.05$). Having a close family member with a mental illness was negatively associated with self-kindness RCI ($r = -0.617$, $p<.05$). Female gender is positively associated with RCI for first aid literacy ($r = 0.581$, $p<.05$). Age is positively associated with RCI for common humanity ($r = 0.822$, $p<.001$), active coping ($r = 0.556$, $p<.05$), and phobic anxiety ($r = 0.605$, $p<.05$). Past psychologist consultation is negatively associated with erroneous beliefs RCI ($r = -0.593$, $p<.05$). Close family mental history is negatively associated with erroneous beliefs ($r = -0.612$, $p<.05$) and self-distraction coping ($r = -0.526$, $p<.05$). Past psychiatrist consultation was negatively associated with erroneous beliefs ($r = -0.605$, $p<.05$), self-distraction coping ($r = -0.637$, $p<.05$), behavioral disengagement coping ($r = 0.562$, $p<.05$),

and positively associated with denial coping (r = 0.572, p<.05) and interpersonal sensitivity symptomatology (r = 0.598, p<.05) RCIs (see Supplementary Material 6).

Attrition sensitivity analysis: comparison of pre-post completers and dropouts

We performed a comparative analysis for baseline values of demographics and outcomes for participants who dropped out of the study before completing the post-intervention assessments, and those who did not drop out. Our analysis suggests that participants who were lost to post-intervention follow-up reported significant lower levels of self-help literacy (M = 1.8, t[30] = -3.79, p < .001), positive mental health literacy (M = 6.04, t[30] =-2.732, p =.01), and common humanity (M = 2.62, t[30] = -2.862, p = .03) compared to participants who did not drop out. No other differences were observed.

Discussion

Research shows that MHL interventions increase mental health status and help-seeking attitudes (e.g., Bjørnsen et al., 2018; Kutcher et al., 2016; Rüsch et al., 2014; Wei et al., 2015). However, few studies have explored its effect on psychological processes such as coping and self-compassion, which are known factors associated with more mental health and less psychopathological symptoms (e.g., Taylor & Stanton, 2007; Muris & Petrocchi, 2017). The current controlled study aimed to develop and pilot test the efficacy of a 4-session group intervention tailored to promote mental health literacy and its effects on several mental health outcomes.

Due to conflicting schedules and availability, the current study did not follow a randomized design. Thus, baseline differences in studied variables between the experimental and control conditions were tested. Results showed that participants in the experimental condition presented significantly more history of mental health education, flourishing, erroneous beliefs and use of self-distraction, and lower levels of denial coping, interpersonal sensitivity, and paranoid ideation compared to those in the control condition. This result should be taken into consideration when interpreting further results, as differences between groups (or lack thereof) might have been influenced by differences at baseline between groups. For example, the fact that participants in the experimental condition seemed to already present a history of mental health education pre-intervention might explain few

significant results after the intervention due to potential ceiling effects (see Liu & Wang, 2021).

An ITT analysis was conducted to compare results between the experimental and control conditions. Overall, results did not show a significant interaction effect indicative of significant differences between the experimental and control conditions, except for anxiety and global symptomatology, with participants in the control condition presenting significantly lower mean levels of anxiety and total positive symptoms over time. This significant interaction effect is predominantly due to a significant reduction in anxiety and overall symptomatology from baseline to follow-up in the control condition, while the experimental condition did not. Although not constituting significant differences, it should be noted that the control condition presented higher mean levels of both anxiety and overall symptomatology at baseline, which might explain the room for an improvement throughout time. Other MHL intervention studies have found non-significant changes in symptomatology (e.g., depressive symptoms and anxiety) and well-being at post-intervention and follow-up (e.g., King et al., 2022). In fact, by comparing the Portuguese normative data on BSI anxiety (M = 0.94) (Canavarro, 2007), it shows that while the experimental condition in the current study presented lower mean levels of anxiety (M = 0.68), the control condition presented higher mean levels (M = 1.05) at baseline, which suggests that participants in the control condition were experiencing more anxiety than the mean in the Portuguese population. Given that this was a passive control condition (wait list), changes throughout cannot be attributed to a placebo effect. However, literature shows that there are spontaneous improvements with medium effects in psychopathological symptoms in wait list controls in clinical psychology trials (e.g., Rutherford et al., 2012), which calls for a more nuanced examination of confounding variables when testing intervention efficacy. For example, future studies on the efficacy of MHL programs should conduct follow-up brief interviews exploring recent stressful life events and associated psychological processes (e.g., cognitive appraisals), given that these seem to contribute to psychopathological symptoms (e.g., Cohen et al., 2019), particularly in the context of the COVID pandemic (e.g., Wand et al., 2022), which was the contextual background of the current study.

In addition to compare mean scores between experimental and control conditions, we have conducted reliable change analyses to explore individual clinically significant changes in each condition. Overall, results suggest a similar pattern of non-reliable change, except for self-compassion. Results show that more participants in the experimental condition presented significant increases in the self-compassion (total scale) and its positive dimensions

(self-kindness, mindfulness, common humanity), while in the control condition more participants presented increases in uncompassionate self-responding dimensions (self-judgment, isolation, common humanity). These results seem to suggest that a MHL intervention can be effective in promoting self-compassion and/or decreasing self-criticism. To our knowledge, this is the first MHL program that explicitly conceptualizes self-compassion as a key component to include in MHL programs. To include self-compassion as a target of MHL programs aligns with the mounting evidence of the protective role of self-compassion against the development of psychopathological symptoms (Kirby, 2017; MacBeth & Gumley, 2012; Neff et al., 2018; Sommers-Spijkerman, et al., 2018; Trompetter et al., 2017), as well as its impact on well-being and health-promoting behaviors (Dschaak et al., 2021; Heath et al., 2018; Hilbert et al., 2014; Neff & Costigan, 2014 Sirois et al., 2015). The tested MHL program not only focused on psychoeducation-like literacy on the importance of provide compassionate support and help when encountering a person experiencing mental health difficulties, but also promoted compassion literacy by engaging in self-compassionate practices. Future studies should explore whether these changes in self-compassion are translated into compassionate motivation and engaging, given that studies suggest that there are shared neural pathways in receiving and giving compassion to others (Marsh & Kosak, 2015). Research also seems to suggest that compassionate engaging is connected to higher levels of emotional resonance, intelligence, and empathy (e.g., Di Fabio & Saklofske, 2021; Stevens & Taber, 2021), which might contribute to the ability to identify mental health risk factors and implement preventive measures more efficaciously (e.g., Di Bello et al., 2021). In fact, compassion is not exclusively an emotional experience, but a motivation associated with helpful action (Kirby et al., 2017).

Finally, to conduct a more in-depth analysis of which participants presented reliable changes, we conducted a correlation analysis between RCIs and participants´ sociodemographic characteristics. Results suggest that gender was significantly correlated with reliable changes, with women presented significantly more decreases in somatization, depression, and positive symptomatology at post-intervention. Age also seemed to present significant correlations with reliable changes, with younger participants presenting more decrease in substance use coping, and older participants presenting more changes in obsession, common humanity, active coping, and phobic anxiety. These results suggest that MHL programs should be tailored specifically according to sociodemographic factors, given that different demographics might entail content and/or format adaptations. Urban versus rural backgrounds, in addition to education, age, gender, SES and race/ethnicity, may present

different levels of MHL (e.g., Aljassim & Ostini, 2020), thus requiring program adaptations that target the specific literacy needs of these populations. For example, it may be the case that some individuals might be more able to identify mental illness symptoms, but still less likely to be aware of which evidence-base resources would be useful, or even to rate maladaptive coping strategies as helpful (e.g., Griffiths et al., 2009). Differences between completers and dropouts at follow-up seem to suggest that those who present fewer self-help behaviors, less positive MHL, and less common humanity are more likely to dropout from a MHL program. This calls for MHL programs to pay a special attention to those participants, and implement measures that potentially buffer dropout of participants with lower self-help, positive mental health, and common humanity (e.g., a between session phone call; a booster session; in-depth reflection of format - individual versus group delivery).

This study presents several limitations that should be considered when interpreting results. Firstly, the small sample size does not allow for definite conclusion, Future studies should conduct large scale efficacy test of the current MHL program, as well as mediational analysis of mechanisms of change to better assess the specific and unspecific factors that contribute to MHL change. Additionally, although we have controlled for attending psychology/psychiatry services in the past, we have not assessed nor excluded participants with current mental illness. Although extreme outliers where not identified in preliminary data analysis, some participants might present current mental health needs that require specialized clinically focused resources/services. Future studies should conduct semi-structured clinical interviews and consider excluding those who present clinically relevant symptomatology. Future studies should also use randomization in order to enable conclusive interpretations regarding causality, and exclude participants with high levels of MHL in order to avoid ceiling effects. Also, the education level of participants was high, which calls for a replication study in samples of participants with lower education. Additionally, there are concerns regarding the psychometric validity of Brief Cope, given that some factors failed to reach acceptable reliability ($\alpha < .70$) in both the Portuguese validation study and in the current study. Future studies should conduct an in-depth psychometric study of the instrument, and test other factor structures that have better reliability. Although the ITT analysis controlled for the effect of confounding nonrandom dropouts, there may be relevant reasons for participants to dropout that could inform key adaptations that would make it a more feasible program (e.g., session duration, delivery format, confidentiality concerns, program content). Future studies should conduct semi-structured interviews that explore

reasons for dropping out, as well as gather suggestions on which changes would likely contribute to retention.

Conclusions

The current study adds to the literature on MHL by pilot testing a new MHL program that a) conceptually incorporates a complete mental health framework by including both positive mental health and mental illness literacy, b) integrates standard psychoeducation content on etiology and evidence based resources to mental ill-health, as well as positive psychology developments, such as (self-)compassion and compassionate engaging c) promotes self-care not only through informational content, but also with in-session practices (e.g., compassionate imagery). The current controlled pilot test suggests that promoting MHL is a useful way to promote effective coping (e.g., emotional, and instrumental support) and self-compassion, but insufficient to decrease psychopathological symptoms.

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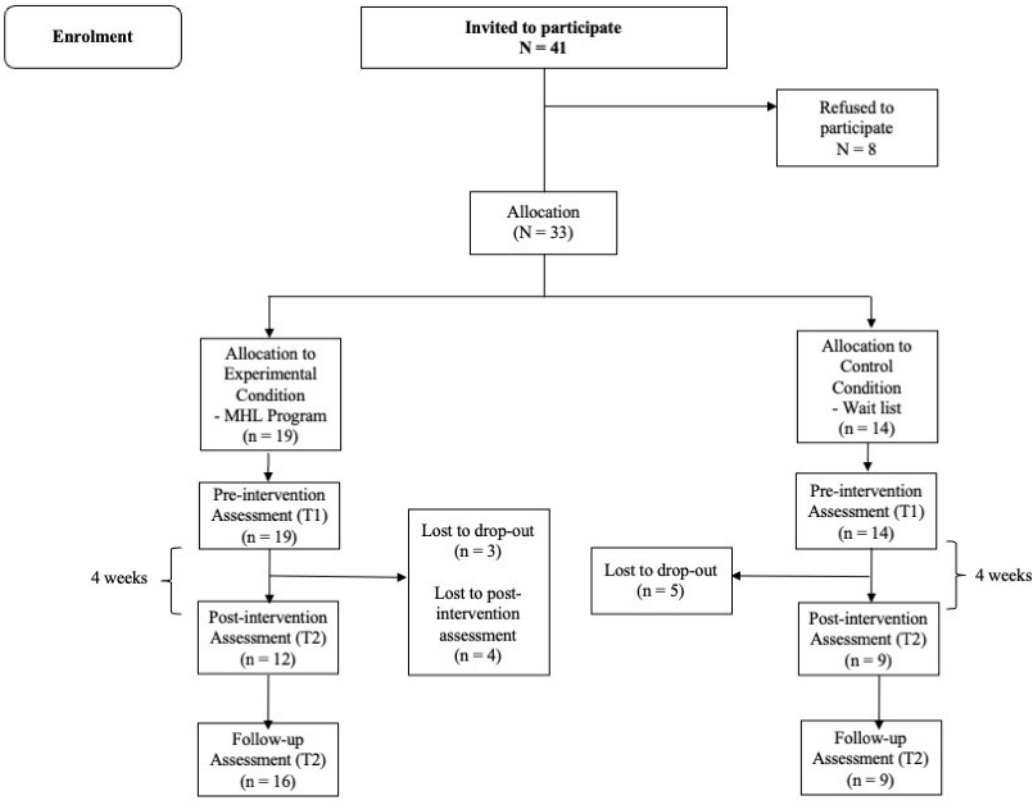

Figure 1. Participants flowchart.

Supplementary Material 1

Intervention overview

Modules	Contents	Exercises
Module 1 The developmental nature of our minds	Biology and genetics Relationship Context Developmental tasks	A developmental reflection
Module 2 Mental health and well-being	Distinguishing mental health and mental illness Defining mental health Components of mental health: the two-continuum model, symptoms of mental health, psychological needs Evidence regarding the importance of positive mental health and well-being for mental health Self-care competencies and protective factors	Values based living: identifying valued areas, needs and limits Three good things gratitude exercise Problem solving exercise The day reflection Gratitude letter
Module 3 Mental illness, symptoms, risk and protective factors	Mental illness definition Risk factors and common mental illnesses Common mental health problems Myths about mental illness	ABC exercise What would you tell a friend Abdominal breathing Pleasure and mastery tasks exercise Self-compassion meditation based on the Self-Compassion Break
Module 4 Asking and giving help with compassion	How do we know we need help? How can we help someone in need?	How would you treat a friend?

Supplementary Material 2

Participants' characteristics (N = 33)

		Experimental Group		Control Group	
		M	SD	M	SD
Age		42.63	9.08	45.69	12.28
		N	**%**	**N**	**%**
Socio-economic status	Low	0	0.00%	0	0.00%
	Medium	19	100.00%	13	100.00%
	High	0	0.00%	0	0.00%
Gender	Masculine	3	15.79%	4	30.77%
	Feminine	16	84.21%	9	69.23%
Previous education in mental health	No	14	73.68%	13	100.00%
	Yes	5	26.32%	0	0.00%
Has consulted psychologist in the past	No	13	68.42%	13	100.00%
	Yes	6	31.58%	0	0.00%
Has consulted Psychiatrist in the past	No	13	68.42%	12	92.31%
	Yes	6	31.58%	1	7.69%
Close relative with history of mental illness	No	11	57.89%	9	69.23%
	Yes	7	36.84%	4	30.77%
	Don´t Know but thinks Yes	1	5.26%	0	0.00%
Distant Family with mental illness history	No	9	47.37%	7	53.85%
	Yes	7	36.84%	5	38.46%
	Don´t Know but thinks Yes	3	15.79%	1	7.69%

Supplementary Material 3

Results from ITT analysis for pretest, posttest and follow-up with experimental group (N=19) and control group (N=14)

	Pretest					Posttest					Follow-up				
	Experimental Group		Control Group			Experimental Group		Control Group			Experimental Group		Control Group		
	Mean	SD	Mean	SD	p	Mean	SD	Mean	SD	p	Mean	SD	Mean	SD	p
Mental Health Literacy															
Knowledge of mental health problems	47.53	4.36	46.92	4.41	0.705	48.83	5.18	46.89	4.62	0.385	49.53	4.72	46.8	5.09	0.182
Erroneous beliefs and stereotypes	33.68	2.16	31.31	4.35	0.049	33.5	1.88	33.56	2.3	0.952	33.87	1.81	32.9	2.42	0.265
Help seeking and first aid skills	25.47	2.89	25.31	3.9	0.891	27.08	2.57	25.44	3.28	0.215	25.8	2.73	25.9	3.75	0.939
Self-help strategies	18.58	1.68	18.31	1.38	0.633	19.25	1.36	17.89	1.76	0.06	19.07	1.49	18.3	1.95	0.276
Mental health literacy (total)	125.26	7.29	121.85	10.12	0.275	128.67	7.56	123.78	9.28	0.199	128.27	6.43	123.9	11.24	0.228
Positive mental health literacy	78.63	6.04	77	7.35	0.497	81	5.8	76.22	7.24	0.109	80.87	5.96	77	7.63	0.169
(Un)Compassionate Self-Responding															

Self-compassion (total)	77.08	14.76	75.67	11.34	0.839	80.67	5.72	76.86	17	0.613	82.25	13.88	83	10.49	0.923
Self-kindness	10.42	3.95	11	5.21	0.723	11.25	4.27	11.11	5.49	0.949	10.87	3.72	11.1	4.36	0.887
Self-judgement	8.84	4.11	9.46	3.55	0.662	7.58	3.96	9.89	3.55	0.184	8.4	3.91	7.5	4.17	0.588
Common humanity	9.63	2.93	10.08	3.86	0.713	10.83	2.92	10.22	4.12	0.694	10.07	3.43	11.1	4.04	0.499
Isolation	7.32	2.5	6.92	3.25	0.702	5.42	2.15	7.78	3.73	0.083	7	2.65	6	4.37	0.482
Mindfulness	8.95	2.55	9.92	3.33	0.355	10.17	3.04	10.22	3.19	0.968	9.8	2.73	11.5	3.21	0.168
Overidentfication	7.53	2.61	7.31	3.54	0.842	6.5	2.84	7.78	4.06	0.406	7.4	2.26	5.3	3.62	0.086
Coping															
Humor	2.53	1.12	2.38	1.94	0.795	3.09	1.38	2.44	1.88	0.386	3.2	1.42	2.7	1.64	0.426
Use-emotional-support	3.47	1.65	3.46	1.76	0.984	4.18	1.47	3.22	1.48	0.165	4.07	1.22	2.9	1.52	0.045
Use-instrumental-support	3.16	1.71	2.92	1.19	0.671	4	1.34	2.56	1.24	0.023	3.87	1.19	3.2	1.69	0.257
Self-distraction	3.53	1.35	2.23	1.36	0.013	3.55	1.44	2.56	1.24	0.121	3.67	1.05	2.9	1.73	0.179
Planning	4.21	1.18	3.77	1.17	0.305	3.91	0.83	3.89	1.27	0.966	4.2	0.86	4.2	1.32	1.00
Denial	0.74	0.99	1.92	1.19	0.005	1.09	1.22	1.67	1.22	0.309	1.07	1.22	1.2	1.03	0.779
Religion	1.63	1.67	2.54	2.33	0.209	1.45	1.81	2.78	2.05	0.142	1.2	1.42	2.2	1.69	0.124
Behavioral disengagement	1.26	1.24	0.69	1.18	0.203	0.91	1.38	0.67	0.87	0.652	1	1.07	0.7	0.95	0.48

Active coping	4	1.29	4.23	1.42	0.637	3.64	1.03	3.33	1.8	0.642	4.07	0.96	4.4	1.51	0.504
Self-blame	2.21	1.27	2.46	1.2	0.579	2.18	0.87	2.22	1.09	0.928	2.07	1.22	2.5	1.51	0.437
Positive reframing	3.26	1.24	3.31	1.6	0.930	3.55	1.29	3.22	1.48	0.609	3.33	0.98	4.1	1.6	0.148
Substance use	0.32	0.75	0.23	0.6	0.736	0	0	0.11	0.33	0.281	0.13	0.35	0.1	0.32	0.811
Venting	3.32	1.42	2.85	1.34	0.355	3.36	0.92	2.56	0.88	0.063	3.4	1.24	2.7	1.34	0.194
Acceptance	3.21	1.36	3.69	1.32	0.326	3.45	1.37	3.11	1.05	0.545	3.4	0.74	3.7	1.16	0.435
Symptomatology															
Somatization	0.38	0.45	0.64	0.83	0.256	0.26	0.39	0.51	0.54	0.249	0.31	0.37	0.29	0.46	0.864
Obsession compulsion	1.15	0.74	1.24	0.75	0.727	0.71	0.76	1.06	0.69	0.308	0.97	0.7	1	0.74	0.91
Interpersonal sensitivity	0.54	0.51	1.25	1.08	0.018	0.64	0.71	0.86	1.13	0.593	0.62	0.49	0.8	1.14	0.585
Depression	0.49	0.46	0.99	0.92	0.051	0.52	0.44	0.94	1.07	0.239	0.51	0.35	0.77	1.06	0.39
Anxiety	0.68	0.46	1.05	0.74	0.085	0.61	0.55	0.81	0.83	0.509	0.66	0.43	0.65	0.59	0.979
Hostility	0.75	0.52	0.72	0.66	0.908	0.62	0.47	0.62	0.72	0.988	0.65	0.46	0.5	0.71	0.519
Phobic anxiety	0.16	0.35	0.43	0.5	0.08	0.09	0.24	0.2	0.47	0.51	0.16	0.36	0.22	0.56	0.746
Paranoid ideation	0.74	0.59	1.46	1.03	0.017	0.45	0.35	1	0.96	0.096	0.59	0.49	0.94	1.06	0.27
Positive symptoms	0.39	0.4	0.83	0.86	0.058	0.29	0.33	0.53	0.96	0.441	0.37	0.36	0.48	0.97	0.699

General index	0.59	0.39	0.96	0.75	0.08	0.46	0.36	0.73	0.75	0.295	0.53	0.32	0.62	0.75	0.676
Mental Health Continuum															
Mental health (total)	48.26	11.04	40.85	13.25	0.096	51.36	10.78	41.33	15.16	0.101	45.8	14.61	41.4	14.36	0.465
Emotional well-being	11.53	2.41	10.23	3.81	0.247	11.45	2.3	10	4.27	0.343	10.6	2.97	9.4	3.17	0.345
Social well-being	14.26	4.79	10.77	5.43	0.065	16.55	4.68	12.11	5.8	0.074	14.53	5.18	11.9	4.86	0.215
Psychological well-being	22.47	5.32	19.85	6.03	0.203	23.36	5.77	19.22	6.55	0.15	20.67	7.35	20.1	7.71	0.855
Hope															
Hope pathways	24.74	3.51	23.08	4.23	0.236	24.45	5.07	22.22	3.96	0.295	13.93	4.22	24.1	4.72	<.001
Hope agency	24.37	3.56	22.31	4.52	0.16	24.64	5.5	21	5.32	0.153	11.6	3.72	24.6	3.89	<.001
Hope total	49.11	6.69	45.38	8.24	0.17	49.09	9.87	43.22	8.29	0.173	25.53	7.71	48.7	7.85	<.001

Supplementary Material 5

Reliable Change of outcomes in the experimental (N = 19) and control (N = 14) conditions from pre- to post-intervention (T1T2) and from pre-intervention to follow-up (T1T3)

T1T2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
ExPos	2	0	0	0	2	0	3	4	3	4	2	7	3	3	0	0	0	0	0	0	0	0
ExNeg	0	0	0	0	1	0	0	4	8	5	9	3	7	0	0	0	0	0	0	0	0	0
ConPos	0	2	0	0	0	0	0	1	4	0	5	1	5	0	0	0	0	0	0	0	0	0
ConNeg	0	0	0	0	0	1	4	6	2	5	2	5	1	1	0	0	0	0	0	0	0	0

	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**
ExPos	0	0	0	0	0	0	1	1	2	2	0	0	0	0	1	0	0	0	0	3	1	2
ExNeg	0	0	2	0	0	1	3	2	2	1	2	1	2	0	2	0	0	0	1	7	1	5
ConPos	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	0	0
ConNeg	0	0	1	0	0	2	1	2	0	1	1	2	4	0	4	0	0	0	0	5	0	1

T1T3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
ExPos	0	0	0	0	2	1	7	8	3	7	5	9	5	3	0	0	0	0	0	0	0	0
ExNeg	4	0	0	0	0	0	2	3	7	7	8	3	9	1	0	0	0	0	0	0	0	0
ConPos	2	2	0	0	1	1	0	2	2	3	4	4	2	2	0	0	1	0	0	0	0	0
ConNeg	1	0	0	1	1	0	1	6	6	4	4	4	6	1	0	0	0	0	0	1	0	0

	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**
ExPos	0	0	0	0	0	0	1	2	0	3	1	0	0	0	0	1	1	0	0	0	1	1
ExNeg	0	0	0	0	0	1	2	1	3	1	4	0	5	0	4	0	0	0	2	0	1	0

ConPos	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	1	0	1	0	1
ConNeg	0	0	1	0	0	3	2	3	2	3	3	2	4	2	6	0	1	0	0	1	0	0

Note. ExPos: increase in experimental condition; ExNeg: decrease in experimental condition; ConPos: increase in control condition; ConNeg: decrease in control condition;
1 = Knowledge of mental health problems; 2=Erroneous beliefs and stereotypes; 3=Help seeking and first aid skills; 4=Self-help strategies; 5=Mhlq total; 6=Posmhlit ; 7=Self-compassion total
8=Self-kindness; 9=Self-judgement; 10=Common-humanity; 11=Isolation; 12=Mindfulness; 13=Overidentfication; 14=Humor; 15=Use-emotional-support; 16=Use-instrumental-support
; 17=Self-distraction; 18=Planning; 19=Denial; 20=Religion; 21=Behavioral disengagement; 22=Active coping; 23=Self-blame; 24=Positive reframing; 25=Substance use ; 26=Venting; 27=Acceptance; 28=Somatization; 29=Obsession compulsion; 30=Interpersonal sensitivity; 31=Depression; 32=Anxiety; 33=Hostility; 34=Phobic anxiety; 35=Paranoid ideation; 36=Positive symptoms ; 37=General index ; 38=Mental health continuum short form total ; 39= Emotional well-being; 40=Social well-being; 41= Psychological well-being; 42=Hope pathways; 43=Hope agency; 44=Hope total.

SYNTHESYS AND CONCLUSIONS

DISCUSSION AND INTEGRATIVE CONCLUSION

Reconceptualizations on mental health (WHO, 2014) called for a corresponding refresh in mental health literacy (Kutcher et al., 2016; Spiker & Hammer, 2019). As dual models of mental health clarified the different contributions of psychopathology and mental well-being to complete mental health, MHL should benefit from incorporating science-based knowledge to operationalize positive mental health literacy, a complementary construct to the much-developed literacy about mental pathology.

As exposed, much more is established in literacy about mental illness, its definition, measurement and promotion than in positive mental health literacy. Positive mental health literacy, on the contrary, was only recently recognized as part of MHL (Carvalho et al., 2022). Thus, positive MHL measurement and promotion programs are missing in MHL theory.
To overcome the lack of research on positive mental health as part of mental health literacy this project was designed to incorporate contributions on theory, measurement, process related outcomes and intervention.

The first study is a theoretical study of MHL (study I), establishing a dialogue between the state of art in mental health literacy and recent advances from dual models of mental health, mental well-being research and positive psychology. Study I is a position paper about the importance and need of positive mental health literacy. Once study I unveils the lack of positive MHL measures, the second and third study consisted in the creation of a new measure of positive MHL adapted to adults (study II) and adolescents (study III). In parallel and once coping was a necessary outcome to control in the following steps, considering its relation to mental health (Jorm, 2019) and adaptation, study IV adapted the Brief Cope to the adolescent portuguese population. Study II, study III and study IV are psychometric studies. Also mentioned in study I, MHL research is based on the premise that MHL is protective for adaptation, prevention and management of mental health, but MHL theory lacks empirical evidence on MHL psychological effects and the processes that intermediate the relationship between mental health and MHL. Tacking in account a developmental focus, study V examined the prevalence of MHL and coping in three developmental groups (e.g. adolescents, young-adults, adults) and MHL/coping strategies associations. Across the development, the types of coping used to manage normative and non-normative events may

affect mental health outcomes. Coping may be an important outcome from MHL promotion if a significant relation can be found. Study VI, explored the effect of self-compassion and hope in the relation between MHL and mental health. Self-compassion and hope are psychological processes associated previously to mental health literacy (Heath et al., 2018; Yang & Mak, 2016) and mental health (Neff et al., 2018; Wang et al., 2020). Study V and study VI are focused on psychological processes related to MHL and were operationalized tacking in account dual models of mental health. Finally, study VII and study VIII are intervention targeted. Also using study I as guidance, study VII and study VIII result from the recognition that MHL interventions do not focus in positive MHL, therefore MHL research lacks: first, programs promoting positive MHL; second, evidence on the contribution of positive MHL to mental health. Also, evidence about its relation to psychological processes and finally, the differential effect of positive MHL and literacy about mental illness on complete mental health.

Theoretical contributions

Study I is a position paper calling for a solid conceptualization of positive MHL. It reviews the state of art of MHL to identify lack of clarify in a new component of MHL "good mental health knowledge" (Kutcher et al., 2016). Once good mental health is not clearly defined, it is difficult to define how to obtain and maintain good mental health, therefore positive MHL misses unequivocal operationalization. The operationalization of positive mental health as encompassing mental well-being is presented, so as the benefits of mental well-being to overall mental health. Resulting from this premise, positive MHL is suggested to be developed from mental well-being literacy. Mental well-being literacy establishes the difference between positive mental health compared to mental illness, clarifies the effect of mental well-being in complete mental health, and the promoting strategies of mental well-being. Like positive MHL is poorly defined, measures of positive MHL are needed, interventions and research on psychological processes associated to it.

Lack of positive MHL is considered to be related to worst mental health, lack of awareness of mental well-being levels, stigma, worst attitudes to give and seek for help. Positive MHL is hypothesized to be related with higher mental well-being, the prevention of psychopathology and adaptative psychological processes. Positive MHL measures should be used to evaluate who is at risk of languishing, moderate mental health or relapse of mental

illness. The educational community (teachers and educators) are first line receivers of positive MHL, so as health professionals that were mainly trained in pathogenic models of mental health. Future studies should qualitatively assess whether teachers and mental health professionals feel comfortable to assess positive mental health literacy, mental well-being levels and empirically explore levels of positive MHL in these community.

Psychometric contributions

Study II developed and validated a new measure of positive MHL the "PosMHLit". Results from Exploratory factor analysis and parallel analysis as well as Alpha Cronbach suggest the PosMHLit is valid, reliable and presents a one dimensional structure of 20 items to evaluate positive MHL in adults. When adapted to adolescents in study III, the PosMHLit presents the same unidimensional structure but retains 23 items. The PosMHLit for adolescents shows adequate levels of validity and reliability as well. Both instruments share the same items, only 3 items are different, so safeguarding these cautions, it can be used to measure and compare positive MHL in adolescents and adults, for intervention assessment and developmental research. An important question is why adolescents consider these items 8, 10, 13. A possible explanation is that the generation of adolescents was more exposed to wellness narratives than adults, so that self-care and mental well-being appear as normal aspects of development.

The PosMHLit can be used as complementary to classical MHL measures that assess mental illness literacy, thus enabling the assessment of MHL in its dual dimensions: positive mental health and mental illness. Results from correlational analysis revealed MHL shares a dual nature with mental health, once positive MHL and illness are related but distinct considering levels of correlation. Therefore, promoting literacy about mental illness does not assure positive MHL is cultivated. Positive mental health literacy is only promoted when approaching mental well-being and positive mental health. Results from studies II and III suggested that positive MHL is necessary once it is related to both mental illness and mental well-being. T-tests from study III suggest positive MHL is not higher among flourishers in adolescents. Future studies should explore the relation between positive MHL and mental well-being, once these variables are related to a certain degree. Psychometric studies also added important findings to prevention by exposing difference of positive MHL levels between girls and boys, where girls present higher levels literacy. These results go in line with

previous research (Campos et al., 2016; Dias et al., 2018). Future studies may explore these findings with other developmental groups (e.g. adults, elder), considering the effect of toxic masculinity (Milner et al., 2019) in mental health.

This instrument can be used with adolescents and adults, for research and intervention purposes. Concerning research this is a complementary measure to MHL instruments and new possibility to examine positive MHL in cross-sectional and experimental designs. Developmental inputs can be assessed considering the age span covered by this measure. In terms of intervention, the PosMHLit can be used by health professionals and teachers to examine who is at risk of having less positive MHL, and possibly less mental well-being, higher risk of mental illness.

Study IV used exploratory and confirmatory factor analysis with alpha Cronbach to test the psychometric properties of the Brief Cope in adolescents presenting adequate properties. Coping strategies are differently associated to positive MHL and literacy about mental illness. This was the first study to explore the relation between coping strategies, positive MHL and literacy about mental illness. This avenue is particularly important considering intervention focused research. The ultimate goal of positive mental health literacy and literacy about mental illness is to promote adaptative coping. Therefore, by showing that MHl is associated to adaptative coping, these studies suggest that further research should explore these relations using experimental and longitudinal research that allow more solid conclusions. Coping is correlated with self-compassion, hope, mental well-being and psychopathology on this study. This result reinforced the importance of controlling coping as a psychological process important to adaptative functioning.

Contributions to the understanding of psychological processes related to MHL

Study V examined the relations between MHL and coping. Important to note, levels of positive MHL and literacy about mental illness are high is the three developmental groups, although bigger in adolescents. Adolescents also report using more Substance Use strategies, Behavioral Disengagement and Denial. Results validates the premise that MHL is related to prevention and management once MHL were related to adaptation strategies like adaptative coping. Interestingly, all developmental groups, adolescents, young-adults and adults shared patterns of associations between coping and MHL. In specific, literacy about positive mental health and pathology were both associated to coping but differently associated to types of

coping strategies in each group. Positive MHL is related to more adaptative forms of coping such as Positive Reframing, Active Coping, Planning, Instrumental Support Coping in adolescents and adults. The same correlations emerge with MHL about mental illness, in adolescents and adults, but not for Positive Reframing. Venting, on the other side, is related to MHL. Higher levels of MHL in adolescents are related with less dissociative strategies such as denial or substance use, behavioral disengagement. Using emotional and social support was the only coping strategy used by adolescents, young-adults and adults with higher levels of positive MHL and MHL. These results illuminate the importance of MHL to improve coping and the use of emotional and social support coping when MHL levels are high. The use of emotional and social support coping should be assessed as a different output from the use of help-seeking. Individuals may use emotional and social support facing emotional challenges yet not ask for help when facing a mental health crisis. Also, some people may ask for professional help but not call for emotional support. Interventions promoting positive MHL and MHL should differently target these attitudes. Future studies should disentangle different attitudes towards seeing help. Related to psychological processes underlying help seeking, is shame a variable that should be addressed in the future research. Shame is felt as consequence of believing that something is wrong, inferior or imperfect. Mental illness has been associated with discrimination, stigma and fear of social rejection (Lally et al., 2013), therefore shame regulates exposition to social stigma when having mental illness.

Study VI tests the effect of self-compassion and hope in the relationship between positive MHL, mental well-being and psychopathology; literacy about mental illness, mental well-being and psychopathology. Mediational analysis suggested that positive MHL is a better predictor of mental well-being than psychopathology. This result sounds consistent with the idea that positive MHL focuses on mental well-being (Keyes, 2005). Future research should explore this result with longitudinal research. If positive MHL promotes mental well-being, developmental outputs of adaptative development may be examined across time. If mental well-being prevents mental illness, positive MHL may contribute to buffer mental pathology by the indirect effect of mental well-being.

Self-compassion is the main mediator of the relationship between positive MHL or literacy about mental illness and mental well-being, psychopathology. Hope, another variable controlled, meditates these relationships through the indirect effect of self-compassion. This result shows self-compassion is a central psychological process to MHL. Given that self-compassion seems to be a key underlying factor operating the relationship between MHL

and well-being and psychopathology, it can be argued that future complete MHL programs should benefit from including self-compassion modules/content (i.e., include self-compassion as an overall adaptive coping process that one could resort to not only when experiencing psychological suffering, but also as a means to promote well-being). Self-compassion could, in this sense, be measured as an important outcome from MHL programs. As it conducts the effect of MHL on mental health it should be improved in parallel to MHL itself in programs through exercises. Important to note, self-compassion may be underdeveloped in certain population such as men, LGBT+ groups, highly self-critical groups. The effects of toxic masculinity, sexual minorities exclusion and self-criticism has been reported concerning mental health (WHO, 2014). Future research should direct MHL to at risk groups, although MHL is recommended to the whole community.

To resume, studies on psychological processes can inform future research and interventions on MHL, besides validating nuclear premises that MHL is a protective.

Intervention contributions

Study VII developed and assessed the efficacy of video-based vignettes and expert explanations (Attachment 1) to promote literacy about positive mental health and mental illness in adolescents and adults. In this study, videos could be used with questionnaires as a tool for evaluation and videos with expert explanations as a tool for promotion.

The intervention consisted of 8 videos and its expert explanations (Attachment 1). In order to develop and validate the intervention several steps were conducted such as consulting the public, experts (e.g. clinicians and academics), and pilot – testing. First, important insights came from the focus groups stages referring to language and format, such as the importance of using language adapted to each age group and the perception that, for example, some mental well-being factors are more suitable to represent flourishing in adolescence than other. Second, representations on flourishing, languishing, mental illness and moderate mental health were, for the first time, assessed with adolescents and adults, suggesting significant differences on how the public recognizes positive mental health and mental illness. Results from literacy on mental illness are clear (Jorm, 2019). Mental illness sounds much familiar than positive mental health or the absence of positive mental health, that is languishing. For this reason, precise language may facilitate the recognition of positive

mental health. Study VII suggests the incomparable contribution of the public to MHL tools development.

Differences between developmental groups were visible in the patterns of recognition of each vignette and also in answers related to help-giving. Both developmental groups presented better recognition rates of mental illness vignettes, suggesting the effect of MHL pathogenic research and the efficacy of MHL promotion initiatives (Jorm, 2019). Mental well-being vignettes were better recognized by adults. Both developmental groups shared compassionate help giving strategies to any vignette also reflecting a shift in mental health stigma.

Analysis regarding the efficacy of this intervention shown PosMHLit improved in adolescents but not in adults, nor MHL. Future studies should replicate the study using a more appropriate sample size.

Study 8 conducted a quasi-experimental study to explore the validity of an innovative MHL intervention targeting both literacy about positive mental health and mental illness, with a developmental and compassionate focus. Participants from experimental and control condition were consulted before the program, in order to evaluate expectations about the intervention, then 4 sessions and a booster session were provided, with psychoeducational and experiential exercises. This was the first study to pilot test the efficacy of a MHL intervention considering complete mental health and literacy about positive mental health and pathology, using consistent measures to evaluate literacy about mental health, mental illness, key adaptative processes to mental health - self-compassion, coping, hope (Carver & Scheier, 2014; Neff et al., 2018; Pleeging et al., 2021), mental well-being and mental illness (Chao et al., 2020) as outcomes. Also, to date, it was the first study to integrate self-compassion in MHL promotion as a conceptually (and empirically based) coherent antidote to stigma. Solid ITT and RCI analysis were used to control the effects of the intervention. Self-compassion, using instrumental support coping and social and emotional support coping improved but not hope or mental health. Ceiling effects were considered in the interpretation of the results (e.g. MHL levels were high before the program) but also sample size (low).

This study goes in line with study V and study VI to suggest the importance of using instrumental support coping and using social and emotional support coping and self-compassion to MHL efficacy. Self-compassion appears to conduct MHL effect on mental health (VI) but also MHL programs appear to improve self-compassion (VIII). Future studies should further explore these interactions.

Finally, studies VII and VIII contributed with two different intervention formats (video based and face-to-face) to promote MHL focusing on positive mental health and illness. The intervention from study VII can also be used in focus-groups or interviews as a way to explore MHL levels and perceptions. For example, in schools, therapeutic groups, video debating and open questions can bring important conversations on mental health. The videos from study VII were validated so it can be used with the questions related to the videos to assess MHL or independently in other settings for example to enact debates. Videos and expert explanations altogether work as an intervention. The intervention from study VIII so as the materials developed can be used independently as well. This intervention was validated with adults but it was developed to any age group (with adjustments). The feasibility of the program to adolescents should be tested in the future. To test whether this program actually improves MHL, and mental health outcomes samples with inferior levels of MHL, more psychopathology and less mental well-being should be recruited. In this case, exclusion criteria were not possible. Prevention initiatives may benefit from promoting MHL covering both positive and mental illness literacy.

Limitations, future studies and overall recommendations

Several limitations should be pointed. First, all studies used self-report measures. Therefore, answers can be biased by respondents and cautions must be considered. Future studies should use crossed evaluation methods (such as clinical reports). Second, sample composition was non randomized for the majority of studies and samples are imbalanced in all studies in terms of gender, SES and age. Also, WEIRD individuals integrate all studies. Future studies should use randomized designs, more balanced samples and focus in specific groups (minorities, men, migrants, orphans, Erasmus students). For example, even not going to non western countries, more nuanced groups can be assessed. At risk groups should be controlled such as languishers, men, LGBT community, highly religious groups (where interpretations on mental health may be less guided by science), at risk of developing mental illness and low SES samples. Educators, health professionals and psychology students should be target of MHL surveys and interventions considering that these are MHL agents. Longitudinal designs should also replicate the main findings of the studies once there are limitations to cross-sectional research. Our findings point to the contribution of self-compassion and coping in the relationship between mental health and MHL. Future research

should further explore the role of fears of compassion, shame and social isolation in MHL and mental health. Self-compassion mediates the effect of literacy on mental health, if fears of compassion prevent the promotion of compassion, groups with high fears of compassion are more vulnerable not only to mental illness but also to lose the prevention effect of mental health literacy and the same logic can guide shame, that is connected to mental illness stigma and social isolation that inhibits using emotional and social support coping or help-seeking.

Recommendations

MHL research and clinical practice

Recommendations for MHL research and intervention are possible from the studies. Positive MHL and literacy about mental illness are equally important though different as constructs. MHL studies should state whether positive MHL or literacy about mental illness is measured and targeted. Measures of both constructs should be used to assess general MHL.

Effects of MHL on psychological processes, mental health or as outcomes from MHL interventions should be measured using positive MHL and classical measures. Mental health as outcome should be reflected on mental well-being and psychopathology.

Self-compassion, coping and hope are central psychological processes to evaluate in MHL research. Additionally, MHL interventions may benefit from self-compassion and coping training. The public appears to know more about mental illness than mental well-being. The promotion of positive MHL is priority (Sampaio et al., 2022).

Future research should explore levels of positive mental health literacy in mental health professionals and teachers. Health professionals that can identify who lacks positive MHL are equipped to identify who is at risk of having less mental well-being, languishing or risk behaviors. Nonetheless, only recently Psychology and Medical curriculums refer positive mental health and well-being as diagnose and curriculums of teaching ignore mental health education.

Developmental research and policy making

MHL was referred as target of prevention measures in policy making reports (Caldas de Almeida & Xavier, 2016; WHO, 2014). Not only the results presented corroborate this premise, but also, results suggest both positive MHL and literacy about mental pathology should be approached. Positive MHL and literacy about mental illness can be measured and promoted in different developmental groups (II, III, VII, VIII), as there are now instruments and interventions valid for that. Schools are preferred places to reach adolescents (WHO, 2019). Adolescents are prone to mental health dysregulation due to biopsychosocial changes and start exploring risk behaviors to achieve mental well-being and regulate possible mental suffering experienced (V). Avoidance focused coping in adolescents also appear to be more prevalent. Thus, positive MHL can present healthy alternatives to achieve mental well-being and literacy about mental illness can be used as resource to identify mental illness and call for help. The same rationale works for help-giving.

In line with previous research, boys report worst MHL levels. Future developmental research and policy making should acknowledge the effects of toxic masculinity and gender socialization in the acquisition of MHL, male mental health and help-seeking.

Workplaces, primary care and media may be the preferred channels to educate adults. Adults spend more time consuming the media (Latif et al., 2016) or working. Since the dissemination of mental health contents in the media as a trend, the public is exposed to pseudo-science and wellness advertising. National campaigns are necessary to improve MHL and consumer knowledge. Experts consulting for TVs and streaming contents could improve mental health contents that are so important to model compassionate responses to mental illness and the reduction of stigma (Corrigan, 2014).

MHL establishes the connection between mental health protection and promotion, therefore, policy-making for mental health should invest in MHL training across the development in prevention measures.

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ATTACHMENT 1 - VIDEOS SCRIPTS AND EXPERT EXPLANATIONS

GUIÃO PARA VÍDEO

(para o produtor dos vídeos)

No último mês, quase todos os dias…

Cenário 1

Chamo-me Joana, tenho 18 anos e sinto-me bem. Quando me vejo ao espelho gosto daquilo que vejo. Não foi sempre assim, mas à medida que vou ficando mais velha noto que me aceito mais e que relativizo as coisas. As coisas na minha vida não são perfeitas, mas tento ver o lado positivo. Sinto-me integrada na minha escola**,** noto que os meus professores valorizam a minha participação nas aulas**,** tenho um bom grupo de amigos. Eu tenho a minha opinião independentemente do que os outros pensam e gosto de a poder partilhar**.** Comecei a fazer voluntariado e esta experiência tem mudado a maneira como vejo certas coisas: vejo que qualquer pessoa, em qualquer idade, pode ser útil para a sociedade e descobri que gosto de ajudar os outros. E também vejo que qualquer pessoa, de qualquer idade, pode passar por momentos difíceis. E sabem que mais? Nesses momentos, não devemos ter vergonha de ser ajudados. Quando eu estou triste falo com os meus amigos ou os meus pais e procuro fazer coisas de que gosto.

Notas: este cenário representa elevados níveis de bem-estar e felicidade, ausência de doença mental e presença de auto-compaixão.

Cenário de florescimento:

A personagem sente afeto positivo, aceita-se, está integrada socialmente, é autónoma, para a sua idade, sente que contribui para a sociedade, que está a crescer como pessoa, que tem relações positivas com os outros e que é aceite pela sociedade. Revela a consciência de que todas as pessoas podem passar por momentos difíceis e exprime-o de forma compassiva.

Notas: tom feliz?

Cenário 2

Chamo-me Filipe, tenho 15 anos e sinto a minha vida estagnada. No meu dia a dia sinto-me como se estivesse em modo piloto automático, vou da escola para casa e de casa para a escola, passo pelos mesmos sítios, estou com as mesmas pessoas e não sinto nada. Não estou a sofrer, tenho uma vida normal, bons amigos, boas notas, uma família espetacular, mas não sinto qualquer satisfação ou motivação. Parece que ando aqui por andar e não saber o que quero fazer depois do secundário parece um reflexo disso. Às vezes dou por mim a pensar qual é o propósito disto tudo. Nunca partilhei este vazio com ninguém.

Cenário de estagnação:

A personagem apresenta ausência de saúde mental e de bem-estar. A personagem sente um vazio, sente que a sua vida está estagnada, parece distante dela, não se sente apaixonado ou motivado com um propósito. Apesar de não ter nenhuma doença mental nem estar deprimido. Apenas não sente bem-estar, felicidade, sentido de vida.

Vivencia isto com baixa auto-compaixão (tem vergonha e não partilha).

Notas: tom confuso…distante?

Cenário 3

Chamo-me Ana, tenho 16 anos e não sei como vim parar onde estou. Eu sou diferente das pessoas da minha idade. Enquanto que todos gostam de ir para a as aulas e sair à noite, para mim tudo é difícil.

Todos os dias me custa muito acordar. Sinto-me triste, sem energia e não me apetece comer nem estar com outras pessoas, apenas dormir. Ter de sair do meu quarto deixa-me muito ansiosa e não tenho motivação ou capacidade de me concentrar para estudar. Por mim já tinha desistido da escola. Mas as pessoas não percebem e sinto que todos me criticam. Quando alguém na minha família ou da escola diz algo sobre a minha maneira de ser fico a pensar e pensar horas e horas sobre o que disseram e revolto-me comigo mesma por não ter respondido. Tenho vergonha de falar disto tudo, não quero que ninguém perceba e por isso tento passar despercebida.

Cenário de depressão.

A personagem está deprimida e não sente bem-estar. Vivencia a sua depressão com baixa auto-compaixão pois critica-se e tem vergonha.

Tom: lento, triste, magoado?

Cenário 4

Chamo-me Afonso, tenho 17 anos e desde pequeno que sou perfecionista e fico ansioso quando não consigo fazer as coisas como queria. Quando tenho um trabalho para apresentar em frente à turma, nos dias anteriores, começo a comer pior, a pensar muito se vou se vou falhar e ensaio até à exaustão. Tornei-me igualmente exigente com os outros porque sinto que se dou tudo eles também devem dar A dada altura percebi que quando estico os meus limites e os dos outros não dá bom resultado…faz-me mal a mim e afasta os outros. Foi quando me tornei mais consciente de mim, que todas as pessoas têm as suas dificuldades e que eu tenho esta. Isto ainda surge algumas vezes mas tenho aprendido a não ser tão duro comigo e com os outros e a cuidar em vez de só exigir. Também aprendi a parar e notar que quando estou stressado não estou 100% do tempo stressado. O stress vai e vem e vai outra vez. Isso tem-me permitido sentir-me mais tranquilo com a vida, mesmo em momentos de stress, sei que posso aceitar-me, que os outros me aceitam e que posso crescer por todas as experiências da vida. Quando falho já não levo tudo tão a sério e tenho mais paciência comigo.

Cenário: saúde mental moderada, alguns sintomas de ansiedade/perfecionismo.
A personagem já teve maiores níveis de ansiedade e perfecionismo e tem aprendido a regular-se. Revela bons níveis de bem-estar e felicidade. Tem auto-compaixão, aceita-se, trata-se com cuidado, percebe que não está sozinho e que é normal.
Tom: seguro, feliz.

EXPLICAÇÕES CLÍNICAS A APRESENTAR COM OS VÍDEOS

Breve explicação clínica do estado psicológico de cada pessoa que narra a sua história.

Neste documento é apresentada uma breve explicação clínica do estado psicológico de cada pessoa que narra a sua história no vídeo.

JOANA – UM CASO DE FLORESCIMENTO – ELEVADO BEM-ESTAR E AUSÊNCIA DE DOENÇA MENTAL

A Joana tem uma boa saúde mental.

Apresenta, em quase todos os dias do último mês, um sintoma de bem-estar emocional e seis sintomas de funcionamento positivo como:

Bem-estar emocional:

- Afeto positivo "sinto-me bem";

Funcionamento positivo (bem-estar psicológico e bem-estar social):

- Auto-aceitação "quando me vejo ao espelho gosto do que vejo";
- Relações positivas com os outros "tenho um bom grupo de amigos";
- Integração social "sinto-me integrada";
- Contribuição social "noto que os professores gostam quando participo nas aulas"; "comecei a fazer voluntariado".

Apesar de adolescente, a Joana revela:

- Autonomia "independentemente do que os outros pensam eu dou a minha opinião";
- Crescimento pessoal "esta experiência tem mudado a forma como vejo as coisas";

Para além dos sintomas de bem-estar, a Joana não apresenta sintomas de doença mental, como elevado sofrimento ou alterações no funcionamento.

Tanto o bem-estar como o mal-estar das pessoas são influenciados por fatores genéticos (ex. temperamento) e ambientais (ex. acontecimentos de vida, relações com os outros, acesso a

educação/estabilidade económica). Por esse motivo, há hábitos saudáveis que as pessoas podem aprender e desenvolver para aumentar o seu bem-estar e gerir o seu sofrimento.
A Joana tem compaixão para consigo mesma em fases com sofrimento, pois reconhece que o sofrimento faz parte da vida e que qualquer pessoa pode passar por momentos difíceis. Quando se sente triste pede ajuda, fala com os amigos e com a família ou procura fazer coisas de que gosta e que a fazem sentir bem. Estas estratégias de auto-cuidado ajudam-na a proteger a sua saúde mental.

FILIPE – UM CASO DE ESTAGNAÇÃO: SEM DOENÇA MENTAL NEM BEM-ESTAR

O Filipe **não tem nenhuma doença mental**. Não está em sofrimento: "não estou a sofrer, tenho uma vida normal" e não tem problemas de funcionamento "tenho bons amigos, boas notas, uma família espetacular". No entanto, o Filipe **não se sente feliz** "não sinto nada de especial […]… não sinto grande satisfação", sente -se estagnado "sinto que a minha vida parada", sem propósito ou paixão pela vida "não sinto grande…paixão por nada […] às vezes dou por mim a pensar qual é o propósito disto tudo".

A ausência de bem-estar do Filipe faz com que, apesar de não ter nenhuma doença mental, não tenha também saúde mental. Os estudos mostram que **estados de estagnação (sem doença mental e sem bem-estar)** são mais incapacitantes (por exemplo, as pessoas faltam e desinvestem mais do trabalho/escola) do que estados de doença mental e onde há, ao mesmo tempo, alguns sintomas de bem-estar. A ausência de bem-estar deve ser encarada como um motivo sério para cuidarmos da nossa saúde mental, falando com pessoas de confiança ou pedindo ajuda profissional.
O Filipe sente um vazio "Acho que não saber em que sou bom e o que quero fazer depois do secundário parece um reflexo disso ". Mas, como o Filipe vive "em piloto automático" e não parou para partilhar "este vazio com ninguém" "e é mais difícil haver espaço para compreender o que se passa consigo ou para ser ajudado. As pessoas à sua volta podem não perceber o que se passa com ele, acreditando que por ter uma boa "escola, amigos, família" não se passa nada. Partilhar as nossas experiências com outras pessoas de confiança, profissionais ou amigos pode ser o primeiro passo para começar a fazer o que é preciso para nos compreendermos e sentirmos melhor.

ANA – UM CASO DE DEPRESSÃO – COM DOENÇA MENTAL E SEM BEM-ESTAR

A Ana tem sintomas de depressão.

A depressão é uma doença mental, que afeta a forma como as pessoas pensam, como se sentem e como se comportam. Enquanto a tristeza é uma emoção que toda a gente sente de forma passageira, os **sintomas depressivos** são mais persistentes. A Ana sente:

- Tristeza e ansiedade "sinto-me triste…" "ter de sair do meu quarto deixa-me muito ansiosa";
- Muito sono "todos os dias custa-me muito a acordar";
- Falta de apetite "não me apetece comer";
- Falta de motivação, interesse e concentração "não tenho motivação nem consigo concentrar-me para estudar";
- Que os outros não a compreendem e a criticam "as pessoas não percebem e sinto que todos me criticam" ;
- Irritabilidade e revolta "revolto-me por não ter respondido";
- Pensa muito sobre as coisas que já se passaram "fico a pensar horas e horas sobre o que me disseram";
- Vergonha "tenho vergonha de falar de tudo isto e não quero que ninguém perceba";
- Isolamento "tento passar despercebida";

Para além de estar em sofrimento e de ter mudado o seu comportamento em casa e na escola, a Ana **não sente bem-estar ou felicidade**. Nem todas as pessoas têm os mesmos sintomas depressivos e algumas pessoas com sintomas depressivos têm momentos em que sentem bem-estar e prazer.

As doenças mentais, como a depressão, são influenciadas por fatores biológicos (ex. neurotransmissores, hormonas, inflamação), genéticos (ex. existirem familiares com história de doença mental), ambientais (ex. experiências de vida traumáticas, relações negativas com os outros, ter passado dificuldades relacionadas com a alimentação, segurança) e psicológicos (ex. não ter desenvolvido estratégias saudáveis para lidar com os problemas).

A Ana critica-se pela sua situação e procura passar despercebida e isso não a ajuda. Quando nos sentimos como a Ana é fundamental pedir ajuda a pessoas de confiança e profissionais.

Ainda que, numa depressão, a tendência seja a de as pessoas se auto- culpabilizarem e criticarem, isto não é útil, irá amplificar os sintomas e piorar o humor. Pode ajudar as próprias pessoas permitirem-se ser gentis consigo mesmas, cultivarem uma atitude interna de paciência e de se encorajarem a fazer o que é necessário para recuperar.

Quando as pessoas estão deprimidas podem precisar de tomar medicação, fazer psicoterapia, fazer exercício físico regular. Nessa fase precisam também de se sentir apoiadas, de fazer atividades que promovem bem-estar e onde se sentem úteis.

AFONSO - SAÚDE MENTAL MODERADA – SINTOMAS DE BEM-ESTAR E SINTOMAS DE ANSIEDADE

O Afonso tem **sintomas de bem-estar e de doença mental**.

Em termos de **bem-estar** apresenta:

- Domínio do meio "quando tenho um trabalho…ensaio";
- Crescimento pessoal - nota que se conhece melhor "foi importante começar a ter consciência disto…reconheço que…";

- Relações positivas com os outros "os outros também me aceitam";
- Afeto positivo "faz-me sentir mais tranquilo no dia a dia";

Em termos de **doença mental** refere **sintomas de ansiedade**:
- Considera-se perfecionista "desde pequenino sou muito perfecionista";
- Ansioso "fico ansioso só de pensar que posso não conseguir…";
- Tem medo de falhar em tarefas importantes "com receio de falhar";

É possível ter saúde mental apesar de se ter sintomas de doença mental (como ansiedade), porque a saúde mental não diz respeito apenas à ausência de doença mental, mas também à presença de bem-estar e o Afonso apresenta vários indicadores de bem-estar.
Como o Afonso, uma grande parte das pessoas sente ansiedade ou medo, pois o sofrimento faz parte da vida e uma perturbação de ansiedade pode desenvolver-se em momentos de maior fragilidade. No entanto, as pessoas podem aprender a conhecer os sintomas e a gerir os mesmos.
O Afonso aprendeu a conhecer-se e a estar mais consciente de si. Descobriu que o seu stress é passageiro, que vai e vem, pelo que relativiza mais as coisas.
A prevenção da doença mental passa, também, por investir na promoção do bem-estar. O facto de o Afonso cuidar de si, fazendo coisas de que gosta e enfrentando as suas dificuldades, ajuda a promover o seu bem-estar e contribui para prevenir os sintomas de ansiedade que podem reaparecer em momentos desafiantes.
A promoção do bem-estar ajuda a prevenir a recaída ou o aparecimento de doenças mentais e facilita também a recuperação dos mesmos.

GUIÃO PARA VÍDEO

No último mês, quase todos os dias…

Cenário 1

Chamo-me Inês, tenho 65 anos e sinto-me bem. Não foi sempre assim, mas, com a passagem do tempo, noto que me aceito mais e relativizo as coisas. Como sei que me vou reformar em breve e os meus filhos vivem longe comecei a preparar esta etapa. Nos tempos livres, passei a frequentar as atividades da minha Junta de Freguesia. É um ambiente agradável, discutimos ideias e experiências e sinto que a minha opinião é escutada e valorizada. Eu tenho a minha opinião, independentemente do que os outros pensam e gosto de a poder partilhar**.** Também, comecei a fazer voluntariado e esta experiência tem mudado a maneira como vejo certas coisas: vejo que qualquer pessoa, em qualquer idade, pode ser útil para a sociedade e descobri que gosto de ajudar os outros. E também vejo que qualquer pessoa, de qualquer idade, pode passar por momentos difíceis. Nesses momentos, não devemos ter vergonha de ser ajudados. Quando me sinto triste falo com os meus amigos e procuro fazer coisas de que gosto.

Cenário de florescimento:

A personagem sente afeto positivo, aceita-se, está integrada socialmente, é autónoma, para a sua idade, sente que contribui para a sociedade, que está a crescer como pessoa, que tem relações positivas com os outros e que é aceite pela sociedade. Revela a consciência de que todas as pessoas podem passar por momentos difíceis e exprime-o de forma compassiva.
Notas: tom feliz?

Cenário 2

Chamo-me Ricardo, tenho 40 anos e sinto a minha vida estagnada. No meu dia a dia sinto-me como como se estivesse em modo piloto automático, vou do trabalho para casa e de casa para o trabalho, passo pelos mesmos sítios, estou com as mesmas pessoas e não sinto nada. Não estou a sofrer, tenho uma vida normal, uma boa família, um bom trabalho, uma boa casa, mas não sinto grande satisfação ou paixão. Parece que ando aqui por andar e acho que não ter uma vida para além das rotinas é um

reflexo disso. Às vezes dou por mim a pensar qual é o propósito disto tudo. Nunca partilhei este vazio com ninguém.

Cenário de estagnação:

A personagem apresenta ausência de saúde mental e de bem-estar. A personagem sente um vazio, sente que a sua vida está estagnada, parece distante dela, não se sente apaixonado ou motivado com um propósito. Apesar de não ter nenhuma doença mental nem estar deprimido. Apenas não sente bem-estar, felicidade, sentido de vida.

Vivencia isto com baixa auto-compaixão (tem vergonha e não partilha).

Notas: tom confuso…distante?

Cenário 3

Chamo-me Laura, tenho 50 anos e não sei como vim parar onde estou. Sei que estou diferente das pessoas da minha idade. Alguns tiveram uma vida fácil, para mim tudo se tornou difícil.

Todos os dias me custa muito acordar. Sinto-me triste, sem energia e não me apetece comer nem estar com outras pessoas, apenas dormir. Ter de sair de casa deixa-me muito ansiosa e não tenho motivação para trabalhar nem capacidade de me concentrar. Por mim já tinha entrado na reforma. Mas as pessoas não percebem e sinto que todos me criticaram. Quando os meus filhos ou o meu marido dizem algo sobre a minha maneira de ser fico a pensar e pensar horas e horas sobre o que disseram e revolto-me comigo mesma por não ter respondido. Tenho vergonha de falar disto tudo, não queria que ninguém percebesse e por isso isolo-me.

Cenário de depressão.

A personagem está deprimida e não sente bem-estar. Vivencia a sua depressão com baixa auto-compaixão pois critica-se e tem vergonha.

Tom: lento, triste, magoado?

Cenário 4

Chamo-me Guilherme, tenho 58 anos e desde novo que sempre fui perfecionista e fico ansioso quando as coisas não correm como queria. Quando tenho uma reunião importante com o meu chefe, nos dias anteriores, começo a comer pior, a pensar muito no que vai falhar e preparo-me até à exaustão. Tornei-me igualmente exigente com os outros porque sinto que se dou tudo eles também devem dar. A dada altura percebi que quando estico os meus limites e os dos outros não dá bom resultado…faz-me mal a mim e afasta os outros. Penso que o meu divórcio foi resultado disso. Tenho-me tornado mais consciente de mim, que todas as pessoas têm as suas dificuldades e que eu tenho esta. Isto ainda surge algumas vezes mas tenho aprendido a não ser tão duro comigo e com os outros e a cuidar em vez de só exigir. Aprendi a parar e notar que quando estou stressado não estou 100% do tempo stressado. O stress vai e vem e vai outra vez. Isso tem-me permitido sentir-me mais

tranquilo e feliz com a vida, mesmo em momentos de stress, sei que posso aceitar-me, que os outros me aceitam e que posso crescer por todas as experiências da vida. Quando falho já não levo tudo tão a sério e tenho mais paciência comigo.

Cenário: saúde mental moderada, alguns sintomas de ansiedade/perfecionismo.
A personagem já teve maiores níveis de ansiedade e perfecionismo e tem aprendido a regular-se. Revela bons níveis de bem-estar e felicidade. Tem auto-compaixão, aceita-se, trata-se com cuidado, percebe que não está sozinho e que é normal.
Tom: seguro, feliz.

EXPLICAÇÕES CLÍNICAS A APRESENTAR COM OS VÍDEOS

Neste documento é apresentada uma breve explicação clínica do estado psicológico de cada pessoa que narra a sua história no vídeo.

INÊS – UM CASO DE FLORESCIMENTO – ELEVADO BEM-ESTAR E AUSÊNCIA DE DOENÇA MENTAL

A Inês tem uma boa saúde mental.

Apresenta, em quase todos os dias do último mês, um sintoma de bem-estar emocional e seis sintomas de funcionamento positivo como:

Bem-estar emocional:

- Afeto positivo "sinto-me bem";

Funcionamento positivo (bem-estar psicológico e bem-estar social):

- Auto-aceitação "com o tempo, noto que me aceito melhor e relativizo mais as coias";
- Relações positivas com os outros "falo com os meus amigos";
- Integração social "comecei a frequente, nos tempos livres, as atividades da minha junta de freguesia…é um ambiente agradável";
- Contribuição social "sinto que a minha opinião é escutada e valorizada"; "comecei a fazer voluntariado".
- Autonomia "independentemente do que os outros pensam eu tenho a minha opinião e gosto de a poder partilhar";
- Crescimento pessoal "esta experiência tem mudado a forma como vejo as coisas";

Para além da presença dos sintomas de bem-estar, a Inês não apresenta sintomas de doença mental, como elevado sofrimento ou alterações no funcionamento.

Tanto o bem-estar como o mal-estar das pessoas são influenciados por fatores genéticos (ex. temperamento) e ambientais (ex. acontecimentos de vida, relações com os outros, acesso a educação/estabilidade económica). Por esse motivo, há hábitos saudáveis que as pessoas

podem aprender e desenvolver para aumentar o seu bem-estar e gerir o seu sofrimento. A Inês aproveitou a etapa que se aproxima, de reforma, para concretizar objetivos que tinha, como o da ocupação dos seus tempos livres.

A Inês tem compaixão para consigo mesma em fases com sofrimento, pois reconhece que o sofrimento faz parte da vida e que qualquer pessoa pode passar por momentos difíceis. Quando se sente triste pede ajuda, fala com os amigos e com a família ou procura fazer coisas de que gosta e que a fazem sentir bem. Estas estratégias de auto-cuidado ajudam-na a proteger a sua saúde mental.

RICARDO – UM CASO DE ESTAGNAÇÃO: SEM DOENÇA MENTAL NEM BEM-ESTAR

O Ricardo **não tem nenhuma doença mental**. Não está em sofrimento: "não estou a sofrer, tenho uma vida normal" e não tem problemas de funcionamento "tenho uma boa família, um bom trabalho, uma boa casa". No entanto, o Ricardo **não se sente feliz** "não sinto nada […]… não sinto grande satisfação", sente -se estagnado "sinto que a minha vida parada", sem propósito ou paixão pela vida "não sinto grande…paixão por nada […] às vezes dou por mim a pensar qual é o propósito disto tudo".

A ausência de bem-estar do Ricardo faz com que, apesar de não ter nenhuma doença mental, não tenha também saúde mental. Os estudos mostram que **estados de estagnação (sem doença mental e sem bem-estar)** são mais incapacitantes (por exemplo, as pessoas faltam e desinvestem mais do trabalho/escola) do que estados de doença mental e onde há, ao mesmo tempo, alguns sintomas de bem-estar. A ausência de bem-estar deve ser encarada como um motivo sério para cuidarmos da nossa saúde mental, falando com pessoas de confiança ou pedindo ajuda profissional.

O Ricardo sente um vazio "Parece que ando aqui por andar e acho que não ter uma vida para além das rotinas é um reflexo disso". Mas, como o Ricardo vive "em piloto automático" e não parou para partilhar "este vazio com ninguém" é mais difícil haver espaço para compreender o que se passa consigo ou para ser ajudado. As pessoas à sua volta podem não perceber o que se passa com ele, acreditando que por ter uma boa "família, trabalho, casa" não se passa nada. Partilharmos as nossas experiências com outras pessoas de confiança, profissionais ou amigos pode ser o primeiro passo para começar a fazer o que é preciso para nos compreendermos e sentirmos melhor.

LAURA – UM CASO DE DEPRESSÃO – COM DOENÇA MENTAL E SEM BEM-ESTAR

A Laura tem sintomas de depressão. A depressão é uma doença mental, que afeta a forma como as pessoas pensam, como se sentem e como se comportam. Enquanto que a tristeza é uma emoção que toda a gente sente de forma passageira, os **sintomas depressivos** são mais persistentes. A Laura sente:

- Tristeza e ansiedade "sinto-me triste…" "ter de sair de casa deixa-me muito ansiosa";
- Muito sono "todos os dias custa-me muito a acordar";
- Falta de apetite "não me apetece comer";
- Falta de motivação, interesse e concentração "não tenho motivação para trabalhar nem capacidade para me concentrar";
- Que os outros não a compreendem e a criticam "as pessoas não percebem e sinto que todos me criticam" ;
- Irritabilidade e revolta "revolto-me por não ter respondido";
- Pensa muito sobre as coisas que já se passaram "fico a pensar horas e horas sobre o que me disseram";
- Vergonha "tenho vergonha de falar destas coisas e não queria que ninguém percebesse";
- Isolamento "por isso isolo-me";

Para além de estar em sofrimento e de ter mudado o seu comportamento em casa e no trabalho, a Laura **não sente bem-estar ou felicidade**. Nem todas as pessoas têm os mesmos sintomas depressivos e algumas pessoas com sintomas depressivos têm momentos em que sentem bem-estar e prazer.

As doenças mentais, como a depressão, são influenciadas por fatores biológicos (ex. neurotransmissores, hormonas, inflamação), genéticos (ex. existirem familiares com história de doença mental), ambientais (ex. experiências de vida traumáticas, relações negativas com os outros, ter passado dificuldades relacionadas com a alimentação, segurança) e psicológicos (ex. não ter desenvolvido estratégias saudáveis para lidar com os problemas). A Laura critica-se pela sua situação e procura passar despercebida e isso não a ajuda. É fundamental pedir ajuda a pessoas de confiança e profissionais.

Ainda que, numa depressão, a tendência seja a de as pessoas se auto- culpabilizarem e criticarem, isto não é útil, irá amplificar os sintomas e piorar o humor. Pode ajudar as próprias pessoas permitirem-se ser gentis consigo mesmas, cultivarem uma atitude interna de paciência e de se encorajarem a fazer o que é necessário para recuperar.

Quando as pessoas estão deprimidas podem precisar de tomar medicação, fazer psicoterapia, fazer exercício físico regular. Nessa fase precisam também de se sentir apoiadas, de fazer atividades que promovem bem-estar e onde se sentem úteis.

GUILHERME - SAÚDE MENTAL MODERADA – SINTOMAS DE BEM-ESTAR E SINTOMAS DE ANSIEDADE

O Guilherme tem sintomas de bem-estar e de doença mental.

Em termos de **bem-estar** apresenta:

- Domínio do meio "quando tenho uma reunião importante no trabalho…ensaio";
- Crescimento pessoal - nota que se conhece melhor "foi importante começar a ter consciência disto…reconheço que…";
- Relações positivas com os outros "os outros também me aceitam";
- Afeto positivo "faz-me sentir mais tranquilo no dia a dia";

Em termos de **doença mental** refere **sintomas de ansiedade**:

- Considera-se perfecionista "desde novo que sempre fui perfecionista";
- Ansioso "fico ansioso só de pensar que posso não conseguir…";
- Tem medo de falhar em tarefas importantes "com receio de falhar";

É possível ter saúde mental apesar de se ter sintomas de doença mental (como ansiedade), porque a saúde mental não diz respeito apenas à ausência de doença mental, mas também a ter bem-estar e o Guilherme tem vários indicadores de bem-estar.

Como o Guilherme, uma grande parte das pessoas sente ansiedade ou medo pois o sofrimento faz parte da vida e uma perturbação de ansiedade pode desenvolver-se em momentos de maior fragilidade. No entanto, as pessoas podem aprender a conhecer os sintomas e a gerir os mesmos. O Guilherme aprendeu a conhecer-se e a estar mais consciente de si. Descobriu que o seu stress é passageiro, que vai e vem, pelo que relativiza mais as coisas.

A prevenção da doença mental passa, também, por investir na promoção do bem-estar. O facto de o Guilherme cuidar de si, fazendo coisas de que gosta e enfrentando as suas dificuldades, ajuda a promover o seu bem-estar e contribui para prevenir os sintomas de ansiedade que podem reaparecer em momentos desafiantes.

A promoção do bem-estar ajuda a prevenir a recaída ou o aparecimento de doenças mentais e facilita também a recuperação dos mesmos.

GRUPO DE CONTROLO

https://www.youtube.com/watch?v=PS-gMmHQYV4

Bolo de laranja e chocolate

Ingredientes:
1 copo de iogurte natural (125g)
150g de manteiga raspa e sumo de 1 laranja
2x o copo do iogurte de açúcar
3x o copo de iogurte de farinha
1 colher de chá de fermento em pó 4 ovos
100g de chocolate partido em pedacinhos
Cobertura:
100ml de natas
100g de chocolate de culinária

Preparação: Numa taça coloque a manteiga amolecida, o iogurte, a raspa e sumo da laranja, o açúcar, a farinha, o fermento e os ovos. Bata até obter um creme homogéneo e sem grumos. Junte depois os pedacinhos de chocolate e envolva bem. Coloque a mistura numa forma com buraco, previamente untada e polvilhada com farinha e leve a cozer em forno previamente aquecido a 180ºC durante cerca de 35 minutos. Entretanto leve um tacho ao lume com as natas e deixe aquecer. Junte depois o chocolate partido em pequenos pedaços e deixe derreter. Quando o bolo estiver cozinhado, retire do forno e deixe-o arrefecer completamente. Verta depois a cobertura de chocolate e está pronto a servir.

https://www.youtube.com/watch?v=o9qTY1_jcZQ

Sumo de meloa e manjericão

Ingredientes para cerca de 1 litro de sumo:
1 meloa pequena
1 pernada de manjericão fresco açúcar q.b. (opcional)
Gelo para servir

Preparação: Descasque a meloa, limpe-a de pevides e corte-a em pequenos pedaços. Coloque depois a melo no copo liquidificador ou robot de cozinha - em alternativa pode usar a varinha mágica - e junte as folhas de manjericão. Triture muito bem até obter uma mistura homogénea, e acrescente água a gosto até o sumo ficar com a consistência desejada. Se necessário junte um pouco de açúcar a gosto. Sirva depois com uns cubos de gelo e mais uma folhas de manjericão. Bom Apetite!

ATTACHMENT 2 - INTERVENTION BOOKLET

MÓDULO 1 – A NATUREZA DESENVOLVIMENTAL DAS NOSSAS MENTES

Uma pequena introdução sobre a nossa natureza…

Biologia e genética

Desde que somos concebidos, que a história da nossa saúde mental começa a ser contada. Os nossos genes, a fisiologia e anatomia dos nossos cérebros influenciam significativamente a nossa saúde mental e a maneira como nos vamos sentir ao longo da vida. Herdamos um conjunto de caraterísticas genéticas que nos vulnerabilizam ou protegem do desenvolvimento de doenças mentais e contribuem para o nosso bem-estar. Assim, a genética dos nossos pais importa e dita parte da nossa história antes mesmo de nascermos.

A investigação sobre bem-estar e sobre doença mental sugere que…

- Cada pessoa tem um set-point ou valor de base genético de bem-estar, se o nosso ponto de partida biológico fosse uma escadaria com dez degraus, cada pessoa partia de degraus diferentes, umas de nível 2 (com menos bem-estar) e outras perto de 10 (com mais bem-estar);
- 32-41% do bem-estar costuma ser explicado por fatores genéticos;
- 60% do bem-estar costuma ser explicado por fatores contextuais e do acaso;
- O bem-estar tende a ser estável, mas pode alterar-se com a idade, personalidade e pode ser influenciado por eventos de vida, intervenções psicológicas ou farmacológicas;
- Os primeiros episódios de doença mental surgem, numa grande parte dos casos, entre os 15 e os 18 anos, ainda que possa aparecer mais cedo ou mais tarde;

- Ainda que qualquer pessoa possa desenvolver uma doença mental, a sua genética condiciona a vulnerabilidade para o desenvolvimento dos sintomas, severidade destes, progressão da doença mental;
- É possível prevenir o aparecimento das doenças mentais e tratá-las, mesmo aquelas que são transmitidas geneticamente;
- De cada vez que algo novo é aprendido (uma competência comportamental - andar ou reação emocional - sentir gratidão), forma-se uma nova ligação entre neurónios no nosso cérebro, que compete com outras ligações: a isto chama-se plasticidade cerebral. Assim conseguimos alterar o nosso cérebro e a sua arquitetura através do treino de competências. Aquilo que treinamos ou praticamos reforça ou enfraquece uma determinada forma de pensar/sentir/agir;
- É possível inibir a expressão de determinados genes através do estilo de vida/comportamentos.

Mas os genes e a biologia dos nossos corpos não são tudo: o contexto onde crescemos e as nossas experiências de vida também moldam bastante o nosso bem-estar e o nosso sofrimento.

Há um importante ramo da genética, a epigenética, que revela que alguns genes podem ser ou não expressos consoante o ambiente à nossa volta – por exemplo, o contexto em que se cresce e as experiências que se tem ao longo da vida.

O stress a que as pessoas são expostas nos primeiros anos de vida influenciam os seus sistemas de regulação biológica e a expressão dos genes relacionados com o stress (nomeadamente os genes da doença mental) – se as pessoas tiverem acesso a condições de segurança, relações seguras e tranquilizantes, o efeito dos stressores no organismo é diminuído e a probabilidade de expressão dos genes da doença mental diminui.

Por exemplo, uma pessoa pode ser portadora de um gene que a torna mais vulnerável a doenças do envelhecimento. Mas, uma dieta mais restritiva, pode ter influências na expressão desses genes.

Porque é que tudo isto é importante para compreendermos a saúde mental?

O que sentimos, o que pensamos e o que fazemos tem, em grande parte, origem, na biologia que temos. Quando alguém está triste ou ansioso, feliz ou apaixonado, há uma série de processos fisiológicos a acontecer em partes do seu cérebro e que se manifestam no resto do seu corpo (por exemplo, quando estamos apaixonados sentimos mais energia, o nosso

coração bate mais rápido quando vemos o alvo da paixão, o estômago aperta quando estamos perto dessa pessoa). O que torna esses processos fisiológicos possíveis são a anatomia do nosso cérebro e também os neurotransmissores que temos. Quando esses processos não são desempenhados adequadamente pelo organismo, nessas áreas, podemos ter o nosso bem-estar condicionado e ficar vulneráveis a doenças mentais.

Assim, é fundamental:

- Conhecermos a genética da nossa família (se há doenças mentais, doenças físicas);
- Estarmos atentos a fatores de risco e evitarmos comportamentos de risco;
- Cuidarmos do nosso corpo como sendo a estrutura que permite uma mente saudável e feliz;
- Como veremos: uma alimentação saudável, beber água, fazer exercício físico, evitar substâncias tóxicas e tomar a medicação que for necessária quando o nosso organismo não produz uma determinada substância, é fundamental para estarmos bem;
- Entendermos que não escolhemos os nossos genes, a nossa biofisiologia, nem a muitos aspetos do nosso contexto (como a nossa família, o modo como os nossos pais nos tratam quando estamos a crescer). Parte de como nos sentimos ou somos não foi escolhida nem controlada por nós.

Relação

Sabendo que as experiências de vida e relações interpessoais (sobretudo os familiares) também são condicionantes devemos prestar-lhes alguma atenção.

Quando nascemos não temos capacidade para cuidar autonomamente de nós próprios pois não temos maturação cerebral, motora e emocional para isso. Os bebés nascem equipados para pedir ajuda (choram, têm reflexos, conseguem emitir sons) mas não conseguem cuidar de si. Assim, existir um cuidador disponível vai determinar a sobrevivência daquele bebé.

Porque é que isto é importante para a nossa saúde mental?

Desde cedo, a ligação estabelecida entre o cuidador e o bebé, é importante para o desenvolvimento do sistema nervoso deste bebé. Um cuidador disponível, sensível e que responde de forma síncrona, ao bebé, é capaz satisfazer as suas necessidades. Quando o contrário acontece, isto é, o cuidador não está disponível, ou apesar de estar disponível não consegue/sabe responder às necessidades específicas do bebé no tempo e ritmo de que este necessita, o bebé pode passar por estados de privação, ou excessiva ativação do sistema

nervoso para apelar aos cuidados do cuidador (é o que os bebés fazem para sobreviver) o seu desenvolvimento fica condicionado.
Esta lógica da relação é igualmente importante noutras etapas do ciclo de vida.

Por exemplo:
- Se desde cedo temos um adulto disponível para observar e responder às nossas necessidades, aprendemos que estamos em segurança e temos apoio;
- Se desde cedo um adulto nos ajuda a identificar aquilo que sentimos (as nossas necessidades, emoções, sensações físicas) aprendemos a nomear, verbalizar e regular aquilo que sentimos com mais facilidade;
- Se pelo contrário somos levados ao limite em estados de privação do que precisamos (por exemplo, afeto) ou sobreestimulação (por exemplo, exposição excessiva a estímulos), não aprendemos a mapear mentalmente limites saudáveis porque fomos expostos a estados de intensa atividade emocional.

As experiências relacionais que temos quando somos crianças ou adolescentes, têm uma importância maior pois ajudam a formar as lentes com que nos vemos e vemos o que está à volta (começamos a desenvolver crenças sobre o valor que temos, como merecemos ser tratados, se os outros representam segurança ou perigo, se o mundo é bom ou mau). Em qualquer idade procuramos sobreviver (exemplo, procuramos pares na escola ou no trabalho para ter maior segurança e desempenhar algumas tarefas que são mais bem sucedidas em grupo) e adaptarmo-nos ao meio que nos rodeia. As relações interpessoais são um cenário onde nos aprendemos a moldar de forma a sobreviver e ser bem sucedidos. Seja em idade pré-escolar, em idade escolar, na adolescência, enquanto jovens-adultos, adultos, a forma como nos relacionamos com os outros, como somos cuidados e tratados influencia bastante o nosso bem-estar e desenvolvimento. Desenvolvemos também um conjunto de estratégias relacionais ou defesas mentais para maximizar o nosso bem-estar e evitar sofrer.

Contexto

Fatores como o contexto socioeconómico (as condições económicas da nossa família, do nosso país, a segurança do local onde vivemos, as regras e normas sociais do mesmo) são pilares sobre os quais a saúde mental é construída.
Em vários estudos, o estatuto socioeconomico mais baixo tem sido associado a maior vulnerabilidade para o desenvolvimento de doenças mentais comuns, como perturbações de

ansiedade e do humor ou violência. É importante notarmos que as nossas condições económicas nos colocam (ou privam) de aceder a condições essenciais para o nosso desenvolvimento (como alimentação, habitação segura e com saneamento, educação).
Neste sentido quem tem o pilar contexto seguro, tem melhores possibilidades de florescer e cultivar bem-estar do que quem sente essa base trémula.

Por exemplo:
- O trabalho que temos e que nos permite auferir rendimentos influencia a nossa disponibilidade para acompanhar, proteger e cuidar dos nossos filhos e também a disponibilidade emocional com que o fazemos;

As pessoas com melhores condições socioeconomicas ou que vivem em países que asseguram cuidados básicos aqueles que não têm boas condições socioeconomicas têm o privilégio de aceder à satisfação das suas necessidades básicas sem stress e tensão. Quem não tem esse privilégio passa por um esforço mental diferente e que traz maior vulnerabilidade para a doença mental. Muitas vezes as pessoas têm de trabalhar excessivamente (o que traz cansaço e ansiedade) e em ambientes abusivos emocionalmente.

Se pensarmos no contexto geral, há vários fatores importantes para a nossa saúde mental:
- Ter segurança (não estar exposto a violência);
- Ter liberdade e direitos protegidos;
- Ter acesso a alimentação, saneamento, trabalho, participação social;
- Ter cuidados de saúde;
- Poder estudar;

Síntese:
Ao longo do ciclo de vida, a bagagem genética que trazemos, os recursos que desenvolvemos nas nossas relações e experiências de vida, ou as feridas que estes possam deixar, afetam a forma como caminhamos.
Cada período do desenvolvimento é uma pequena viagem com caraterísticas específicas, tarefas de desenvolvimento, fatores de risco e fatores de proteção.
Promovermos a nossa saúde mental passa por tentarmos vivenciar cada fase do desenvolvimento com atenção ao risco e desenvolvendo fatores protetores.

Experiências atípicas ou traumáticas (como doenças, perdas, acidentes, abusos físicos ou psicológicos, catástrofes) também condicionam largamente o nosso desenvolvimento.
Como veremos adiante, muitas vezes os sintomas de doença mental são originados por estas experiências (que mais uma vez, geralmente, não são escolhidas por nós).

Quando pensamos no nosso desenvolvimento particular devemos ter em conta que tudo isto conta:
- Os nossos genes e biofisiologia que determinam parte de como nos vamos sentir, pensar e agir;
- A estabilidade financeira dos nossos pais e do nosso país (que influencia o acesso a bens essenciais como alimentação, educação, saúde, segurança, tempo passado em casa);
- A saúde física e mental dos nossos pais e dos que estão à nossa volta (que influencia a forma como estes se sentem, pensam e comportam – logo – a forma como nos fazem sentir, pensar e comportar em idades em que não temos maturidade para pensar autonomamente e nos vermos de forma independente deles);
- A situação social e histórica do nosso país / cultura (que influencia a perceção que temos do mundo, as perceções e crenças dos que nos rodeiam, as experiências de vida que temos);
- As experiências de vida que vamos tendo e que nos moldam como pessoas;
- A oportunidade de ter experiências de desenvolvimento normativas (estudar, namorar);
- O desafio de ter passado por situações traumáticas;
- O facto de que não escolhermos alguns destes fatores, mas temos possibilidade de os reconhecer e aprender a recursos para os gerir a nosso favor.

Para nos compreendermos temos de compreender a nossa natureza: somos biologia, relação e contexto em desenvolvimento ao longo do ciclo de vida. E, como refere a Organização Mundial de Saúde, a nossa saúde mental vai sendo "acumulada" ao logo da vida, por tudo o que a influencia.

Tarefas desenvolvimentais ao longo do ciclo de vida

Sou adolescente:

- O nosso corpo está a passar por mudanças significativas e aprendemos a lidar com várias mudanças;

- A nova imagem física pode gerar satisfação ou frustração e tentamos desenvolver uma relação positiva com a nossa imagem corporal (através do que vestimos, usamos, da forma como vemos o nosso corpo);
- Os pais continuam a ser figuras muito importantes mas os amigos tornam-se focos da nossa atenção;
- Gostamos de ter uma boa relação com os professores, é importante que reconheçam o nosso valor;
- Importamo-nos muito com o que os outros pensam de nós;
- Sentimos necessidade de que os outros gostem de nós;
- Começamos a questionar uma série de coisas sobre a vida e o seu sentido;
- Construímos os nossos valores;
- Sentimos emoções de modo mais intenso nas relações interpessoais e por vezes isso não nos ajuda a considerar outras perspetivas que não as nossas;
- Queremos desenvolver uma identidade que nos traga bem-estar, segurança e conforto;
- Desejamos ser amados pelos nossos pares e figura amorosa;
- Começamos a namorar;
- Estamos a estudar e as pessoas esperam que consigamos bons resultados;
- Desenvolvemos várias competências: emocionais, tomada de decisão, regulação do comportamento;
- Escolhemos o que vamos estudar e a carreira em que vamos entrar no futuro;

Jovem-adulto:

- A nossa identidade continua em construção;
- Entramos no ensino superior e adaptamo-nos a este novo contexto;
- Ou começamos a trabalhar;
- Aprendemos novos métodos de trabalho ou de estudo;
- Construímos uma nova rede de suporte social;
- Saímos de casa dos pais;
- Aprendemos a gerir tarefas domésticas;
- Lidamos com a necessidade de autonomia e independência;
- Começamos a fazer escolhas sozinhos;
- Procuramos parceiros amorosos;

- Construímos família;
- Tomamos decisões de carreira;
- Temos experiências de trabalho;
- Aprendemos a gerir o nosso tempo entre diferentes prioridades;

Adulto:

- Temos responsabilidades cívicas e sociais;
- Estabelecemos e mantemos uma rotina;
- Cuidamos/educamos descendentes ou ascendentes familiares;
- Desenvolvemos o nosso trabalho, procurando estabilidade e desafio profissional;
- Procuramos ou mantemos relacionamentos amorosos;
- Lidamos com um conjunto de mudanças físicas;
- Construímos um conjunto de ideias sobre o mundo e a vida;

Exercício:

Este programa tem uma componente prática. Para poder usufruir dos seus benefícios experimente fazer os exercícios que sugerimos. Pegue num papel e numa caneta e responda às perguntas seguintes.

Observe as tarefas desenvolvimentais do estádio de vida onde se encontra.

Com que tarefas está a lidar neste momento? Há alguma que esteja interrompida?
Estas tarefas trazem bem-estar ou sofrimento?
Nos próximos módulos irá encontrar estratégias para promover o seu bem-estar e gerir o seu sofrimento, ou perceber quando é necessário procurar ajuda profissional.
Procure fazer os exercícios que vai encontrar da forma mais aberta e honesta possível, para que possam ser úteis.

Røysamb, E., & Nes, R. B. (2018). The genetics of wellbeing. In E. Diener, S. Oishi, & L. Tay (Eds.), Handbook of well-being. Salt Lake City, UT: DEF Publishers. DOI:nobascholar.com

Hyman, S. (2000). The genetics of mental illness: implications for practice. *Bulletin of the World Health Organization*, 78 (4).

MÓDULO 2 – SAÚDE MENTAL E BEM-ESTAR

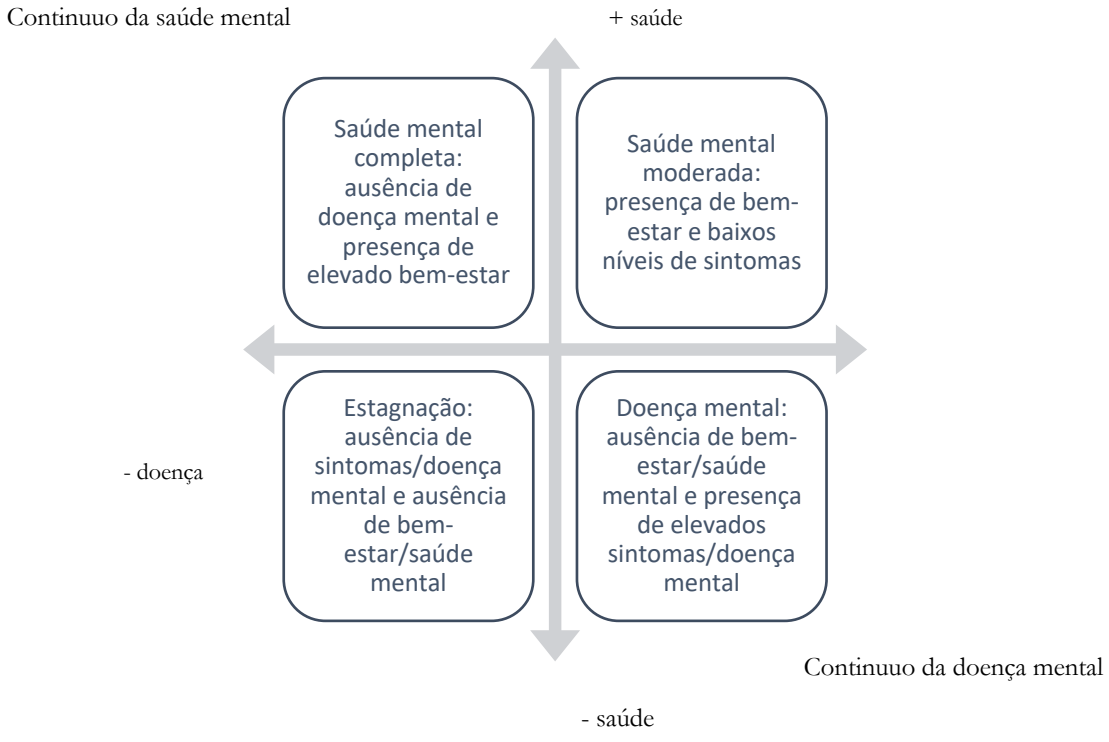
Distinção Entre Saúde Mental E Doença Mental

O que é a saúde mental? Será que ter saúde mental é o mesmo que não ter doença mental? A saúde mental é um estado de bem-estar mental. Ter saúde mental não é o mesmo que não ter doença mental.

- Sentir bem-estar, contribuir para a comunidade de forma produtiva e conseguir lidar com os stressores normais do dia-a-dia (Organização Mundial de Saúde, 2005);
- Mais do que a ausência de doença mental, implica sentir níveis significativos de bem-estar físico, pessoal, social (Organização Mundial de Saúde, 1948);

Ou seja, ter saúde mental implica sentir bem-estar e ter a capacidade de funcionar bem.

Modelo dos dois contínuos de Corey Keyes



A saúde mental, tal como a doença mental, é melhor representada por dois contínuos onde há mais bem-estar mental/menos bem-estar mental; mais doença/menos doença.
No contínuo da saúde mental podemos ter mais bem-estar mental ou menos bem-estar.
No contínuo da doença mental podemos ter mais sintomas ou menos sintomas.

Definição De Saúde Mental

O contínuo da saúde mental

Como sei se tenho bem-estar?

Quando alguém tem uma boa saúde mental …

- Sente alegria, satisfação com a vida e prazer;
- Gosta de si;
- Sente que tem crescido ao longo do tempo;
- Tem confiança em si e no ambiente que a rodeia;
- Tem relações positivas/satisfatórias com os outros;
- Sente-se integrada no seu meio;
- Sente-se autónoma;
- Sente que tem um papel na sua comunidade;
- Sente que a vida e a sociedade têm sentido;

Sintomas de bem-estar mental

Bem-estar emocional:

O bem-estar emocional está presente quando sentimos emoções "agradáveis" ou "positivas" como alegria, interesse, felicidade, vitalidade, calma, tranquilidade, realização, satisfação.

Funcionamento psicológico positivo:

Aceitar os aspetos de que se gosta e de que não se gosta em si, na sua personalidade;

Crescimento pessoal nos desafios a que se propõe, noção do seu potencial, sensação de estar em desenvolvimento;

Propósito, direção e sentido de vida;

Domínio do meio, selecionando, gerindo e moldando o ambiente às necessidades;

Autonomia, sendo guiado pelos seus parâmetros, valores e normas que são socialmente aceites;

Relações positivas com os outros;

Aceitação social quando se aceitam as diferenças humanas de forma positiva;

Crescimento social quando acredita nas pessoas, grupos, sociedades em desenvolvimento;

Contribuição social com atividades sentidas como úteis e valorizadas pelos outros;

Coerência social pelo interesse na sociedade e vida social como tendo sentido;

Integração social com sentido de pertença, conforto e suporte pela comunidade;

O nosso bem-estar emocional e funcionamento psicológico positivo são moldados pela nossa biologia mas também pelo contexto onde somos educados e pelos nossos relacionamentos.

Ao longo do seu desenvolvimento, algumas pessoas aprendem competências para desenvolver o seu bem-estar e têm contextos onde o podem potenciar. Outras pessoas não têm a mesma disponibilidade porque estão a responder a outras necessidades de funcionamento (por exemplo, cuidar da casa).

Ao longo deste módulo, poderá aprender a treinar competências promotoras do bem-estar mental.

Se em algum momento da sua vida sente que deixou de praticar competências que aprendeu, procure perceber por que motivo interrompeu essa prática e como desenvolvia o seu bem-estar.

Se cultivar o bem-estar é algo novo para si, lembre-se que a prática requer rotina! Não basta ler o que lhe apresentamos neste módulo: requer compromisso com a prática das competências desenvolvidas neste módulo. Porque é de competências que falamos quando falamos de desenvolver bem-estar. Se quisermos tonificar um músculo do nosso corpo, não basta ler sobre exercício físico: é preciso praticá-lo! Para além disso, não basta fazer exercício físico esporadicamente: é preciso praticá-lo de forma rotineira. O mesmo se passa com o desenvolvimento de competências de bem-estar: é preciso praticar para que esse nosso "músculo mental" se desenvolva.

Vamos ver passo a passo o que é sentir bem-estar mental e como podemos treinar o bem-estar mental.

Bem-estar emocional:

O bem-estar emocional está presente quando sentimos emoções "agradáveis" ou "positivas" como alegria, interesse, felicidade, vitalidade, calma, tranquilidade, realização, satisfação.

Como podemos estimular as emoções positivas?

- Ouvindo as nossas necessidades e respeitando os nossos limites. Isto é fundamental para o nosso sistema nervoso ter espaço para emoções agradáveis.

Exemplo:

Quando estamos com fome, se comermos, sentimos saciedade. Para isso temos de ouvir a nossa necessidade (fome), respeitar o nosso limite (de horas sem comer) e comer.

Também com o nosso bem-estar é preciso ouvir aquilo de que precisamos.

Todas as pessoas têm:

Necessidades fisiológicas:

- Dormir bem (ideal 8h);
- Ter uma dieta equilibrada (rica em vegetais, legumes, fruta, com hidratos de carbono, peixe, carne, ou substitutos de proteína, água, cereais, pouco açúcar e fritos);
- Beber água (1,5l por dia);

Necessidades relacionais:

- De se sentirem amadas, protegidas, respeitadas e valorizadas;
- De se sentirem compreendidas e validadas;
- De terem apreciação, poder de decisão, sentido de comunidade, liberdade, tranquilidade, independência, intimidade, segurança, suporte;

Necessidades intelectuais ou ocupacionais:

- De fazerem coisas que as estimulem (por exemplo, exercício físico, atividades manuais, jardinagem, ler, ouvir música, ver séries);
- De fazerem tarefas onde se sentem competentes e a aprender.

Ainda que as pessoas valorizem coisas diferentes, há necessidades partilhadas.

É importante refletir sobre as suas necessidades e a forma como as trata.

Algumas sugestões para identificar as suas necessidades e respeitar os seus limites: Este programa tem uma componente prática. Para poder usufruir dos seus benefícios experimente fazer os exercícios que sugerimos. Pegue num papel e numa caneta e responda às perguntas seguintes.

Experimente reservar algum tempo para refletir sobre o seu dia-a-dia.

- De que preciso para me sentir bem?
- O que me traz alegria, felicidade, tranquilidade, realização, satisfação?

Quais são as áreas da minha vida que mais valorizo/que me trazem vitalidade (exemplos, amigos, família, trabalho, desporto)?

- Quais são os comportamentos ou atividades que me trazem bem-estar e equilíbrio emocional?

Reflita sobre o tempo que dedica para as suas fontes de bem-estar emocional.

- Quando foi a última vez que fiz o que me traz bem-estar?
- Quando foi a última vez que senti bem-estar?
- Costumo cultivar na rotina diária as pequenas e grandes coisas que trazem bem-estar?
- Aquilo que me traz bem-estar vai de encontro ao que valorizo e quero?

Reflita também sobre os seus limites.

É importante perceber quando está a funcionar em esforço, sem necessidade. Às vezes vivemos com cansaço, exaustão e mágoa desnecessariamente. Note se há coisas da sua vida que o colocam no limite e das quais se pode libertar.

Estamos no limite quando aquilo que fazemos excede a nossa capacidade de estar bem, os nossos recursos anteriores e não traz vitalidade ou significado à nossa vida.

Também há ações que nos desafiam e colocam em esforço mas dão vitalidade.

Avalie a sua disponibilidade e limites para aquilo que valoriza, para cuidar de si.

Às vezes é importante protegermo-nos daquilo que nos traz mal-estar, respeitando os nossos limites. No entanto, é também importante desafiarmo-nos quando algumas ações nos trazem desconforto mas depois deixam-nos felizes.

Uma pequena nota: o bem-estar ou emoções positivas induzidas pelo consumo de substâncias psicoativas ou experiências de risco devem ser evitados pelas consequências que trazem.

Existem outras formas de promover as emoções positivas.

Exercício de gratidão:

- Todos os dias, num momento em que consiga estar só e sem ser interrompido, de preferência antes de dormir, sente-se para refletir sobre as coisas boas do seu dia.
- Para manter a rotina, o ideal é que aponte, num papel, diariamente, 3 momentos que o fizeram sentir bem-estar. Estes momentos podem ter sido "pequenas coisas" (por exemplo, sair à rua e sentir o sol na pele, ver o sorriso de alguém, ouvir uma música agradável). Também podem ser "grandes coisas" (por exemplo, uma refeição saborosa, uma viagem, um momento de lazer).

Esteja atento às coisas que acontecem no seu dia a dia ou aos momentos que tem no seu dia a dia em que sente bem-estar. Às vezes a expetativa de obter bem-estar de "grandes acontecimentos" não nos permite estar conscientes de pequenas satisfações e alegrias que vamos experienciando.
Treinarmos a atenção para momentos bons permite-nos estar atentos a eles.

Funcionamento psicológico positivo:

Aceitar os aspetos de que se gosta e de que não se gosta em si, na sua personalidade. Isto não significa perder "sentido crítico" mas relacionar-se melhor com aspetos que fazem parte de si, mesmo que não goste deles. Podemos, por exemplo, não gostar de ter uma caraterística, mas não lidarmos com ela com culpa/crítica interna e vergonha. Reconhecer de onde vem essa caraterística, que faz parte de nós e que a podemos gerir é diferente de resistir. Enquanto que da resistência interna vem sofrimento, de uma atitude de aceitação vem disponibilidade para nos conhecermos e regularmos melhor;

Crescimento pessoal nos desafios a que se propõe, noção do seu potencial, sensação de estar em desenvolvimento;
Propósito, direção e sentido de vida;

Domínio do meio, selecionando, gerindo e moldando o ambiente às necessidades;
Autonomia, sendo guiado pelos seus parâmetros, valores e normas que são socialmente aceites;

Exercício:

Identifique uma situação que o incomoda. Procure distinguir se o que o incomoda é um facto (ex. o seu vizinho fazer barulho durante a noite) ou a forma como vê/lida com um facto (ex. precisar de falar com o seu vizinho).

Distinga o que controla do que não controla. Por exemplo: não controla o que o seu vizinho faz mas controla a forma como interpreta o que ele faz e como lida com isso.

Relativamente ao que não controla há pouco a fazer. Ainda que todas as pessoas pensem sobre coisas que as incomodam de modo automático, a verdade é que ruminar sobre aquilo que não controlamos muitas vezes traz sofrimento adicional.

Pense agora no que controla. O que pode fazer (enumere tudo o que consegue imaginar entre soluções possíveis)? O que outras pessoas fariam no seu lugar? O que se sente disponível / com vontade para fazer? O que seria melhor para si?

Para resolver a situação que o incomoda pode tentar mudar a forma como a vê ou resolver o problema. Defina um plano para resolver o seu problema, selecionando a solução que melhor se adequa a si e antecipando possíveis consequências (positivas e negativas) de cada solução. Antecipe também estratégias para lidar com obstáculos que possam surgir.

Exemplo:

Facto – vizinho faz barulho de noite.

Forma como vê a situação – falta de respeito, não lhe permite descansar. Precisa de falar com o seu vizinho mas não o conhece e tem receio da reação.

Possíveis soluções:

- Tocar à porta e falar diretamente com o vizinho: prós – resolve o assunto imediatamente e vê a disponibilidade com que ele recebe a sua reação; contras – poderá ter de lidar com um conflito se o seu vizinho não for empático;
- Deixar um bilhete por baixo da porta do vizinho – prós – não tem de enfrentar o seu vizinho e lidar com a sua reação; contras – ele pode ignorar;
- Ligar á polícia e fazer queixa – prós – pode ser uma solução imediata e eficaz; contras – pode ganhar uma relação de tensão com o seu vizinho e prejudica-lo sem necessidade.

Exercício:

- Todos os dias, num momento em que consiga estar só e sem ser interrompido, sente-se para refletir sobre o seu dia. Também pode fazer isto antes de adormecer.

- Para manter a rotina, o ideal é que aponte, num papel, diariamente, 1 ou mais momentos em que sente que foi a pessoa que valoriza ser (foi bom para si e para os outros) e 1 ou mais momentos em que não foi a pessoa que valoriza ser (em que não foi bom para si e para os outros).
- Identifique as forças ou qualidades que o ajudaram a ser a pessoa que valoriza.
- Identifique as suas dificuldades, aquilo em que se tem de perdoar (aquilo em que foi uma pessoa que não valoriza ser) e o que o levou a fazer/dizer/permitir-se determinada ação/não ação.
- O que diria a um filho ou amigo que estivesse no seu lugar?
- O que imagina que alguém que lhe transmite segurança e confiança lhe diria?
- Procure agora perceber se tem as ferramentas para num próximo momento fazer diferente ou se é necessário pedir ajuda?

Relações positivas com os outros;

Desenvolvermos e mantermos relações sociais positivas é fundamental. As relações são uma fonte de crescimento e apoio.

Relações saudáveis são relações onde nos sentimos apoiados, respeitados e protegidos. É normal que as pessoas tenham diferenças, não concordem em tudo, tenham dias maus e características menos boas. No entanto, uma relação saudável implica estes ingredientes: segurança, respeito, partilha.

Se alguém nos faz sentir inseguro, atacado, em perigo, com ansiedade e medo é porque a relação não oferece segurança. Numa relação saudável é essencial podermos dizer não.

Mais uma vez é necessário estarmos atentos aos nossos limites e necessidades.

O mesmo se aplica a nós e à forma como fazemos sentir os outros.

Cuidar de um relacionamento é mostrar interesse, disponibilidade, respeito e proteção. Os outros são diferentes de nós, têm esse direito e cabe-nos respeitar a sua diferença.

Para cuidar da relação com o outro é importante verbalizar e revelar em comportamentos o nosso interesse, disponibilidade, amor, respeito e consideração pelo outro.

Funcionamento social positivo:

Aceitação social quando se aceitam as diferenças humanas de forma positiva;

Crescimento social quando acredita nas pessoas, grupos, sociedades em desenvolvimento;

Contribuição social com atividades sentidas como úteis e valorizadas pelos outros;

Coerência social pelo interesse na sociedade e vida social como tendo sentido;

Integração social com sentido de pertença, conforto e suporte pela comunidade;

Exercícios para treinar o funcionamento social positivo:

Exercício:

Reserve algum tempo para pensar sobre os tópicos abaixo. Anote as respostas num papel.

- Quem o faz sentir-se aceite, amado, valorizado, respeitado, apoiado?
- Quem sente que vê o melhor de si e o encoraja?
- Quem sente que vê os seus defeitos e o aceita como é?
- Costuma cultivar essa relação? Como a cultiva?
- Quando foi a última vez que esteve ou falou com essa pessoa?
- Escreva uma carta a essa/essas pessoas mencionando como a fazem sentir, o que sente por elas, bons momentos que recorda com elas.
- Envie uma mensagem a cada uma dessas pessoas.

ou

- Faça um telefonema a uma dessas pessoas.

ou

- Reserve duas horas para falar ou estar com essa pessoa e entregue-lhe a carta.

Cuidarmos das nossas relações interpessoais implica assumirmos responsabilidade por elas. Assim, para mantermos as ligações que valorizamos é importante reservarmos tempo para estar com as pessoas, comunicarmos claramente o que elas representam para nós e agradecermos os seus gestos.

Uma nota final…

Pode parecer-nos óbvio que o bem-estar mental é importante. Mas há alguns dados interessantes sobre a importância do bem-estar mental na saúde mental:

- O bem-estar mental promove a resiliência (capacidade de lidar com a adversidade);
- O bem-estar mental previne a recaída em episódios de doença mental;
- O bem-estar mental previne o aparecimento de doenças mentais;
- O bem-estar mental do próprio influencia o bem-estar do que os rodeiam;
- O bem-estar mental está associado aos indicadores de melhor saúde física;
- O bem-estar mental está associado a melhor funcionamento;
- A ausência de doença mental não garante a presença de bem-estar mental. Uma pessoa que não tenha doenças mentais pode não sentir bem-estar e funcionar pior do que alguém com doença mental. E uma pessoa com doença mental pode ainda assim ter bem-estar e funcionar bem.

Cuidarmos da nossa saúde mental e do nosso bem-estar não é egoísmo. Cuidarmos da nossa saúde mental é uma necessidade e uma responsabilidade.

Para funcionar bem e estarmos bem com os outros temos de ter saúde mental.

Como qualquer exercício físico, em que só com treino se veem resultados, e necessário rotina.

O bem-estar deve ser treinado com hábitos diários e sólidos.

Permita-se cuidar do seu bem-estar e refletir periodicamente sobre o que precisa.

MÓDULO 3 – SINTOMAS DE DOENÇA MENTAL, FATORES DE RISCO E PREVENÇÃO

Definição de doença mental

Quando somos expostos a situações de elevado desafio emocional, momentos traumáticos ou quando por algum motivo temos uma desregulação bioquímica podemos desenvolver sintomas de doença mental.

Quando alguém tem doença mental…

- Sente elevados níveis de sofrimento;
- Apresenta alterações no seu funcionamento (comportamental, cognitivo, emocional) (DSM-V, 2013);

Os sintomas de doença mental mais comuns entre a população são os sintomas de ansiedade e sintomas depressivos. Estes sintomas costumam ser um primeiro alerta. Quando aparecem devemos identificá-los para perceber de onde vêm, que função desempenham e o que revelam.

Fatores de risco e doenças mentais comuns

Ansiedade

- Vem da emoção básica medo;
- O medo tem uma função útil, permite-nos perceber que podemos estar em perigo. Sentimos medo, quando percecionamos uma ameaça (real ou imaginária). A resposta à ameaça pode ser de fuga, congelamento ou luta, tal como podemos observar nos animais. Sem o medo, os animais não poderiam fugir dos predadores ou lutar contra estes. Sem o medo nós podemos ser atropelados ao atravessar uma passadeira

quando um carro está a aproximar-se ou podemos colocar-nos em risco porque não nos defendemos atempadamente;

- A ansiedade pode também ajudar-nos:
- A preparar o futuro (por exemplo, temos de fazer algo importante e planeamos a melhor forma de o fazer);
- A melhorar o nosso desempenho (por exemplo, quando estudamos para um teste);
- A evitar más decisões (por exemplo, não falhar uma festa).

Quando a ansiedade se torna muito presente ou muito intensa pode sinalizar que algo está mal.

Quando é que a ansiedade deixa de ser útil?

- Quando nos causa sofrimento elevado (mais do que dor passageira) durante um período significativo de tempo OU tendo impacto negativo em uma ou mais áreas valorizadas da nossa vida (funcionamento social, familiar, escolar, ocupacional…);

No módulo sobre saúde mental vimos que a saúde é melhor representada como dois contínuos. No contínuo da doença mental, a ansiedade pode passar a ser uma perturbação de ansiedade.

Há diferentes perturbações de ansiedade, das quais as mais comuns:

- Perturbação de pânico.
Perturbação de ansiedade caraterizada pela presença recorrente e incapacitante de ataques de pânico que leva a um conjunto de alterações comportamentais e cognitivas (por exemplo, evitamento de determinados locais, situações ou pessoas; interpretação catastróficas de sinais corporais de ansiedade) que visam prevenir os mesmos.
- Ansiedade Social.
Perturbação caraterizada pela presença de ansiedade intensa ou incapacitante em situações de interação ou exposição social. É comum a pessoa ter pensamentos relacionados com receio de ser humilhada ou gozada e desenvolver um conjunto de comportamentos para disfarçar ou evitar a sua ansiedade e vergonha.
- Perturbação de Ansiedade Generalizada;

Perturbação de ansiedade que envolve sintomas de ansiedade constantes sem que existe nenhuma causa específica. A pessoa costuma sentir-se acelerada, preocupada com vários temas, estar em alerta permanente e ruminar sobre possíveis acontecimentos negativos.

- Perturbação Obsessiva-Compulsiva;

Perturbação caraterizada pela presença de obsessões (pensamentos repetitivos e que causam desconforto intenso) sobre determinados temas (alguns exemplos são problemas de saúde, contaminações, perigo, temas morais), que podem ser acompanhadas de compulsões (comportamentos que visam neutralizar ou reduzir a ansiedade provocada pelos pensamentos).

- Fobias específicas;

As fobias específicas são medos intensos de determinado objeto/tema/local que levam ao seu evitamento.

- Ansiedade de separação;

Ansiedade elevada ou incapacitante em situações de afastamento.

- Ansiedade relacionada com a saúde;

Preocupação ou medo intenso e frequente relacionados com temas de saúde, como doenças, procedimentos médicos e tratamentos.

Sintomas de ansiedade

A ansiedade é uma forma de medo por vezes manifesta sob a forma de **pensamentos e processos cognitivos**:

- Catastrofização (a pessoa realizada mentalmente a antecipação de cenários negativos, com muitas dificuldades e sem capacidade de os gerir, isto provoca sentimentos de angústia e impotência);
- Preocupação ("e se…" "e se…", dúvida persistente acerca de cenários negativos, com um conjunto de imagens e pensamentos guiados por sentimentos negativos, a pessoa tenta resolver mentalmente o problema mas surgem vários cenários negativos);
- Ruminação (revisão repetitiva de cenários reais ou imaginados negativos, com foco nos sintomas de sofrimento ou em aspetos problemáticos, sem visualizar soluções);
- Desrealização ou despersonalização (Sensação de irrealidade, de que a realidade está diferente, parece um sonho ou sensação de estar alterado ou desligado do seu corpo, por exemplo, vendo-se de fora);

- Sensação da iminência de um perigo;
- Pensamentos indesejados;
- Dificuldades de concentração;

A ansiedade é uma forma de medo por vezes manifesta sob a forma de **sensações fisiológicas**:

- Palpitações;
- Tremores, tonturas, vertigens;
- Agitação motora;
- Perturbação gastrointestinal (náuseas, vómitos…);
- Dores de cabeça;
- Tensão muscular;
- Boca seca;
- Vontade de urinar;

A ansiedade é uma forma de medo por vezes manifesta sob a forma de **sensações emocionais**:

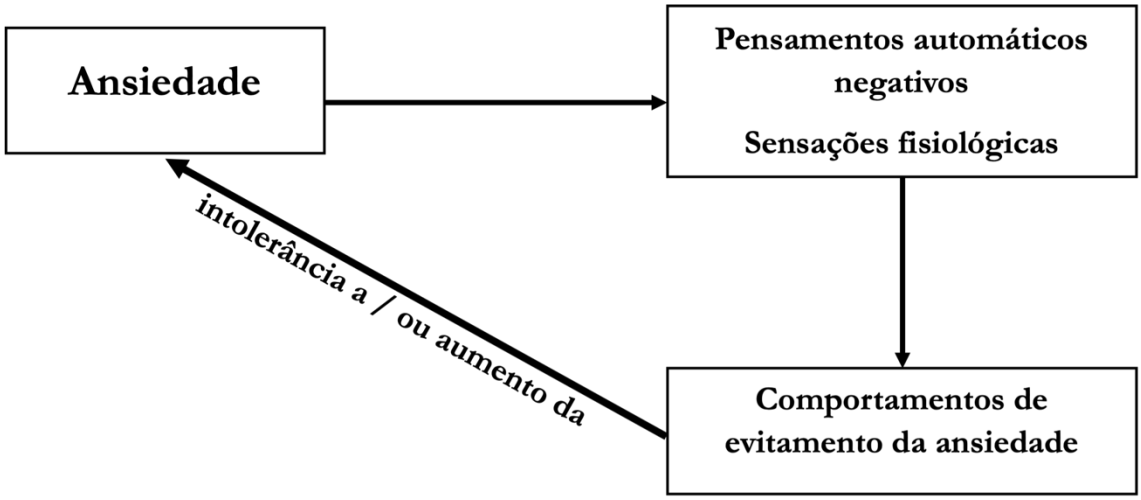
- Irritabilidade;
- Sensibilidade;
- Frustração;
- Culpa;

Da ansiedade decorrem alterações **de comportamento** como forma de lidar com essas sensações e pensamentos (evitando-a/anestesiando-a):

- Comportamento perfecionista;
- Fuga ou evitamento de situações;
- Procrastinação;
- Exigência e rigidez elevada;
- Pedido de tranquilização aos outros;
- Dependência funcional e afetiva dos outros;
- Dificuldades na socialização ou no desempenho escolar/profissional;
- Receio de fazer algumas tarefas;
- Inibição do comportamento exploratório/aventureiro;

- Consumo de substâncias que anestesiam a ansiedade;

O que causa ansiedade tende a ser evitado, o que por sua vez, a longo prazo aumenta a ansiedade sentida e a nossa dificuldade em gerir os sintomas.



A ansiedade pode interferir com várias áreas na nossa vida.

- Podemos passar a evitar pessoas ou lugares;
- Podemos passar a dormir pior;
- Podemos deixar de realizar atividades de que gostaríamos ou que eram importantes;
- Podemos ter um desempenho pior;
- Podemos sentir menos segurança ou auto-estima;
- Podemos começar a tratar os outros com maior hostilidade ou agressividade;
- Podemos fazer apenas coisas que já conhecemos/onde nos sentimos seguros;
- Podemos perder oportunidades para evitar sentir desconforto;

Quando existem sintomas de ansiedade é fundamental avaliar o seu grau de intensidade e interferência no funcionamento.
É normal sentirmos ansiedade. Contudo, se esta interfere com o nosso bem-estar devemos procurar ajuda profissional. A ajuda profissional pode ajudar-nos a compreender o aparecimento da ansiedade, a sua função (isto é, o que é que a ansiedade está a sinalizar/de que nos está a tentar "proteger") e a forma mais saudável de a gerirmos.

Uma reflexão sobre como lida com os sintomas:

Identifique uma situação que lhe causou ansiedade.

Anote:

O que aconteceu.

O que pensou, o que sentiu, como ficou o seu corpo.

O que fez para lidar com esse desconforto.

Aquilo que fez ajudou a reduzir o desconforto? Conseguiu gerir a situação?

Surgiram consequências da forma como geriu a situação?

A forma como lidou com a situação aumentou ou reduziu a ansiedade a longo prazo?

Às vezes optamos por estratégias que reduzem a ansiedade a curto prazo (por exemplo, se evitamos uma situação que nos causa ansiedade) que aumentam a ansiedade posteriormente (porque de alguma forma reforçamos a ideia de que não somos capazes de enfrentar a situação). Observe se esse é o seu caso.

Sente que conhece ou tem estratégias para enfrentar a sua ansiedade ou que aquelas que utiliza não são eficazes/ levam-no a evitar e perder coisas que valoriza?

Sente que beneficiaria de ajuda profissional?

O que diria a um amigo?

E a si? Diria aquilo que diria a um amigo? O que muda?

Quando deixamos de viver a vida que valorizamos e queremos porque estamos a fugir da ansiedade ou não sabemos lidar com esta, significa que beneficiamos de ajuda profissional. Um profissional pode ajudar-nos a mudar a forma como vemos a ansiedade e a lidar com esta com estratégias eficazes que não nos afastam do que valorizamos.

Exercício para gerir a ansiedade:

Respiração abdominal

Se tem sentido ansiedade experimente treinar o abrandamento da respiração.

Sente-se numa posição confortável e coloque as mãos sobre a sua barriga.

Feche os olhos ou deixe-os abertos.

Concentre-se dizendo a si mesmo "Agora estou aqui e agora".

Coloque as mãos sobre a barriga e inspire profundamente, notando o ar a entrar. Encha a barriga de ar, contando mentalmente até quatro – um, dois, três, quatro.

Expire devagar e profundamente esvaziando a barriga, contando mentalmente até quatro – um, dois, três, quatro.
Pode fazer isto em um tempo "inspira/ expira " vagarosamente ou em dois tempos "inspira inspira" vagarosamente e "expira expira" vagarosamente.
Repita as vezes necessárias até sentir que está com a respiração mais regulada.

Tristeza

A tristeza é um sentimento muito importante. Quando nos sentimos tristes o nosso organismo está a mapear:
- Perdas;
- Desilusões;
- Cansaço;
- Insatisfação;
- Que fomos magoados;
- Que fomos atacados ou envergonhados;
- Que estamos a perder a esperança;
- Que estamos no limite;

No entanto, quando a tristeza se prolonga ou intensifica a ponto de causar sofrimento ou alterações de funcionamento podemos estar a desenvolver sintomas de depressão.

No contínuo da doença mental, a tristeza pode transformar-se em depressão.

Sintomas de depressão

Cinco ou mais destes sintomas apresentam-se presentes durante duas semanas ou mais tempo:
- Humor deprimido na maior parte dos dias;
- Perda de interesse e satisfação pelas coisas;
- Alterações de apetite (aumento do apetite ou perda de apetite);
- Alterações de sono;
- Agitação motora ou lentificação motora;
- Alterações na energia (cansaço, fadiga);

- Sentimentos de inutilidade ou culpa;
- Menor motivação;
- Dificuldades de concentração ou raciocínio;
- Perda da capacidade de sentir satisfação;
- Auto-criticismo;

Para além disto a pessoa pode apresentar:

- Ruminação;
- Isolamento social;
- Sensibilidade interpessoal;
- Vergonha;
- Perspetiva negativa do futuro.

Consequências dos sintomas de depressão

- Podemos sentir as nossas relações interpessoais fragilizadas;
- Podemos ter um desempenho pior ou mais dificuldade em fazer tarefas simples;
- Podemos começar a gostar menos de nós;
- Podemos colocar-nos em perigo;

Tal como a ansiedade, também a tristeza em elevada intensidade pode interferir no nosso funcionamento. O corpo passa a não ser um lugar seguro, a vida perde cor, tudo parece complexo. Quando temos sintomas depressivos tudo é feito com mais esforço e cansaço.
Podemos passar a evitar sítios e atividades porque não temos motivação e energia para o fazer ou porque duvidamos do nosso valor. Assim, o evitamento vai reforçando a tristeza e a perspetiva negativa da realidade.
A ajuda profissional pode ajudar-nos a compreender o aparecimento da tristeza, a sua função (isto é, o que é que a tristeza está a sinalizar/o que é importante ser processado emocionalmente) e a forma mais saudável de a gerirmos para recuperarmos o bem-estar.
Quando a tristeza se transforma em sofrimento é necessário pedir ajuda profissional.

Um exercício para perceber se tem tido sintomas de ansiedade/depressão e se deve estar alerta.

Uma reflexão sobre como lida com os sintomas:

Identifique os momentos em que os seus sintomas depressivos têm estado presentes.
Anote:
O que aconteceu (caso tenha acontecido algo).
O que pensou, o que sentiu, que sensações observou o seu corpo.
O que fez para lidar com esse desconforto.
Aquilo que fez ajudou a reduzir o desconforto?
Surgiram consequências da forma como geriu a situação?
A forma como lidou com a situação aumentou ou reduziu os sintomas a longo prazo?
Há quanto tempo estes sintomas estão presentes?
Trouxeram consequências para a sua vida?
Sente que conhece ou tem estratégias para enfrentar os sintomas depressivos?
Sente que beneficiaria de ajuda profissional?
O que diria a um amigo?
E a si? Diria aquilo que diria a um amigo? O que muda?
Quando a tristeza está muito presente e começa a interferir no funcionamento diário significa que beneficia de ajuda profissional.

Exercício:

Atividades de prazer e mestria

Quando nos sentimos tristes é importante criarmos espaço na nossa agenda para fazermos coisas que nos fazem sentir prazer e competência.

Identifique 3 coisas que lhe dão (ou davam anteriormente) prazer. Quando nos sentimos mais tristes ou deprimidos podemos não sentir motivação, prazer ou competência a fazer nada. No entanto, é possível recordarmos aquilo que nos dava bem-estar quando estávamos bem. Procure identificar coisas que lhe traziam bem-estar anteriormente.

Identifique 2 coisas que se sente competente ou realizado a fazer. Caso não identifique nada em que se sinta competente neste momento, recorde tarefas em que anteriormente se sentia bem sucedido.

Quando nos sentimos deprimidos é muito importante estimular o bem-estar. Mesmo que não nos apeteça ou não sintamos muita vontade devemos cultivar mecanicamente o que nos fazia sentir bem. É como se estivéssemos a reaprender uma competência esquecida ou reanimar um músculo adormecido.

Crie tempo na sua semana para cada uma delas. Pode começar por fazer uma coisa por semana ou todas as que sinalizou.

Exercício:

Pausa compassiva

Pense numa situação que esteja a ser difícil neste momento.
Note o stress e desconforto no seu corpo.

Agora faça uma pausa por um momento e diga para si mesmo:
- Este é um momento de sofrimento.
(Isto é mindfulness ou estar consciente. Outras opções incluem:)
- Isto magoa;
- Au;
- Isto é stressante;

- O sofrimento faz parte da vida.
(Isto é humanidade comum. Outras opções incluem:)
- Outras pessoas sentem-se assim;
- Não estou só;
- As pessoas passam por momentos difíceis;

Agora coloque cada mão sobre o seu peito e sinta o calor a reconforta-lo. Esteja numa postura tranquilizante.
- Possa ser bondoso/a comigo.
(Neste momento pode estar a perguntar-se por que precisa de ser bondoso consigo.)
- Possa tratar-me bem.
- Possa ter paciência comigo e com os meus defeitos.
- Possa encontrar coragem.
- Possa manter a calma.
- Possa ser caloroso.
- Possa ser forte.
- Possa aceitar-me.
- Possa perdoar-me.

A pausa de auto-compaixão é um momento para estar consigo. Neste momento reconhece o que está dentro de si e permite-se estar presente para si. Ao mesmo tempo nota que não está só. Finalmente, cultiva as qualidades de que necessita e que o ajudam a estar bem, procura tranquilizar-se, cuidar de si.
Pode praticar isto a qualquer hora do dia ou da noite.

Outros problemas comuns:

Os sintomas de ansiedade e de depressão podem ser apenas a primeira camada de outras problemáticas.

- Luto;
- Adição à internet (crescente entre os jovens);
- Problemas de desempenho escolar, profissional;

Os sintomas de ansiedade e depressão podem surgir devido a experiências de violência e abuso emocional, destacamos os mais prevalentes:
- Bullying (forma de violência entre pares que pode acontecer na infância, adolescência ou idade adulta);
- Violência no namoro (forma de violência entre pares amorosos que pode acontecer na adolescência ou idade adulta);
- Violência Doméstica (forma de violência entre o casal);
- Assédio Moral no Trabalho (forma de violência que ocorre no local de trabalho);

Por vezes os sintomas de ansiedade e depressão podem aparecer associados a perturbações como:

Perturbações do comportamento alimentar (que envolvem insatisfação com a imagem corporal e/ou padrões de comportamento na alimentação que não são saudáveis como fazer jejum prolongado, vomitar, comer compulsivamente).
- Bulimia;
- Anorexia;

- Ingestão Alimentar Compulsiva;

Perturbações Psicóticas (como a Esquizofrenia)

As perturbações psicóticas caraterizam-se pela presença de delírios (ideias que não correspondem à realidade – como a crença de que se está a ser perseguido) ou alterações sensoriais como alucinações (ver, ouvir coisas que ninguém vê/ouve).

Consumo de substâncias psicoativas

O consumo de álcool ou de drogas envolve, em qualquer idade, um conjunto de riscos. Se o padrão de consumo for repetido e em quantidade elevada pode acarretar dependência.

Perturbações da personalidade

Padrão de traços de personalidade rígidos que traz problemas no funcionamento, podendo interferir nas relações interpessoais, amorosas, trabalho e rotinas.

Algumas ideias sobre a doença mental:

- Quando as pessoas apresentam sintomas de ansiedade ou depressão, ou quaisquer outros sintomas de doença mental devem pedir ajuda;
- Quando mais cedo for iniciado tratamento melhor é a evolução e recuperação;
- As pessoas com doença mental não são fracas, preguiçosas, loucas ou antipáticas. Estão doentes;
- As pessoas com doença mental podem parecer-nos vítimas. Novamente, estas pessoas estão doentes e isso altera a sua forma de se sentirem, pensarem e posicionarem;
- As pessoas com doença mental podem recuperar;
- A doença mental pode acontecer em qualquer etapa da vida;
- A doença mental pode acontecer a pessoas com ótimas relações com a sua família e amigos;
- A doença mental pode desenvolver-se em pessoas com boas condições económicas;
- As pessoas não perdem valor ou mérito por terem doença mental – há muitas pessoas de sucesso que tiveram doença mental;
- As pessoas com doença mental não têm de ser perigosas.

Fatores de risco para a doença mental:

- Isolamento;
- Privação de acesso a alimentação, estabilidade económica, segurança;
- Estar em relações abusivas;
- Consumo de substâncias psicoativas;
- Acontecimentos traumáticos;
- Estados de exaustão psicológica ou física;
- Falta de apoio;
- Desequilíbrios bioquímicos ou hormonais;
- Doenças físicas do próprio ou de outros;
- Genética familiar;
- Elevado auto-criticismo ou vergonha;

Fatores de prevenção para a doença mental:

- Exercício físico (liberta endorfinas, promove oxigenação do cérebro, melhora a relação com o corpo, interrompe a ruminação);
- Falar com pessoas em quem confiamos e de segurança;
- Evitarmos situações de risco: relações e ambientes tóxicos, consumos de substâncias, estados de privação ou exaustão;
- Definir prioridades, investir o nosso tempo onde precisamos, dizer não;
- Realizarmos uma boa higiene do sono;
- Ter uma alimentação equilibrada e beber água;
- Pedir ajuda profissional.

Cuidarmos da nossa saúde mental e do nosso bem-estar não é egoísmo. Cuidarmos da nossa saúde mental é uma necessidade e uma responsabilidade.

Sem saúde mental ou com doença mental dificilmente conseguimos funcionar bem.

MÓDULO 4 - PEDIR E OFERECER AJUDA PROFISSIONAL COM COMPAIXÃO

O primeiro passo para pedir ou oferecer ajuda é saber identificar quando a ajuda é necessária. Ao longo destes módulos vimos que não só a presença de doença mental mas também a ausência de bem-estar mental podem sinalizar a necessidade de cuidarmos de nós ou de pedirmos ajuda profissional.

É importante ter em conta que 1 em cada 5 portugueses tem problemas de saúde mental e que a maioria da população terá algum problema de saúde mental nalguma etapa do seu desenvolvimento. Tudo isto, torna os problemas de saúde mental e a própria doença mental uma experiência humana, pela qual qualquer pessoa pode passar.

Apesar da vergonha e preconceito associados à doença mental, esta é uma condição comum. A vulnerabilidade e as dificuldades fazem parte da vida e por vezes a forma como lidamos com estas , ou a falta de apoio para as gerir, podem-nos levar a quadros de doença mental. Pedir ajuda profissional significa assumir responsabilidade da nossa felicidade.

Como saber se precisamos de ajuda?

- Quando não sentimos bem-estar mental;
- Quando o nosso bem-estar mental está longe do que desejamos;
- Quando sozinhos não conseguimos melhorar o nosso bem-estar mental;
- Quando temos sintomas de doença mental e esses sintomas se prolongam no tempo (por exemplo, estar duas semanas ou mais tempo com o humor deprimido ou ansiedade);
- Quando os sintomas de doença mental interferem nas atividades do dia-a-dia;
- Quando os sintomas de doença mental causam elevado e intenso sofrimento, ou mal estar prolongado;
- Quando várias pessoas à nossa volta identificam mudanças na nossa maneira de ser/estar e partilham a opinião de que precisamos de ajuda;
- Quando sentimos essa necessidade.

Quando é que sabemos que alguém precisa de ajuda?

Os critérios são os mesmos. No entanto, é preciso ter claro que só é ajudado quem se deixa ajudar e quem está disponível para pedir ajuda.
Há algumas coisas que podemos fazer para ajudar quem achamos precisar de ajuda.

Como ajudar alguém com problemas de saúde / doença mental?

- Ficar atento a mudanças de comportamento;
    - Mostrar interesse e empatia, isto é, a disponibilidade e sensibilidade para compreender os sentimentos e experiência do outro;
    - Verbalizar que gostamos da pessoa ou que ela é importante para nós;

- Não emitir comentários críticos e com julgamento sobre o que a outra pessoa está a pensar/sentir/dizer/fazer, cada pessoa tem uma experiência e motivos ÚNICOS. Embora seja normal e automático o nosso cérebro emitir julgamentos, temos a capacidade de os filtrar e escolher as nossas palavras quando falamos com as pessoas. Quando alguém está em sofrimento os julgamentos não vão ajudar, pelo que devemos filtrar a nossa linguagem;
- Se a pessoa não quiser falar simplesmente estar presente, estar acompanhado é mais reconfortante do que estar sozinho;
- Sugerir fazerem atividades de que a pessoa gosta ou em que se sinta confortável;
- Respeitar o ritmo e o tempo da pessoa - quando estamos em sofrimento mudamos de velocidade;
- Validar aquilo que a pessoa sente/partilha: estando presente e atento ao que pessoa diz, refletindo que se acompanha e está a processar o que ela está a dizer, interpretando o seu comportamento e ações no contexto que descreve, reconhecendo a sua experiência emocional e sendo genuíno na forma como se acolhe essa experiência. Note que não tem de concordar ou discordar do que a pessoa partilha, apenas acompanhar e reconhecer o que é partilhado;
- Se a pessoa tiver dificuldades em partilhar ou vergonha do que sente dar exemplos de que todos passamos por momentos difíceis, isto pode fazer toda a diferença;
- Encorajar a pessoa a procurar um profissional de saúde e se a pessoa apresentar risco de vida evite deixá-la isolada;

- Estar presente na vida da pessoa, na medida do que ela permitir, mostrando interesse;
- Relembrar à pessoa que todos passamos por momentos de dor, sofrimento, fracasso;
- Mostrar à pessoa que não está sozinha e tem apoio;

- Perguntar à pessoa se há algo que possamos dizer/oferecer/em que possamos ajudar para que se sinta melhor, mais confortável;
- Refletir sobre o que nos ajudaria a nós, em momentos de sofrimento e tratar o outro como gostaríamos que nos tratassem;
- Manter o respeito e cuidado pela pessoa que teríamos em qualquer momento.

Falámos do caso da Ana a propósito da doença mental. Algo que poderíamos dizer à Ana no sentido de a incentivar a procurar ajuda profissional seria:

Identificar as mudanças de comportamento	**Noto que estás diferente, tens estado mais calada e mais ausente.**
Mostrar interesse, disponibilidade e empatia	Estou aqui para o que precisares e te puder ajudar. É normal sentires-te assim. Deve ser muito duro o que estás a sentir.
Verbalizar que gostamos da pessoa ou que ela é importante para nós (às vezes a doença mental embacia a nossa capacidade de nos sentirmos amados) **Valorizar aquilo que a pessoa faz bem (muitas vezes a doença mental filtra o nosso amor próprio)**	És muito importante para mim e quero o teu bem. Nota que tens conseguido fazer isto.
Não julgar aquilo que a outra pessoa está a pensar/sentir/dizer/fazer, cada pessoa tem uma experiência e motivos ÚNICOS	Não sei como te estás a sentir mas terás os teus motivos.
Se a pessoa não quiser falar fazer companhia, estar acompanhado é mais reconfortante do que estar sozinho	Se não quiseres falar, respeito. Estou aqui.
Sugerir fazerem atividades de que a pessoa gosta ou em que se sinta confortável	O que gostavas de fazer? O que é confortável para ti?
Respeitar o ritmo e o tempo da pessoa, quando estamos em sofrimento mudamos de velocidade	Está tudo bem, vamos ao teu ritmo.
Se a pessoa tiver dificuldades em partilhar ou vergonha do que sente dar exemplos de que todos passamos por momentos difíceis, isto pode fazer toda a diferença	Todas as pessoas passam por momentos difíceis. Não tens de ter vergonha ou sentir culpa. Ninguém quer passar por isto.

Pedir ajuda profissional:

Encorajar alguém a pedir ajuda profissional pode ser uma tarefa fácil ou muito difícil.
Há algumas estratégias que podem ajudar:
- Apresentar nomes de profissionais de referência;
- Falar sobre a taxa de sucesso da intervenção em determinados problemas;
- Mostrar o site da ordem dos psicólogos ou a sociedade de psiquiatria e saúde mental;
- Relembrar que qualquer pessoa pode precisar de um profissional de saúde mental;
- Destacar que a pessoa pode experimentar e ver como se sente para depois decidir;
- Enumerar os motivos pelos quais acha que a pessoa deve pedir ajuda, calorosamente e validando as suas vulnerabilidades (dando exemplos de como não pedir ajuda a está a prejudicar);
- Realçar que pedir ajuda não nos tira valor. Tal como recorremos a ajuda médica quando temos um problema de saúde física, beneficiamos de ajuda psicológica quando temos um problema de saúde psicológica;
- Mostrar vídeos ou entrevistas relacionadas com o tema da saúde mental.

Exercício:

O que diria a um amigo que precisa de ajuda psicológica? O que diria à Ana?
Procure identificar em que momento se dirigia ao seu amigo/à Ana. Que palavras usaria para começar a conversa? Quais seriam os aspetos que iria abordar?
Como acha que o seu amigo se iria sentir?
Procure agora ver a situação de outra perspetiva. Se o seu amigo tivesse esta abordagem consigo, como se sentia?
Finalmente, procure identificar o que diria a si mesmo caso precisasse de ajuda psicológica. Note as diferenças entre o que diria a si ou a um amigo.