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Category: Research

A REVIEW OF STUDIES ON MENTAL HEALTH PROGRAMMES TARGETING YOUNG ADULTS (18–24) IN EDUCATIONAL SETTINGS IN EUROPE

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ABSTRACT

A review of studies on mental health programmes targeting young adults (18–24) in educational settings in Europe

As students' mental health and wellbeing are receiving increasing attention within educational institutions, this article presents a review of existing knowledge regarding the effectiveness of mental health and wellbeing programmes targeting young adults within educational settings in Europe. A literature search was conducted, and nine studies were found that matched the selection criteria. Programmes were analysed in terms of their characteristics, participant characteristics and study characteristics. All studies showed that such programmes have a small to moderate effect on at least some aspects of the students' wellbeing that were targeted. Implications for both practice and research include: involving end users in the programme development stage; taking into account the drop-out rates of students participating in a programme; considering carefully whether a group-based or individual-based programme is best; and focusing on the importance of embedding a programme in the respective organization. More research is needed to verify the findings and to further determine what makes a programme effective.

Keywords

Mental health programme, wellbeing, young adult, student, educational setting, Europe

SAMENVATTING

Een overzicht van onderzoek naar programma's voor psychosociale problemen bij jongvolwassenen (18–24 jaar) in de onderwijssetting in Europa

Binnen de onderwijscontext groeit de aandacht voor het welzijn van studenten. In dit artikel worden resultaten gepresenteerd van een literatuurstudie naar wat bekend is over de effectiviteit van Europese programma's binnen de schoolcontext ten behoeve van het mentale welbevinden voor 18–24 jarigen. Dit leverde negen studies op. Studies zijn geanalyseerd op kenmerken van de interventie, kenmerken van deelnemende studenten en kenmerken van het uitgevoerde onderzoek. Alle geïncludeerde studies rapporteren een (klein tot matig) effect van het programma op (aspecten van) het mentale welbevinden van de deelnemers. Implicaties voor praktijk en verder onderzoek zijn onder meer gericht op het betrekken van de doelgroep bij de ontwikkeling van een programma, bewuste keuzes te maken die uitval van deelnemende studenten aan een programma

tegen kunnen gaan, het aanbieden van zowel groepsinterventies als individuele interventies en het inbedden van een programma in de organisatiecontext. Meer onderzoek is nodig om uitkomsten te verifiëren en om nader vast te stellen wat effectieve bestanddelen zijn van dergelijke programma's.

Trefwoorden

Mentale gezondheid, programma, jongvolwassene, student, onderwijscontext, Europa

INTRODUCTION

Good mental health is a key asset in ensuring the health and wellbeing of people, and it is critical for positive youth development (WHO, 2013). Mental health is commonly defined as 'a state of wellbeing in which every individual realizes his or her own potential, can cope with normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community' (WHO, 2001, p. 1). Studies suggest that improved mental wellbeing is associated with an increase in positive outcomes relating to psychological health, life expectancy, educational achievement, skills and employment rates, and social interaction and participation. It is also associated with fewer negative outcomes, or a reduction in their levels, relating to health-risk behaviours (e.g. smoking and alcohol abuse), the risk of mental health problems, suicide and rates of anti-social behaviour and crime (Cane & Oland, 2015).

The mental health of students within educational settings is attracting growing attention. Educational institutions are not only places for cognitive learning; they are also places where young people have social experiences with their peers and older adults. Thus, these institutions are places where processes of personality development and identity formation occur, social competence is acquired and social problems potentially develop and are manifest (Heimgartner & Sting, 2013; Patalay et al., 2017). Young people spend a significant proportion of their time within educational settings, and existing structures within these institutions enable planned provisions and programmes to be implemented effectively (Jané-Llopis & Braddick, 2008).

Young adults are vulnerable to symptoms relating to mood and behaviour regulation (Grant & Potenza, 2010). A substantial number of students experience problems affecting their wellbeing. For example, Dopmeijer (2018) assessed the general psychological wellbeing of students at a Dutch university of applied sciences (n = 3134), and found that almost 39% of students suffered from light to moderate feelings of fear and depressive symptoms, while over 14% of students

experienced these feelings strongly and 25% faced the risk of developing burnout. Also, according to De Boer (2017), 75% of Dutch students (n = 324) claim to experience emotional exhaustion. Research suggests there is a relationship between self-reported depressive symptoms and school dropout among students (Quiroga, Janosz, Bisset & Morin, 2013). It is critical that individuals demonstrating mental health problems during this phase of life, such as depression or depressive symptoms, seek appropriate help early (Vanheusden, 2008). However, individuals aged 18–24 years are less likely to make use of mental health services than those in other age groups. Denial, underestimation of the problem and a negative attitude towards seeking help are factors that constrain such help-seeking behaviour (Vanheusden, 2008), and thus receiving treatment.

The literature to date reveals that programmes for mental health and school-based social work within schools are effective to some extent (e.g. Allen-Meares, Montgomery & Kim, 2013; Carta, Fiandra, Rampazzo, Contu & Preti, 2015; Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011; Kavanagh et al., 2009; Sklad, Diekstra, De Rittter, Ben & Gravesteijn, 2012; Weare & Nind, 2011). This accounts for both preventative programmes (intended to keep mental health problems from arising) and curative programmes (responsive, aimed at those starting to develop or already experiencing problems). The literature also reveals substantial knowledge about what is effective in programmes for youth in general. This includes general factors (factors independent of the programme and target population, usually at an organizational level) and specific factors (those relevant to the target audience and the programme) (e.g. Van Yperen, Veerman & Bijl, 2017).

Many mental health and wellbeing programmes have been implemented in the United States. Interventional approaches there are often top-down, strict and prescriptive. By contrast, the European approach to the development and execution of these types of programmes is more bottom-up, flexible and non-prescriptive, and also emphasizes the need for end-user involvement (Weare & Nind, 2011). Because of the different styles and approaches used in the United States and Europe, and because of organizational differences in educational systems, programmes from the United States are not applicable in Europe without adaptation, and the results of studies on the effectiveness of programmes cannot be generalized to the European context.

European research on the effectiveness of mental health programmes implemented within educational settings has focused mainly on programmes implemented for children and adolescents (e.g. Bolin & Sorbring, 2017; Carta et al., 2015; Chilton, Pearson & Anderson, 2015; Kavanagh et al., 2009; Kuyken et al., 2013; Rampazzo et al., 2016; Vierhaus, Maass, Fridrici & Lohaus,

2010; Vostanis, Humphrey, Fitzgerald, Deighton & Wolpert, 2013). Students are usually 18 years or older and generally would be considered responsible for their own wellbeing rather than would the educational institution. However, research shows that student wellbeing is crucial for academic success and, therefore, it could be argued that educational institutions should take some responsibility. Students facing mental or other health problems attain lower grades and have a greater risk of dropping out (Van den Broek, Muskens & Winkels, 2013). As such, improving student wellbeing is increasingly seen as an important task to ensure the emotional, social and academic development of students (Noble, McGrath, Wyatt, Carbines & Robb, 2008).

To contribute to the further development of services promoting the mental health and wellbeing of students in Europe, we present the results of a literature review, with the aim of answering the following research question: what is known about the various programme characteristics and the effectiveness of mental health and wellbeing programmes implemented in educational settings for young adults (aged 18–24 years) in Europe?

METHOD

We conducted a literature review of studies that met the following criteria: (1) the studies were carried out in Europe, (2) they focused on the effect of a mental health or wellbeing programme implemented in an educational setting, (3) they focused on outcomes for young adults aged 18–24 years, (4) they were published in peer-reviewed journals and (5) they were published between 2006 and May 2018. The literature search was conducted between 20 June 2017 and 1 June 2018. Two researchers searched the ERIC, MEDLINE, PSYCHinfo, PSYCHarticles and SOCindex databases for systematic reviews and randomized controlled trials (RCTs). The databases of the Cochrane Library and the Campbell Collaboration Library were also searched. Reference lists of studies matching the selection criteria were then manually scanned by means of snowball sampling. Databases were searched using combinations of keywords, including effect, student wellbeing, school-based social work, student wellbeing programme, student welfare activity, school-based social work support, school-based mental health service and mental health intervention. This produced no systematic reviews and only three RCTs (two of which studied the same programme but at different time periods), resulting in the decision to include other research designs.

In total, 8,117 articles were identified through 58 searches. Further selective scanning of these articles led to the identification of seven studies that matched the review's criteria. The manual

search of reference lists yielded two more articles, resulting in nine studies in total being included in the review. An overview of the search results is provided in Figure 1.
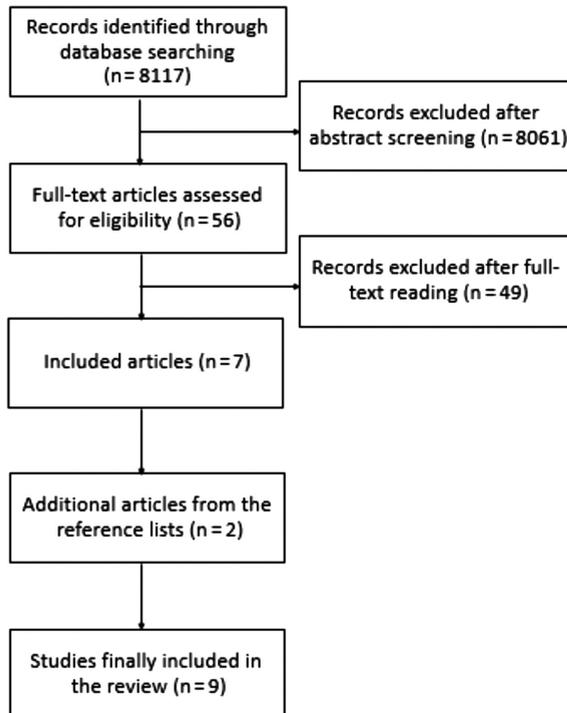

Figure 1: Results of the literature search.

Analysis

The articles were first scanned to obtain an overview. To answer the first part of the research question, the characteristics of youth programmes in the studies were analysed based on distinctions in the literature, including a distinction between programme characteristics and user characteristics. To answer the second part of the research question, the characteristics of the actual studies were analysed (see Table 1). To determine the outcomes of this literature review, the studies were then compared according to these categories.

Table 1. Categories for analysis.

	Characteristics of the programme	User characteristics	Effectiveness of programme
1)	Country	Average age	Author(s) and year of publication
2)	Name	Gender	Research method
3)	Method used	Attendance/ dropout rates	Measures and instruments
4)	Focus (General/specific)		Findings
5)	Aim: Preventative/curative		Main conclusions
6)	Group-based/ individual		
7)	Programme delivered by		
8)	Type of educational institution and courses		
9)	Length of programme		

RESULTS

Characteristics of programmes and users

Table 2 presents the results of the analysis of the main characteristics of each programme and its users.

Different methods were used in the studies (n = 9). These included a university counselling service (n = 4), mindfulness (n = 2; with one of these studies focusing on the short-term effects and one on the long-term effects of the same programme), a peer-led group programme (n = 1), an art-based programme (n = 1) and a modular programme using different techniques (e.g. meetings, activities) (n = 1).

Most of the programmes targeted a general audience (n = 7). Two of the programmes targeted a specific audience. Of these, one was aimed at students suffering from mild depression. The other only included students who were not suffering from schizophrenia or any other psychotic disorder, or alcohol or drug addiction, and who were not receiving psychopharmacological treatment. Most of the programmes were intended for university students (n = 8), while one programme was aimed at students attending vocational institutions. Two programmes were offered to students attending specific courses; the other programmes did not make this distinction.

In total, five programmes had a curative aim. Four of these were university counselling programmes (n = 4) and one was a peer-led group programme (n = 1). Four studies looked at programmes that had a preventative aim: a mindfulness programme (n = 2), a modular programme (n = 1), and an

Table 2. Characteristics of programmes and students.

Author(s)	Country	Name of programme	Method	Focus (general/specific)	Aim: Preventative/curative	Group-based/individual	Programme delivered by	Educational institution(s), courses	Length of programme	Average age	Gender	Attendance
Andersen et al. (2016)	Denmark	Shaping the Social	Module programme with 6 themes: preliminary meetings before school start, welcoming activities at first school day, clear timetable, class meetings, scheduled breaks, pleasant non-smoking environment	General	Preventative	Group-based	Teachers	Vocational education; students attending basic courses: car mechanics, construction, electricity, management & IT, media production or agricultural education	Themes 1 and 2 once, other themes ongoing	21	75% male, 25% female	No information available
Byrom (2018)	United Kingdom	Students Minds	Peer-led group programme	Specific (for mild depression)	Curative	Group-based	Trained peers	University	Six weekly sessions	20.1	22% male, 70% female, 8% not classified as male or female	34% of participants completed the course
Connell, Barkham & Mellor-Clark (2008)	United Kingdom	University Counselling Service	Counselling, not clear what technique was used	General	Curative	Individual	Professional therapists	University	Mean no. of sessions with planned ending: 4.8	22.8	32% male, 68% female	Average no. with unplanned ending: 2.7
Margrove (2015)	United Kingdom	Open Arts	Art-based programme	General	Preventative	Group-based	Professional artists with Mental Health First Aid accreditation	University	12 weekly sessions	27.3	21% male, 79% female	Mean no. of sessions attended: 6.4
Murray, McKenzie, Murray & Richelieu (2016)	United Kingdom	University Counselling Service	Counselling, not clear what technique was used	General	Curative	Individual	Professional therapists	University	Mean no. of sessions: 5.04. Duration in days: 78.9	22.8	29.2% male, 70.4% female, 0.4% transgender	No information available
Stepparava et al. (2016)	Italy	University Counselling Service	Counselling protocol was grounded in cognitive behavioural therapy	General	Curative	Individual	Professional therapists	Undergraduate university students	Mean no. of sessions: 7.49	23.9	30% male, 70% female	56% completed treatment

Table 2 (continued)

Author(s)	Country	Name of programme	Method	Focus (general/specific)	Aim: Preventative/curative	Group-based/individual	Programme delivered by	Educational institution(s), courses	Length of programme	Average age	Gender	Attendance
Vescovelli, Melani, Ruini, Ricci Bitti & Monti (2017)	Italy	University Counselling Service	Cognitive behavioural therapy (CBT) and psychodynamic therapy (PDT)	Specific inclusion criteria: absence of schizophrenia or other psychotic disorder, absence of alcohol or drug addiction, absence of ongoing psycho-pharmacological treatment	Curative	Individual	Psychotherapists	University	No. of sessions: usually 4	24.6	38% male, 62% female	87.7% completed CBT, 88.1% completed PDT
De Vibe et al. (2013)	Norway	Mindfulness-Based Stress Reduction (MBSR)	Mindfulness exercises, didactic teaching on mindfulness	General	Preventative	Group-based	Instructors trained in conducting MBSR courses and experienced mindfulness practitioners	University medicine and psychology students	7 weekly sessions	23.8	24% male, 76% female	Mean no. of sessions attended: 5.3
De Vibe et al. (2018)	Norway	Mindfulness-Based Stress Reduction (MBSR)	Mindfulness exercises, didactic teaching on mindfulness and booster sessions twice a year	General	Preventative	Group-based	Instructors trained in conducting MBSR courses and experienced mindfulness practitioners	University medicine and psychology students	7 weekly sessions and 2 booster sessions yearly for 6 years	23.8*	24% male*, 76% female*	21% attending 1 booster session, 25% between 2 and 4 booster sessions, 5% between 5–8, 46% did not attend booster sessions

*Numbers from the sample from the initial study conducted in 2013 are also mentioned in the follow-up study from 2018.

art-based programme (n = 1). Of the seven general programmes, two had a preventative aim and five a curative aim. The two programmes targeting a specific audience both had a curative aim.

Four programmes were delivered by professional therapists (the four university counselling services), one by trained peers (n = 1) and three by trained instructors (n = 3). The modular programme was delivered by teachers.

Five programmes were group-based and four programmes were delivered on an individual basis. Most of the programmes with a curative aim (n = 5) were offered to individuals, with only one of them group-based. The group-based programmes all had a different duration, ranging from six sessions over six weeks to ongoing. Three of these programmes recorded attendance numbers (measured by the number of students who completed a course or the mean number of sessions attended). The numbers showed that dropout occurred within all programmes. The programmes for individual students showed a mean number of sessions which ranged from 4 to 7.49. Four programmes recorded information on attendance in a different format, such as the average number of sessions (in the case of an unplanned curtailment) and the percentage of students who completed treatment. Here, too, dropout occurred.

The average age of students taking part in the different programmes ranged from 20.1 to 24.6. With one exception, the programmes attracted a higher percentage of female students (ranging from 62 % to 79 %). Two programmes mentioned a small number of students not classified as male or female and/or transgender students.

Effectiveness of programmes

Table 3 presents the characteristics of the studies that were analysed to determine the effectiveness of the programmes.

All of the studies reported a positive effect of the programme on at least some of the students who attended and on at least some aspects of their wellbeing. However, the studies varied in the methods used to determine this effect.

Three RCTs were found, two of which focused on the same mindfulness programme (one study on the short-term effects and one study on the long-term effects). Five studies focused on the effect of the programme, measured by means of a pre-test and a post-test. The effect of

Table 3. Overview of characteristics of studies included.

Author(s)	Focus of study	Method	Measures and instruments[1]	Findings	Conclusions
Andersen et al. (2016)	Impact of programme on student wellbeing at school; daily cigarette smoking.	Non-randomized controlled trial (10 vocational schools, n = 5,794).	Four sub-scales used for measuring students' wellbeing: (1) School connectedness: Danish version of a two-item Likert scale developed for the HBSC surveys. (2) Student support: a five-item Likert scale developed for the HBSC study on classmate support. (3) Teacher relatedness: a three-item Likert scale developed for the HBSC study. (4) Valuing the profession: a two-item Likert scale developed for this study.	– Students in the intervention group showed increased school connectedness. – No effects found for student support, teacher relatedness or valuing the profession. – No programme effects found for daily smoking. – Findings indicated that programme deterred occasional smokers from becoming daily smokers.	– Findings indicate the possibility of tackling school-related wellbeing and smoking in high-risk population through settings-based programmes. – Improvements in social environment achieved through the integration of social and educational activities have potential to become embedded within existing school practices in vocational school settings. They may be effective in increasing school connectedness. – Given high levels of risk behaviour and school dropout among their students, vocational schools remain important settings for targeting young people's health and wellbeing.
Byrom (2018)	Evaluation of acceptability and impact of programme on student mental health on 8 project sites.	Analysis of three data points: Time 1 (n = 65, collected at the first session), Time 2 (n = 37, collected at the end of 2nd, 3rd or 4th session, depending on the site) and Time 3 (n = 22, collected at the end of the 5th or 6th session, depending on the site. Method: regression analysis.	Short version of WEMWBS (SWEMWBS).	– Significant increase in mental wellbeing measured for students returning between Time 1 and Time 2; non-significant for Time 2 and Time 3. – Students attending likely to have experienced mental health difficulties for over a year and to have already sought professional support. – Lower levels of mental wellbeing at Time 1 positively influenced the likelihood of returning for subsequent sessions.	– Retention beyond the mid-point was low, shorter programme might be better. – Peer-led programmes may be of value in combination with professional services to provide students with choice. – Results suggest there is potential for peer support to improve mental health among university students. – The term 'peer support' refers to a diversity of approaches. This programme includes many of the essential components for effective peer support.
Connell et al. (2008)	Effectiveness of student counselling services.	Pre- and post-test (n = 7 for university student counselling services, n = 846 for students).	CORE system, comprising CORE-OM and CORE-A. Core-OM: a four-scale self-reporting measure covering 34 items. Items relate to depression, anxiety, physical problems, trauma, close relationships, social relationships, general day-to-day functioning, overall subjective wellbeing and risk to self and others. CORE-A: two forms for practitioners, eliciting variables such as age, gender, ethnicity, student status, practitioners' pre- and post-therapy severity ratings, type of ending (planned or unplanned) and type of therapy.	– Indications that counselling was effective, 70% of students showing reliable improvement relating to the CORE-OM measure. – From a practitioner's perspective, greater improvement measured for those students with most prevalent problems. – Effect sizes differed for planned and unplanned endings/dropout and for anxiety and depression according to practitioners involved.	– Student counselling is effective; effect is greater for those who complete a counselling course and have a planned ending (i.e. agreed between the counsellor and student). – Stage of dropout was important: students who dropped out of therapy before the third session were the most vulnerable.

Table 3 (continued)

Author(s)	Focus of study	Method	Measures and instruments[1]	Findings	Conclusions
Margrove (2015)	Usefulness of programme in terms of increasing wellbeing and/or social inclusion.	Pre- and post-tests (n = 14 for baseline questionnaire, n = 7 for post-programme questionnaire).	Wellbeing: 14-item WEMWBS scale; Social Inclusion: a 12-item SIS.	– Of the seven students who completed baseline and post-test questionnaires, 71%, 86% and 71% reported improvements in confidence, motivation and social relationships, respectively. – Improvements in wellbeing and social inclusion were not significant.	– Findings indicated positive effects for participation in the project, but results need to be interpreted with care due to small numbers. – More effective engagement with the counselling and wellbeing services is recommended. Only a few participants were referred to the project by the university counselling team. – Project was not condition-specific, with negligible emphasis on mental health. Participatory arts and health programmes may appeal widely to students with a range of different problems and conditions because of high stigma associated with mental health issues among students.
Murray et al. (2016)	Effectiveness of a university counselling service.	Pre- and post-test (n = 304).	CORE-OM system.	– At group level, statistically significant improvement in scores following counselling programmes. 63% showed reliable improvement. Furthermore, 43% of all students and 49% of students who began counselling with scores in the clinical range, moved from the clinical range to a healthy range. – Reliable deterioration in symptoms occurred among 2% of attendees. – More sessions were associated with reduced probability of the occurrence of a clinically significant change.	– University counselling services support individuals in regaining their psychological health. – More research needed to clarify contribution of the number of sessions and type of ending to the counselling outcome.
Stepparava et al. (2016)	Effectiveness of a university counselling service.	Pre- and post-test (n = 83, of which 45 students completed pre-and post-measurements).	Three self-reporting instruments: (1) Symptom Checklist 90 (revised) with nine sub-scales used for measuring the perceived severity of psychopathological symptoms. (2) CORE-OM. (3) Emotion Regulation Questionnaire (a 10-item self-reporting measurement of reappraisal and suppression).	– Significant reductions found for self-reported symptoms and general level of psychological distress. – Use of reappraisal to regulate emotions showed a significant increase. – No significant reduction was found for suppression strategies.	– Cognitive-relational counselling services have considerable potential for promoting significant reductions in psychological distress and for improving overall level of functioning and wellbeing of students. – A need to develop new ways to facilitate access to available services for high-risk populations. – Psycho-educational group programmes to address common problems among students can be used as a first step aimed at discussing these difficulties in a less structured and more comfortable context. Can be followed by a second step entailing a more structured programme.

Table 3 (continued)

Author(s)	Focus of study	Method	Measures and instruments[1]	Findings	Conclusions
Vescovelli et al. (2017)	Investigate and compare feasibility and clinical utility of cognitive behavioural (CBT) vs psychodynamic (PDT) psychotherapies.	Pre- and post-test (total sample: n = 149, with n = 64 for CBT and n = 85 for PDT).	Self-rating: Italian version of CORE-OM, observer-ratings: sociodemographic and clinical interview, GAS (numeric scale from 0–100 to rate patients' emotional, cognitive, behavioural, occupational and social functioning on a continuum of mental health-mental illness).	– At end of treatment, majority of students reported lower levels of distress and higher levels of wellbeing compared with pre-treatment. This was endorsed by clinician's judgements. – Treatment effects for CBT and PDT do not significantly differ. – Male and female students equally benefitted from programme; majority of requests came from female students. – Anxiety, mood disorders represent most frequent diagnoses in sample, mostly characterized by mild symptoms, according to GAS criteria.	– Study highlights feasibility and utility of CBT and PDT. – More clinical attention needs to be paid to affective disorders such as anxiety and stress, since these tend to be of moderate intensity and usually respond well to intervention without requiring drug treatment. – Integration of observer-rated information is an essential ingredient of a rigorous outcome assessment.
De Vibe et al. (2013)	Study of the effect of a mindfulness programme.	RCT (total n = 288 with n = 144 for intervention group and control group).	Self-report before and after the programme: – mental distress: GHQ12, 12-item, four scale measure; – student burnout: MBI, 15-item scale measuring 3 dimensions of student burnout: emotional exhaustion, cynicism and study efficacy; – study stress: PMSS, 13-item scale; – subjective wellbeing: 4-item version of SWB scale; – mindfulness: FFMQ, 39 items.	– Programme reduced mental distress and improved student wellbeing independent of student class (medicine or psychology) and university location. – No significant effect on student burnout. – For female students, a significant programme effect on mental distress, study stress and wellbeing. – Higher level of class attendance and practice at home increased the effect of the programme, especially for mental distress.	– Effect of course is moderate. – Impact of gender on effect of the programme and on the reported type of distress. More research needed to clarify this relationship.
De Vibe et al. (2018)	Study on six-year effects of a mindfulness programme with booster sessions twice a year.	RCT (total n = 288 with n = 144 for intervention group and control group).	Self-report measures: – Wellbeing: 4-item version of the SWB-scale; – Coping: 42-item Ways of Coping Checklist), with 3 dimensions of coping remaining after factor analysis of the dataset: problem-focused coping (PFC, 14 items), avoidance-focused coping (AFC, 17 items) and seeking social support (SS, 9 items); – Dispositional mindfulness (DM): FFQM, 39 items; – Student compliance: measured by class attendance and extent of home-based mindfulness practice.	– Multivariate analysis shows increases in DM associated with increases in PFC. Increases in both DM and PFC were associated with decreases in AFC during 6-year period. – Intervention group exhibited significantly greater increases in DM and more problem-focused coping styles. – Full model accounted for 56% of the variance in wellbeing at the 6-year measure.	– Despite poor to moderate adherence to formal mindfulness practice, results indicate increased wellbeing at 6-year follow up. – Mindfulness programme may have facilitated shift in way students coped with adversity. – More research needed to disentangle effects and causal mechanisms. – Many participants pursued mindfulness training on their own during follow-up period. Impossible to control non-specific factors.

[1]HBSC: Health Behavior in School-aged Children; CORE: Clinical Outcomes in Routine Evaluation; WEMWBS: Warwick Edinburgh Mental Wellbeing Scale; SIS: Social Inclusion Scale; GAS: Global Assessment Scale; GHQ12: General Health Questionnaire; MBI: Maslach Burnout Inventory (student version); PMSS: Perceived Medical School Stress; SWB: Subjective wellbeing; FFMQ: Five Facet Mindfulness Questionnaire.

one programme was studied by taking measures at the beginning, the middle and the end of the programme. The variation in research designs and measurements make the outcomes of the studies difficult to compare. It was therefore decided not to include statistical information derived from the quantitative studies in the overview but to describe these outcomes in words, the only numerical information being in the form of descriptive statistics such as means and percentages.

All of the studies used self-reporting instruments to measure wellbeing. Two studies also used measures for practitioners. These self-reporting instruments varied across the studies. The CORE measure was used in all four studies on university counselling services. Three of these studies only used the self-report measure of the CORE (CORE-OM), while one also used the practitioner forms (CORE-A). Two studies used CORE-OM combined with other measures. The Warwick Edinburgh Mental Wellbeing Scale (WEMWS) was used in two studies, one of which used a short version of the scale. In addition to using the above self-reporting instruments, all of the studies used different scales to operationalize various aspects of wellbeing. Most of these scales were validated, but some were self-designed.

Apart from reporting on the programme's effect on the wellbeing of participants, the studies identified several factors that were considered important in terms of a programme's effectiveness: embedding a programme in the existing practices of the educational institution; integrating a programme into other wellbeing services; facilitating access to the programme; the appeal and length of a programme; and the impact of early dropout. One study also suggested that the gender of the participants may impact a programme's effectiveness.

Summary of characteristics and effectiveness

All of the studies demonstrated a positive effect of the programme on at least some aspects of mental health and wellbeing, with the effects small to moderate. The content of the programmes varied, from 'classic' student counselling to an art-based programme and a mindfulness programme. In relation to the gender of participants, while not all of the studies included this information, the programmes seemed to attract more females than males. The programmes were mostly delivered by trained professionals; however, some also involved teachers and peers. The length of the programmes ranged from a few weeks/sessions to ongoing. Most of the programmes targeted a general audience, and there were slightly more group-based programmes than individual programmes. Dropout occurred in both preventative and curative programmes.

All of the studies used quantitative measures to examine the effectiveness of the programme – using RCTs, pre-tests and post-tests and a research design with measures at three time points. Different measurements were used to operationalize the concept of mental health and wellbeing. The studies highlighted the importance of embedding and integrating programmes within existing structures.

DISCUSSION

The aim of this review was to examine the characteristics and the effectiveness of mental health and wellbeing programmes targeting young adults (aged 18–24 years) implemented within European educational settings. Nine studies matched the inclusion criteria. This section discusses our findings.

An analysis of the characteristics of the programmes and their users showed that the programmes varied in: method, focus (general/specific) and aim (preventative/curative); whether they were group-based or targeted at the individual; who delivered the programme; and the programme length. The review cannot provide clear answers to the question of what choices should be made in order for a programme to be most effective, as all programmes showed at least some degree of effectiveness. One possible explanation for this is that the effectiveness of a programme is not only dependent on programme characteristics but also on factors such as context and user characteristics (Van Yperen et al., 2017). Another explanation might be that students select a programme that suits their needs and interests best and this could, in turn, influence the effectiveness of the programme as measured.

Most programmes in the review were led by a professional, with only one led by teachers and one by trained peers. This might suggest that most programmes show little integration into the educational context and educational processes, while implementation factors have been shown to be important in relation to the effectiveness of a programme. Previous research has indicated that programmes that encountered no obvious implementation difficulties were more effective than those that did encounter difficulties (Weare & Nind, 2011). Although all the programmes included in our review showed some degree of effectiveness, the studies did highlight the importance of implementation factors, such as the need to embed a programme in the organization (Andersen et al., 2016), the need to facilitate access to services for students in order to improve their wellbeing (Strepparava et al., 2016) and the need for integration with other counselling and wellbeing services to improve the way that students are referred to a programme (Margrove, 2015).

The review does not show a clear correlation between the effectiveness of a programme and the organization or body delivering it. As mentioned above, students are known to be reluctant to use mental health services. Some of the literature shows that when help is sought, students prefer to turn to a teacher or a peer rather than seeking professional help (Di-placito-De Rango, 2016). However, other literature suggests that since teachers are seen as part of the competitive culture of educational institutions, students do not feel free to talk about mental health and wellbeing issues with them (Kirsh et al., 2014).

Another finding relating to programme characteristics was that most programmes with a curative aim were offered on an individual basis. This might give a student the impression that a mental health problem is an individual problem, when it might be more helpful to share problems and experiences with others in a group-based intervention. In addition, this individual approach could hinder the normalizing of openness about mental health and wellbeing issues that is considered important in relation to the help-seeking behaviour of students (Netwerk Studentenwelzijn, 2018).

The relationship between programme duration and effectiveness is somewhat unclear based on our review. Connell et al. (2008) found that the number of sessions combined with the type of ending (planned or unplanned) may be important for the outcome, with those who dropped out of student counselling after attending fewer than three sessions rated as making the least progress. In line with this, De Vibe et al. (2013) found that higher levels of class attendance (combined with practice at home) increased the effectiveness of the programme. However, Murray et al. (2016) found that a higher number of sessions was associated with a reduced probability of the occurrence of a clinically significant change. In line with this finding, Byrom (2018) suggested that shorter programmes may have advantages, with this study finding that retention beyond the mid-point was low and that the positive effect on mental wellbeing measured in the first half of the programme was not evident in the second. All programmes in the review that reported attendance numbers also reported dropout; however, the reasons for dropout were not mentioned.

With respect to the second aim, namely to analyse the effectiveness of programmes, the studies showed that the programmes had a small to moderate effect on the mental health and wellbeing of the participants. However, the studies did not determine the factors that make a programme effective. Moreover, various research designs and instruments were used to measure mental health and wellbeing and to determine effectiveness. This made it difficult to compare the studies and their results. Nevertheless, the programmes were studied in 'real-world settings', which is

important because such settings are often more complex than tightly controlled trial settings. It is known that the latter can be problematic, including in primary and secondary education settings, where programmes that have been well validated in tightly controlled efficacy trials have been found to produce zero results in practice (Vostanis et al., 2013).

Implications

This review provides some insight into the characteristics of mental health and wellbeing programmes and the effectiveness of such programmes. It also shows the need for more research to clarify the relationship between the type of problems and the most appropriate type of programme, as well as who should deliver it. More research is also needed to clarify how the number of sessions and how a programme ends impacts on outcomes.

Future studies should not be exclusively effect-focused (i.e. centred solely on outcomes). Effect-focused studies can produce 'black box' evaluation, whereby the mechanisms leading to changes in outcomes remain unknown or poorly understood (Scriven, 1994). In the interests of determining whether a programme works, as well as understanding why it works, the focus should be both on the effects of a programme and on participant characteristics, programme characteristics and implementation factors (Vostanis et al., 2013; Weare & Nind, 2011). In other words, research designs should be selected that enable the identification of those factors that determine programme effectiveness and that account for user characteristics and contextual dynamics.

One implication for both research and practice is that greater attention needs to be paid to the views of young people about their mental health and wellbeing in educational contexts when designing and evaluating a programme. This is often lacking (Coombes, Appleton, Allan & Yerrell, 2013), despite the fact that it tallies with the bottom-up approach that is a typical feature of European programmes (Weare & Nind, 2011). In the light of existing barriers to young people seeking help when they have mental health and wellbeing issues, it is especially important that their involvement is sought in the programme development and design stage to ensure that a programme suits their needs. This might also contribute to a reduction in the number of students dropping out of a programme.

Another implication for both research and practice is to determine in detail what the programme's aims are and how the programme can be monitored to determine whether these aims are being

met. This could enable the effective measurement and evaluation of the impact of programmes designed to improve mental health (Bryant, Heard & Watson, 2015).

One final implication for practice is to take an integral approach to programme development. Embedding a programme in an organization is crucial. The way access is organized, the way a programme is integrated into the range of counselling and wellbeing services on offer and the way that it is embedded in the educational system of the institution will influence whether a programme attracts students and whether it functions as intended.

Strengths and limitations

One strength of this study is that, to the best of our knowledge, it is the first review of the existing literature on mental health programmes for young adults (aged 18–24 years) within European educational settings, including a review of their effectiveness. It serves as a valuable indicator of the availability of such programmes for this group of people. A second strength of the study is that it involved a comprehensive search of relevant databases to identify articles that matched the selection criteria. A third strength is that it identified the practical implications for those seeking to engage in further research on – and the development of – mental health and wellbeing programmes targeting students.

One limitation of this study is that because we only included peer-reviewed articles, evaluations of existing programmes that have not yet been published in peer-reviewed journals were omitted. A second limitation is that due to the different research designs and measurements used, it was difficult to compare the outcomes of the studies. Statistical information derived from quantitative studies was thus not included in the analysis, and the outcomes were only explained in words, the only numerical information being in the form of descriptives such as means and percentages. Another limitation concerns the small number of studies found and their diverse characteristics and areas of focus, which means the conclusions should be interpreted with caution.

CONCLUSION

In conclusion, this review highlighted the fact that programmes targeting student wellbeing appear to be beneficial to most participants. These programmes offer support to a vulnerable

group of young people in a context in which they naturally spend much of their time. The review offered preliminary insight into different participant characteristics, programme characteristics and organizational and implementation factors that may have a significant influence on the effectiveness of a programme. However, it also revealed that we still do not know a lot about these factors. We strongly recommend educational institutions continue offering programmes that support the wellbeing of students. We also strongly recommend that further studies are conducted on these types of programmes in order to gain a greater understanding of what works for whom and why.

DISCLOSURE STATEMENT

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