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Promoting mental fitness in the context of active ageing policies: Comparative analysis of action programme objectives in eight countries

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Abstract. In the context of an ageing European population there is increasing demand for policies and strategies aimed at maintaining or stimulating the cognitive abilities of older adults. Mental fitness programmes seek to maintain and promote the emotional and psychological wellbeing of older adults, enabling them to meet the demands of everyday life. Although many European countries have implemented programmes and services within a broad framework of active ageing, there are no standardised guidelines regarding how this should be done. In order to learn more about these programmes and services and provide useful information for decision making by policy makers we conducted a comparative study of the initiatives undertaken in eight different countries. Using qualitative content analysis we examined the stated objectives – in terms of attitudes, knowledge and abilities – of 116 programmes and services implemented across these countries. Overall, the results showed that ability objectives are much more common than are those focused on attitudes and knowledge. A more specific network analysis also provided information about how the sub-categories of each of the three kinds of objective are related to one another. The findings have practical implications for future planning of mental fitness programmes.

Keywords: ageing; welfare policies; social programmes; psychosocial intervention; objectives.

[es] Promoción del mental fitness en el contexto de las políticas de envejecimiento activo: análisis comparativo de objetivos en programas de ocho países

Resumen. En el marco de una población europea cada vez más envejecida, existe una creciente demanda de políticas y estrategias destinadas a mantener o estimular las capacidades cognitivas de los adultos mayores. Los programas de estimulación mental buscan mantener y promover el bienestar emocional y psicológico de las personas mayores, permitiéndoles satisfacer las demandas de la vida cotidiana. Aunque muchos países europeos han puesto en práctica programas y servicios dentro de un amplio marco de envejecimiento activo, no existen directrices normalizadas sobre cómo hacerlo. Con el fin de aprender más sobre estos programas y servicios y proporcionar información útil para la toma de decisiones por parte de los responsables políticos, realizamos un estudio comparativo de las iniciativas emprendidas en ocho países diferentes. Utilizando una metodología cualitativa de análisis de contenido, examinamos los objetivos fijados — en cuanto a actitudes, conocimientos y habilidades — de 116 programas y servicios puestos en práctica en estos países. En general, los resultados mostraron que los objetivos de habilidad son mucho más comunes que los centrados en las actitudes y el conocimiento. Un análisis de redes más específico también proporcionó información sobre cómo las subcategorías de cada uno de los tres tipos de objetivos se relacionan entre sí. Las conclusiones obtenidas tienen repercusiones prácticas para la planificación futura de los programas de estimulación mental.

Palabras clave: envejecimiento; políticas de bienestar; programas sociales; intervención psicosocial; objetivos.

Sumario. Introduction. The importance of promoting cognitive ability in an ageing population. Promoting mental fitness in the context of active and healthy ageing. The MENTA 50+ project for promoting mental fitness among older adults. Method. Participants. Instruments. Procedure. Network analysis. Conclusions. Funding. Disclosure statement. Acknowledgements.

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Introduction

The importance of promoting cognitive ability in an ageing population

Our cognitive functioning does not remain static across the life span, but rather is characterised by periods of both development and decline (De Bot and Makoni, 2005). A key concept in this respect is what Levy (1994) refers to as ageing-associated cognitive decline, whereby a person begins to experience memory loss or forgetfulness without important functional deficits in relation to activities of daily living (Petersen et al., 1999).

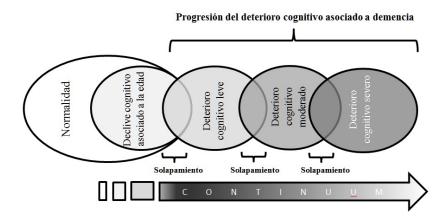


Figure 1. Continuum from normal cognitive functioning through age-associated cognitive decline to dementia. Adapted from Montenegro Peña et al. (2012) "Evaluación y diagnóstico del deterioro cognitivo leve" [Assessment and diagnosis of mild cognitive impairment], Logopedia, Foniatría y Audiología [Speech Therapy & Audiology], 32, pp. 47-56.

It can be seen in Figure 1 how this mild cognitive impairment, occurring alongside a reduction in the brain's neural interconnections, may be understood as part of a continuum that stretches from normal cognitive functioning through increasing impairment to dementia (Luiten et al., 2016). Importantly, however, age-associated cognitive decline is not inevitable, at least not in all areas (Poddar et al., 2019; Rovner et al., 2018). Continued engagement with intellectual activities, such as doing crosswords or active learning (e.g. learning a foreign language), can play a key role in compensating the age-related decline in processes involving attention and reasoning (Compton et al., 2000). Furthermore, research suggests that compensatory efforts to counteract functional deficits increase well into later life (Rothermund and Brandstädter, 2003).

Cognitive stimulation is a term used to refer to techniques and strategies aimed at optimising a person's cognitive performance and abilities, specifically through his or her participation in activities which require the use of memory, reasoning, attention or language, among other skills (García Sevilla, 2012; García and Hombrados, 2002). The premise underlying cognitive stimulation is what is known as neural plasticity. The brain is an extremely dynamic organ and its neural circuitry is constantly being modified in response to the individual's experiences and his or her relationship to the environment. This dynamic quality of the brain means that the central nervous system may undergo functional adaptations across the person's lifespan, ameliorating structural or physiological deficits caused by lesions or degenerative processes, including those associated with ageing (Sharman, Classen, and Cohen, 2013; Stranahan, Erion and Wosiski-Kuhn, 2013). Neurobiological research has shown that a loss of neurons can be compensated by an increase in dendritic branches and connections in alternative neural circuits (Arcos Burgos et al., 2019). Thus, by intentionally activating the neural circuits involved in higher mental processes, cognitive stimulation may compensate age-related cognitive deficits.

Promoting mental fitness in the context of active and healthy ageing

The notion of mental fitness is closely linked to the broader concept of mental wellbeing, as well as to the more general notion of active ageing. However, as Nyqvist et al. (2013) point out, there is no consensus definition of these concepts, due not least to the diversity of approaches resulting from different policy perspectives and disciplines. A good working definition of mental wellbeing is that set out in the report of the Foresight Mental Capital and Wellbeing Project, where it is described as 'a dynamic state in which the individual is able to develop their potential, work productively and creatively, build strong and positive relationships with others, and contribute to their community' (Kirkwood et al., 2008, p. 10). As regards mental fitness, this notion was first proposed by Dorothea McCarthy in the 1960s (McCarthy, 1964), since when it has come to be considered a

key component of healthy ageing. A useful operational definition of the concept can be found in the paper by Cusack and Thompson (1998):

Like physical fitness, [mental fitness] is a condition of optimal functioning that is achieved through regular exercise and a healthy lifestyle. Mental fitness includes creative thinking, clear thinking, problem solving, memory skills, learning new things, and expressing ideas clearly, setting personal goals and developing positive mental attitudes (p. 311).

It is clear from such a definition that mental fitness can help to ensure that individuals maintain and/or achieve psychological wellbeing as they age, enabling them to make use of their cognitive and emotional abilities, to function adequately within their communities and to meet the demands and challenges of daily living.

Both mental fitness and mental wellbeing are therefore consistent with a positive view of health, one that emphasises what the World Health Organization defines as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity' (WHO, 2006, p. 1). It is this holistic and salutogenic perspective which locates the two concepts firmly within the policy framework of active ageing, the aim of which is to transform the opportunities (especially as regards health and social engagement) that are available to people as they age, thus improving their quality of life (United Nations, 2002). Despite, however, the clear conceptual overlap between mental fitness and active ageing, very few studies have linked the two fields of knowledge. Accordingly, a search of the Scopus database (June 2019) using the search strategy "[("mental fitness" or "mental wellness" or "mental well-being") and ("active ageing" or "active aging") in the fields: article title, abstract or Keywords]' yields only ten records. Furthermore, an analysis of the content of these ten documents reveals that in only two of them was mental fitness or wellbeing a target of intervention in programmes designed to promote healthy and active ageing among community-dwelling adults. One of these was the study by Gandy, Bell, McClelland, and Roe (2017), who analysed a community support programme in the West Lancashire region of the UK aimed at improving the wellbeing and physical and mental health of people aged 50 and over, especially those isolated due to age-related illness or disability. The other was a report by Roberts et al. (2017) regarding Active Aging for L.I.F.E., a health initiative implemented in the state of Oklahoma (USA) with the goal of improving outcomes in the domains of longevity, independence, fitness and engagement and of supporting active ageing across the lifespan.

Fortunately, the number of records retrieved increases to 21 if we broaden the search strategy to include ageing in general: [("mental fitness") and ("ageing" or "aging")]. Analysis of these documents reveals the wide range of aspects that may be addressed under the umbrella of mental fitness, including: changing attitudes, creativity, critical thinking, goal setting and memory (Cusack and Thompson, 1998; Cusack, Thompson, and Rogers, 2003); positive affect (Kunzmann, 2008); nutritional aspects (Yonei et al., 2008); physical exercise (Faina et al., 2008); meditation (Xiong and Doraiswamy, 2009); and intergenerational activity (Roberts et al., 2017). What unites these different aspects is that they may all contribute to the empowerment of older adults, a process which also requires the development of autonomy, community involvement through social networks (Orozco-Campos and López-Hernández, 2016; Araya Cuello et al., 2020), the fostering of self-esteem and self-confidence, perceived control over one's life and surroundings (Durán Muñoz, 2007), and the creation and strengthening of a sense of belonging to a group (Iacub and Arias, 2010). Certainly, the factors involved in promoting empowerment in the elderly are included in three of the four domains of the Active Ageing Index (Zaidi et al., 2017): Participation in society; Independent, healthy and secure living and Capacity and enabling environment for active and healthy ageing. Within this last domain, the authors set, as a specific indicator, the "Mental Wellbeing" that, although being a somewhat broader concept, is fully related to Mental Fitness as the aim of intervention on which the present work is focused.

The MENTA 50+ project for promoting mental fitness among older adults

MENTA 50+ is a multilateral project funded through the Grundtvig programme, part of the European Union's Lifelong Learning Programme. It is a collaborative initiative involving eight institutions from Spain, the UK, Hungary, Italy, Austria, Greece, Cyprus and Israel. The primary aim of the project is to respond to the challenge of an ageing population by promoting mental fitness among adults aged 50 and over, adopting a holistic approach in order to create a range of practical resources that support and encourage their activity. Overall, the project objectives are consistent with Article 25 of the Charter of Fundamental Rights of the European Union (European Commission, 2012), which 'recognises and respects the rights of the elderly to lead a life of dignity and independence and to participate in social and cultural life'. This recognition likewise appears in other European Union framework documents on social policy in relation to an ageing population, for example, The demographic future of Europe: From challenge to opportunity (European Commission, 2006), Dealing with the impact of an ageing population in the EU (European Commission, 2009) and EUROPE 2020. A European strategy for smart, sustainable and inclusive growth (European Commission, 2010).

MENTA 50+ also seeks to engage with policy makers and managers of mental fitness programmes within the context of active ageing (Coberly and Wilber, 1987). In this respect, and bearing in mind the point we made earlier about the wide range of activities and proposals which fall under the umbrella of mental fitness, the project likewise aims to clarify and describe the different initiatives that are currently being implemented. This goal derives from the need to agree a set of common policies that can lead to specific and, to some extent, standardised actions across EU member states as regards the opportunities and services available to older adults (Schmidt, 2019). To this end, and within the framework of the project, we previously conducted a preliminary analysis of the different services, programmes and initiatives (both public and private) for promoting mental fitness among older adults that have been implemented in the countries that make up the MENTA 50+ consortium (Delgado et al., 2013; Delgado, García-Martín, and Romo, 2017). This analysis established an initial classification of the objectives sought by these programmes, grouping them into three broad categories: attitudes, knowledge and skills. In order to build on this analysis the aims of the present study were:

- 1. To obtain descriptive information for each participating country about programmes, services and/or activities aimed at promoting mental fitness in people aged 50 and over.
- 2. To conduct a comparative analysis of the objectives of these programmes/services/activities.

Method

Participants

Participants in this study were the eight member institutions from the eight different countries that comprise the consortium MENTA50+Learning to take action for mental fitness and wellbeing in older age, which is funded as a lifelong learning project (project reference 527515-LLP-1-2012-1-ES-GRUNDTVIG-GMP) by the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Union. The information about programmes/services/activities in each of the eight countries that was analysed in the present study was provided by each country's corresponding member institution. Collecting data was carried out from 2013 to 2014.

Instruments

Data sheet for programmes/services/activities: This was created ad hoc to gather information about key aspects of the different programmes/services/activities aimed at promoting mental fitness among people aged 50+ in each participating country. Specifically, we gathered the following information: Name of the programme/service/activity; type of organization (public/private) and scope (local, regional, etc.); target population; and characteristics of the programme/service/activity. In addition, respondents were asked to state the purposes of the programme/service/activity and provide a summary description of it. They were also invited to make additional comments, including with regard to what they thought made the programme/service/activity effective and which aspects of it were most and least highly rated by users.

Procedure

Step 1: Selecting programmes/services/activities in each participating country

Using the aforementioned data sheet each of the participating institutions collated information about the mental fitness programmes/services/activities in their respective country. In order to be eligible for analysis in the present study a programme/service/activity had first to fulfil the following two criteria:

- A) Target population: Users aged 50+ with no recognised cognitive impairment.
- B) Purpose: One of the main goals of the programme/service/activity is to improve the mental health and wellbeing of users by promoting their cognitive abilities.

The consortium member team from each country then selected, from among the eligible programmes/ services/activities that had been implemented or were currently underway, those for which the most complete information was available and/or which best represented the initiatives being undertaken in their country. Each member team could select a maximum of 20 programmes/services/activities in their country. Table 1 shows the distribution of selected programmes/services/activities across the eight participating countries.

Step 2: Content analysis of the data sheet corresponding to each of the selected programmes/services/activities

For each of the selected programmes/services/activities we then carried out a content analysis of information provided in the 'Purposes of the programme/service/activity' section of the data sheet. The starting point for this analysis was the three broad categories of objectives, namely attitudes, knowledge and abilities, that were identified in our previous preliminary analysis (Delgado et al., 2013; Delgado, García-Martín, and Romo,

2017). In accordance with the principles of grounded theory (Charmaz, 2014), two of the present authors simultaneously and independently coded the material in order to identify themes among the stated purposes of the programmes/services/activities. This was done following an inductive method and using the software package ATLAS.ti 7.0 (Scientific Software Development GmbH, 2014), and it was a two-stage process. In the first, the two coders independently coded the materials according to the three broad categories of objectives. They then shared and discussed their respective interpretations in order to reach a consensus. In the second stage, they independently produced a more detailed coding of the material in each of the three broad categories, which were thus broken down into more specific sub-categories of objectives. As before, the two coders then shared and discussed their respective interpretations in order to reach a consensus.

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Country	Number of programmes/services/ activities
Austria	19
Cyprus	11
Spain	19
Greece	10
Hungary	11
Israel	15
Italy	15
United Kingdom	16
Total	116

Table 1. Distribution of selected programmes/services/activities among the participating countries.

Results

It can be seen in Figure 2 that the priority given to the three categories of objectives (attitudes, knowledge and abilities) by mental fitness programmes is broadly the same across the eight countries. Thus, overall, by far the greatest emphasis is placed on developing abilities (57.6% of the total of 507 objectives analysed), whereas attitudes and knowledge each account for only around one fifth of the stated programme objectives (22.7% and 19.7%, respectively).

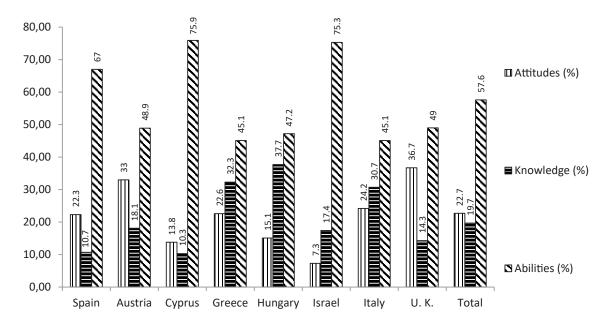


Figure 2. Percentages by country for the three broad categories of objectives.

Given that adequate knowledge and a positive attitude are crucial to the maintenance and development of abilities as people age, it could be argued that national programmes should aim to give more or less equal weight to all three of these areas. The country which comes closest to doing so is Greece, followed by Italy and Hungary. As regards the relative emphasis placed on knowledge and attitudes, Cyprus and Italy are the countries whose programmes achieve the greatest balance in this respect. Finally, the programmes offered in

Cyprus, Israel and Spain are those which ascribe the greatest importance to helping older adults develop the ability component of mental fitness.

In what follows we will discuss separately the results for each of the three categories of objectives (attitudes, knowledge and abilities). As an aid to interpreting the findings presented in the figures, we also present a series of tables (Tables 2, 3 and 4) that provide descriptions and illustrative quotes for the sub-categories in each case.

Sub-category	Description	Example quote – Groundedness
Adaptation	Foster an attitude that facilitates a closer match between the person	33:9 Facilitate their adaptation to the environment.
	and his or her environment.	
Autonomy	Increase independence in the performance of activities of daily liv-	99:1 Increase personal autonomy and social inclu-
	ing.	sion.
Empowerment	Promote control over one's own life as an essential step towards	20:2 To empower these groups of females and con-
	acquiring greater social power.	tribute to more equity in health.
Identity	Support the development of a unique and all-encompassing self-im-	22:21 To encourage them to see their "life review"
	age, starting from the acceptance of past experience as the basis for	as a process of accepting the passage of time and of
	personal growth.	acquiring a deeper appreciation of the philosophical
		concept of existence.
Integration	Encourage a sense of belonging to their social milieu.	19:2 Enjoyment of social contacts.
Participation	Encourage older people to recognise what they can contribute	56:1 The aim is to activate older people to actively
	through involvement in community activities.	participate in solving local environmental problems.
Reducing loneliness	Reduce feelings and/or perceptions of loneliness and isolation.	95:1 Reduce situations of loneliness, avoiding feel-
		ings of abandonment.
Self-esteem	Facilitate the development of a more positive view of themselves.	53:3 To promote the self-esteem of older people.
Wellness / Quality of life	Promote the attitudes needed to improve their perceived wellbeing.	120:1 To improve quality of life by promoting inno-
		vative solutions that challenge mainstream thinking
		on economic, environmental and social issues.

Table 2. Attitudinal objectives: Description and groundedness.

In terms of attitudinal objectives, it can be seen in Figure 3 that, across all eight countries, the greatest emphasis is placed on encouraging participation and involvement.

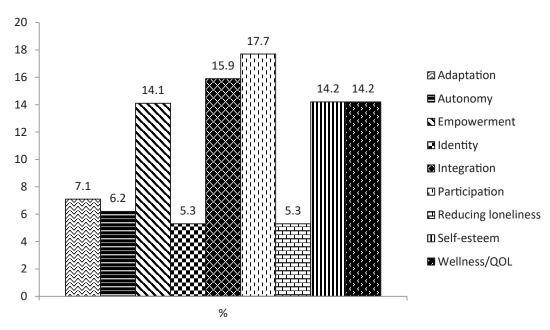


Figure 3. Percentage of attitudinal objectives across all countries.

These two objectives are closely followed by promoting self-esteem, quality of life and empowerment, which featured to an equivalent extent in the programmes analysed. The percentages were much lower in relation to adaptation, autonomy, identity and reducing loneliness, possibly because these aspects are already implicit to activities aimed at promoting participation and involvement.

Table 3. Knowledge objectives: Description and groundedness.

Sub-category	Description	Example quotes – Groundedness
Changes and age	Provide information about the biopsychosocial changes associated with ageing so as to facilitate a better understanding of this process and help individuals to cope with it.	62:1 The programme respects the ageing process and recognises the importance of early prevention.
Communication needs	Promote understanding of the need to share experiences that can improve social interaction.	54:1 The HOMEdotOLD project aims to provide a TV-based platform with cost-effective services that will be delivered in a personalised and intuitive way and will advance the social interaction of elderly people.
Using digital technology	Provide information about the use of ICTs so as to favour their learning and close the digital gap with respect to younger generations.	26:5 Introduction of new technologies to the target people. Eliminate the digital gap affecting older people.
Fostering creativity	Increased emphasis on creativity training so as to encourage free and authentic expression.	67:3 To learn how to use your creativity.
Cultural calendar	Provide people with information about social, cultural and leisure activities on offer in their local area.	18:1 The aim of senior guides was to train older volunteers for information tours for older people.
Emotional awareness	Increase people's awareness and understanding of their own emotions in order to help them cope better with the process of ageing.	32:1 Acquire better knowledge of our own emotions regarding adaptation to the ageing process.
Empowerment	Increase awareness among both individuals and society about the importance of having control over one's own life.	11:1 To strengthen public awareness regarding the particular situation and problems faced by older women, this being a prerequisite for their empowerment.
Memory functioning	Increase individual awareness of memory functioning and prevent age-related memory loss.	22:2 Strengthen their metamemory.
Mental health recommendations	Provide information about age-associated cognitive decline, as well as about educational resources designed to compensate possible age-related limitations.	86:2 Learning techniques for activating the brain's right lobe, in order to create a balance and to release the pressure on the left lobe.
Psychosocial care	Provide information about their psychosocial needs in relation to a possible reduction in autonomy.	51:2 This need arises from the large increase in survival of elderly and increasing incidents of elderly people who need psychiatric and psychosocial care.
Social inclusion	Provide information about the advantages of maintaining links with family and the community.	58:2 Their hopes for maintaining sustainable relationships with their families and communities.
Training recommendations	Provide theoretical and practical information related to memory training and concepts linked to models of human learning.	61:1 The programme provides participants with memory and learning training via the method of brain control.

As regards knowledge objectives, the greatest emphasis was placed on training recommendations, closely followed by the sub-categories we labelled as 'changes and age' and 'cultural calendar'.

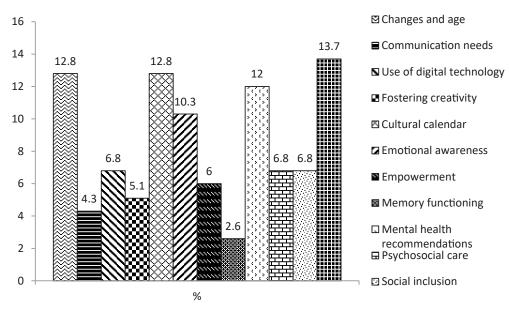


Figure 4. Percentage of knowledge objectives across all countries.

The fourth and fifth most common knowledge objectives were, respectively, mental health recommendations and emotional awareness, followed by social inclusion, psychosocial care and use of digital technology. Finally, in descending order of frequency, came empowerment, fostering creativity, communication needs and memory functioning. The fact that memory functioning was the least cited objective in the knowledge category may seem surprising given that the aim of these programmes is to promote mental fitness. However, if we consider the description of the various sub-categories shown in Table 3, it can be seen that memory functioning is in fact one of the main targets of training recommendations, the most common knowledge objective across the programmes analysed.

Sub-category	Sub-category Description Example quote – Groundedness			
	*	* *		
Autonomy	Promote skills that facilitate continued independence in daily living.	31:3 Increase personal autonomy.		
Creativity skills	Promote skills that encourage creative expression.	38:6 Promoting their creativity.		
Emotions	Identify and manage effectively one's own emotions and those of others.	32:11 Reflect on our own emotions and those of others to be aware of their subjectivity.		
Health care	Promote habits aimed at maintaining optimal health.	33:11 Improve healthy habits.		
Intergenerational collaboration	Promote the skills needed for cooperation between persons of different ages.	62:3 To foster interrelations between different generations.		
Learning	Implement strategies to promote continuous self-directed learning.	80:4 To learn how to be our own teachers.		
Life management	Develop the skills needed to achieve a healthy lifestyle in all respects.	89:2 To promote within the different social contexts the use of strategies and the introduction of suitable lifestyles to support cultural and mental wellbeing.		
Memory	Implement strategies aimed at strengthening memory.	5:2 Memory training: keeping mentally fit and mental strengthening.		
Mental/cognitive activity	Provide the resources necessary for maintaining cognitive activity and preventing the age-associated decline in mental abilities.	28:1 To improve and/or maintain cognitive abilities for as long as possible in those people who have begun their impairment process.		
Physical activity	Increase people's ability to remain physically active.	65:2 To maintain the physical abilities and flexibility necessary for everyday life.		
Physical/mental skills	Use and maintain the skills needed for effective synergy between physical and mental activity.	36:3 Maintaining remaining abilities as long as possible and even restoring the abilities that have fallen into disuse.		
Social relations	Foster the relational skills that are essential for maintaining social contacts.	60:5 Support older persons in maintaining their social activities.		
Stress reduction	Apply strategies to reduce stress in daily life.	84:1 Reducing the level of tension and encouraging calm functioning in stressful situations.		
Wellness/Quality of life	Promote skills that contribute to a better quality of everyday life.	54:2 Aiming at improving the quality and enjoyment of their home life		

Table 4. Ability objectives: Description and groundedness.

Finally, by far the most common objective in the ability category was the promotion of cognitive ability, which is consistent with the fact that the overall goal of all the programmes analysed is to promote mental fitness (see Figure 5).

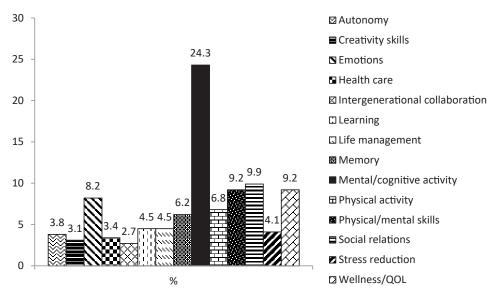


Figure 5. Percentage of ability objectives across all countries.

Despite, however, the predominant emphasis on cognitive ability, our analysis shows that the programmes also consider several other ability areas as being important for improving the wellbeing of older adults. Specifically, the second most common ability objective concerned social relations, followed, in descending order, by physical/mental skills, wellness/quality of life, managing emotions and physical activity. Next, with an equal frequency among ability objectives, came promoting learning and daily living skills, which also show a degree of overlap in their definition (see Table 4). Stress reduction and promoting autonomy also featured among objectives in the ability category, reflecting the importance that these aspects have for the development of all the other ability areas. Finally, the least frequently cited ability objectives concerned caring for one's health, creativity and intergenerational collaboration.

Network analysis

Figure 6 depicts the results of a network analysis for relationships between attitudinal objectives across the programmes and services analysed. It can be seen that encouraging a positive attitude with regard to participation in social activities and promoting self-esteem are seen as key strategies for improving quality of life among older adults. Self-esteem is also directly linked to greater autonomy and reduced loneliness.

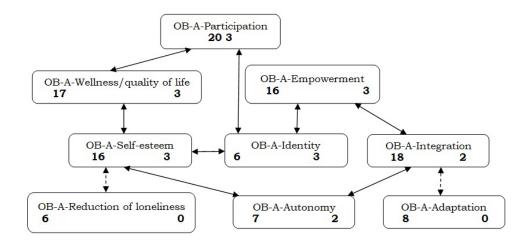


Figure 6. Attitudinal objectives network. Note: The number on the left in each box indicates the number of quotes associated with that code, whereas the number on the right refers to the number of co-occurrences between codes in these quotes. In those cases where there are no co-occurrences the relationships between codes are theoretical.

Increased participation is also closely related to a stronger sense of identity among older adults, which likewise derives from improved self-esteem. The strengthening of a sense of identity is, in turn, the basis for empowerment, an aspect which is linked through integration to greater autonomy and adaptation to the social environment.

Figure 7 shows the network analysis for relationships between knowledge objectives. It can be seen that providing knowledge about the cultural calendar is linked to the objective of fostering creativity, which in turn is related to the psychosocial wellbeing of older adults. Awareness of cultural activities is also relevant when it comes to developing their mental abilities (training recommendations).

Providing older people with knowledge about the changes which accompany the ageing process is seen as important for helping them to become more aware of their emotions, as well as for encouraging their social inclusion. The network analysis also shows that, theoretically, social inclusion requires certain communication skills, including the ability to use digital technology and to manage emotions. The ability of older adults to understand and apply recommendations regarding mental health, which is one of the central objectives of the programmes we analysed, also requires knowledge about memory functioning. Finally, there is also a theoretical relationship between social inclusion and the ability of seniors to enjoy the benefits that follow from greater empowerment.

Figure 8 shows the network of relationships between the various ability objectives and highlights the considerable emphasis placed on maintaining and/or increasing cognitive and mental activity. This primary objective is related in turn to the promotion of social relationships, quality of life, memory, the ability to learn, life management skills, stress reduction and caring for one's health in general.

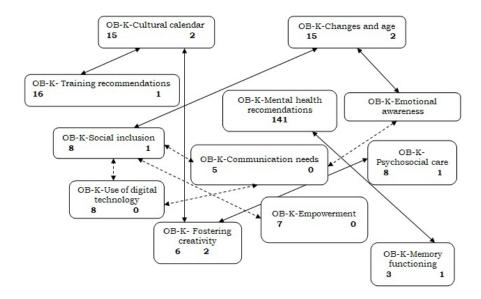


Figure 7. Knowledge objectives network. Note: The number on the left in each box indicates the number of quotes associated with that code, whereas the number on the right refers to the number of co-occurrences between codes in these quotes. In those cases where there are no co-occurrences the relationships between codes are theoretical.

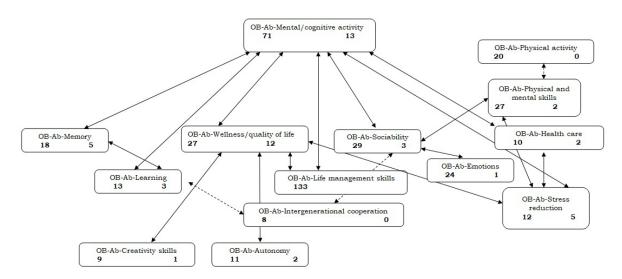


Figure 8. Ability objectives network. Note: The number on the left in each box indicates the number of quotes associated with that code, whereas the number on the right refers to the number of co-occurrences between codes in these quotes. In those cases where there are no co-occurrences the relationships between codes are theoretical.

The ability to engage in social relationships is likewise linked to the development of physical and mental wellbeing and the effective management of emotions. A direct relationship can also be observed between improved memory functioning and the ability to learn, which in turn is related to the skills required for intergenerational cooperation, the latter being another objective that is seen as relevant to improved social relations. Stress reduction and caring for one's health are shown to be related objectives, and the former is also linked to the acquisition of skills for improving physical and mental wellbeing. This latter objective also features in programmes whose primary aim is to promote physical activity among older adults. Finally, and still within the broader context of promoting mental abilities, there is a clear relationship between life management skills and strategies for improving quality of life, the latter being linked to the fostering of both creativity and autonomy.

Conclusions

Interventions aimed at promoting mental fitness can play a key role in preventing age-associated cognitive decline, and hence it is important to gather information about the objectives being sought by programmes and initiatives that have been undertaken in Europe within the context of active ageing policies.

By doing so, it is possible to assess the extent to which the aforementioned Article 25 of the Charter of Fundamental Rights of the European Union (European Commission, 2012) is being fulfilled through these action programmes. The present study is, to our knowledge, the first transnational analysis of mental fitness programmes in Europe, and its results shed light on what is a crucial social initiative for responding to and meeting the needs of an ageing society.

The existence of action programmes aimed at promoting mental fitness among older adults is a key indicator of the level of development of social policy, which itself varies depending on the characteristics of the welfare state in different European countries. This heterogeneity became apparent in the first stage of the present study, when we sought to identify and select for analysis a pool of mental fitness programmes from across the eight participating countries. Specifically, this process proved to be more difficult in Cyprus, Greece and Hungary, most likely due to the smaller overall number of specific initiatives that have been undertaken in these countries.

Despite, however, these differences across countries in the number of mental fitness programmes being implemented, there was broad agreement in terms of the objectives being sought. Thus, in each of the eight countries the primary focus of the programmes analysed was on promoting certain abilities among older adults, with much less emphasis being placed on attitudinal or knowledge-related objectives. This highlights how programmes and initiatives in this field are more concerned with the development and application of specific skills than with changing attitudes or raising awareness about the changes that accompany ageing. This difference in emphasis may, in part, be a response to the specific demands of older adults themselves, who tend to look for activities or programmes that can help them improve their daily living skills, for example, managing age-associated memory loss (Espeland et al., 2017; McDougall et al., 2010) or learning how to use digital technology (Werner et al., 2011) or social networks (Chang et al., 2018).

It could be argued that each of the three target areas, that is, attitudes, knowledge and abilities, should ideally be addressed to a similar extent since they are inter-related and exert a mutual influence on one another (Gibson, 2014). However, although the programmes analysed were, as a whole, skewed towards an emphasis on ability objectives, analysis of the specific aspects addressed under each of the three broad categories (i.e. attitudes, knowledge and abilities) revealed a considerable degree of coherence. Thus, as we will see below, the programmes address a number of common aspects, especially from the perspective of abilities and attitudes. In the case of knowledge objectives, these tend to relate to aspects that help to develop the common objectives of the attitudes and abilities components.

With regard to abilities, it is unsurprising that by far the greatest attention is paid to maintaining and/ or increasing the cognitive and mental activity of older adults, since this is by definition the primary goal of mental fitness initiatives (Compton et al., 2000; Rothermund and Brandstädter, 2003). If we consider the other abilities targeted by the programmes analysed, it is possible to see them in light of two broader objectives. On the one hand, the programmes attempt to help older adults develop the skills required to engage in social relationships and participate actively in their communities. At the same time, they seek to improve their quality of life and physical and mental wellbeing by promoting the abilities which underpin independence in activities of daily living. Skills and abilities such as these are clearly consistent with active ageing policies based on a positive and holistic view of health (WHO, 2006).

The goal of achieving greater social integration and participation among older adults is also reflected in the objectives sought as part of the attitudinal component of mental fitness programmes. As in the case of ability objectives, improved quality of life is once again a key target here, although in seeking to achieve this, particular emphasis is placed on raising self-esteem and empowering older adults. Thus, other objectives closely linked to empowerment, such as adapting successfully to one's environment and building a strong sense of identity, are also addressed.

As regards knowledge objectives, the programmes include elements that complement the ability and attitude components and which contribute to the social integration and quality of life of older adults, for instance, by helping them to become more aware of and learn about the changes that accompany the ageing process, including cognitive decline (Montenegro Peña et al., 2012). An increased awareness of social, cultural and leisure opportunities in the local community can likewise favour their integration and participation in society.

In summary, this study provides an in-depth overview of the objectives of mental fitness programmes and initiatives in eight European countries. On a practical level, the results may serve as a useful guide for future decision making by policy makers and programme coordinators, helping them to identify the objectives that underpin effective interventions in this field.

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