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MENTBEST

Protecting mental health in times of change

Publicly available data resource (*new database of a Greek population mental health survey*)

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MENTBEST Consortium

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D1.4: Publicly available data resource

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1. Executive Summary

The purpose of Deliverable 1.4: Publicly available data resource (D1.4), a deliverable of Work Package One: Mental Health Epidemiology and Interventions (WP1), was to carry out a model population survey to address the existing knowledge gap on mental health needs of vulnerable populations in South-East Europe. The following tasks were carried out:

- T1.4.1: we first developed a culturally sensitive framework for the collection of new data about mental health via a population-based survey in Greece, which could serve as a future resource that can be adapted and implemented in Albania.
- T1.4.2: we conducted a cross-sectional population survey in Greece to collect primary data on sociodemographic variables and mental health needs of migrants and older adults in comparison to native, working age adults in the general population.

This report was drafted by the lead of WP1, the South East European Research Center (SEERC; Ana Vivas, Lina Gega and Georgia Pappaioannou) and was reviewed by Reiner Rugulies (NFA) and Ainslie O'Connor (Pintail).

2. Introduction and Background

2.1 Role of this Deliverable in the MENTBEST project

MENTBEST is an ambitious project, led by the European Alliance Against Depression (EAAD) with a multi-disciplinary consortium of 13 partners across 10 countries. The overarching aim of MENTBEST is to understand the needs and develop appropriate interventions for five vulnerable populations *migrants/refugees, older people, younger people, long-term unemployed, and those with mental disorders* whose mental health is more likely to be affected by dramatic societal changes and external/environmental stressors.

MENTBEST has first focussed on characterising the scale and nature of mental health challenges in Europe associated with times of dramatic societal change. Then, has been working with patients, healthcare professionals and other stakeholders to identify and develop interventions and tools that best build resilience and protect mental health.

Building on the expertise of existing MENTBEST partners in community-based interventions to reduce depression and suicidal behaviour, known as EAAD 4-Level-Intervention, the MENTBEST project has created a comprehensive community-based intervention, known as COMBINA, which will be delivered and evaluated in five model regions across five countries (Spain, Ireland, Estonia, Greece, Albania). MENTBEST is also developing the MENTINA app, a digital tool to help users monitor and manage their mental health using smartphones.

WP1 – Mental Health Epidemiology and Interventions - has the overarching aim of providing evidence about the effectiveness of existing interventions to protect mental health, and about the scale and nature of mental health challenges in Europe, with a focus on the five vulnerable populations (*migrants/refugees, older people, younger people, long-term unemployed, and those with mental disorders*.)

The four objectives of WP1 as stated in the Deed of Agreement (DoA) are:

- To provide high-quality data to the evidence base of the prevalence and severity of rapidly changing mental health needs across Europe in the general population, taking into consideration demographic and vulnerability factors such as age (younger and older age), education, and socio-economic status level (e.g., poverty and unemployment) and migrant status.
- To identify and aggregate information about published interventions that have addressed (a) sub-clinical mental health symptoms and (b) mental disorders with a focus on the identified vulnerable populations.
- To select from these, the most promising interventions to be included in COMBINA and the MENTINA app. These interventions must collectively address (a) the specified vulnerable groups, (b) mental disorders (depression, anxiety disorders, suicide prevention) and/or (c) sub-clinical mental health challenges (e.g. subthreshold depressive syndromes, mental distress, resilience building)
- To address the existing knowledge gap on mental health data in South-East Europe.

In terms of WP1 tasks, the work is organised around four main tasks as shown in the Table below.

TASK	LEAD	PARTNERS	OUTPUTS
1.1. Scoping Reviews x 2: - *Epidemiological studies* - *Clinical studies*	SEERC	NSRF, NFA, ISPUP, UAM	Report on prevalence data + intervention effects, costs, acceptability
1.2. Intervention selection - *Stakeholder consultation*	NSRF	SEERC, ISPUP, EAAD	List of selected interventions for COMBINA & MENTINA
1.3. Database hub creation + data analysis with 2 databases	NFA	SEERC, NSRF	Report of database hub creation + findings of analysis
1.4. New data collection system + survey in Greece with migrants	SEERC	NSRF, NFA, ISUP	New database

This report focuses on the fourth objective and describes the work and outputs of a mental health survey conducted in Greece (Task 1.4.), culminating in *Deliverable 1.4 – Publicly available data resource (*D1.4).

The central activity in Task 1.4 was the development of a culturally sensitive framework for the collection of new datasets for mental health in Greece, which could serve as a future resource that can be adapted and implemented in Albania. Using this framework, we conducted a cross-sectional population survey in Greece to collect mental health data in vulnerable populations. Addressing the existing knowledge gap on the mental health needs of migrants in Greece is important, because Greece is an entry point for arrivals of migrants to Europe from Asia and Africa. Taking into account the knowledge gaps further identified in Task 1.1 and included in D1.1 report, the mental health survey in Greece includes data on older adults as well as younger adult populations to use as a comparison.

Through the successful delivery of Task 1.4 and D1.4, we address the following main objective of MENTBEST as reflected in the DoA:

To characterise the scale and severity of mental health challenges associated with rapid societal, economic, environmental and other change in Europe, particularly for five vulnerable

groups (migrants/refugees, older people, younger people, long-term unemployed, those with mental disorders).

Completion of Task 1.4 also provides information to support COMBINA's implementation with migrants and older adults in Greece as an implementation country (Work Package 3: COMBINA Study). The present deliverable will also inform Work Package 8: Communication, Dissemination and Future Implementation with evidence regarding the exploration of prevalence and severity of change-related mental ill-health (see Figure 1), adding in this way to the ultimate goal of building an enhanced COMBINA package (during and after the project).

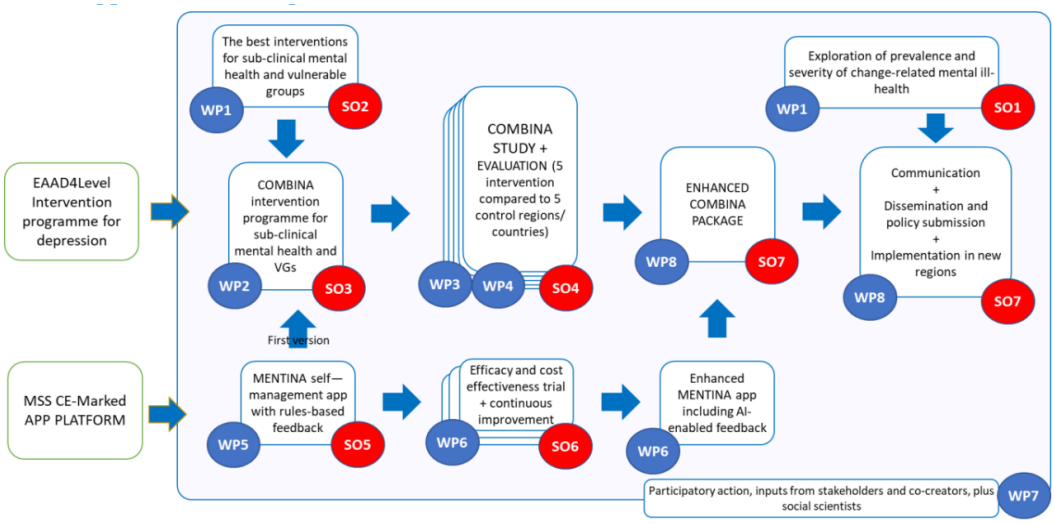

Figure 1. MENTBEST approach and inter-relations between WPs**.**

The work actioned in T1.4 progressed according to the DoA and there were no deviations. As stated in the DoA, the new anonymous dataset will be made publicly available in the Open Science Framework (OSF) once it has been ensured that no individual person can be identified from the dataset (if we assess that there is an ethical risk, the data will be available upon the researcher request). We will make the anonymous dataset publicly available at the point when at least one publication related to the data has been accepted/published in a scientific journal. We estimate that this will occur within a year from the time of submitting this report. This task was led by Georgia Pappaioanou, Lina Gega and Ana Vivas, and the draft of the survey protocol was shared with the MENTBEST's consortium so that there were opportunities to provide written feedback on the documents produced and orally through reporting to the monthly MENTBEST online meetings. Ethical approval was obtained from the local Greek Ethics Committee at the Psychology department where the SEERC's team is affiliated (Ethics Committee of the Psychology Department of CITY College, University of York Europe Campus).

Developing a culturally sensitive framework to assess mental health outcomes

Mental health is a multifaceted concept that includes the emotional, psychological, and social well-being of individuals influencing their feelings, thoughts and behaviors. It is a fundamental component of overall health, shaping one's ability to cope with life's challenges, recognize their abilities and use them in vocational as well as community settings (World Health

Organization, 2023). Good mental health results in better educational outcomes and job opportunities, leads to more productive work and greater chances to being employed. Good mental health helps older people to better integrate and undertake a more active role in the community. It is essential to better understand the specific challenges and opportunities in promoting mental health as a way of fostering a holistic approach to the wellbeing of the population across Europe.

Age as an important predictor of mental health outcomes

As individuals age, the dynamics of mental health take on unique dimensions, especially for older adults. The United Nations (UN, 2019) defines 'older people' as those aged 60 or 65 or above, while the World Health Organization (WHO) and Eurostat (2020) include those who are 65 years and above in the 'old age' bracket and those who are 85 years and above in the 'very old' age bracket. There is a global demographic shifts towards a more ageing population. In 2020, approximately 1 billion people in the world were aged 60 years or older; this is expected to reach 1.4 billion by 2030 and 2.1 billion by 2050, with people aged 80 years old and above expected to reach 426 million (World Population Prospect, 2022). #

In a population-based survey across 27 European countries with over quarter of a million participants, the prevalence of current depressive disorder among older people over 75 years old – assessed as symptoms over the previous two weeks above a diagnostic cut-off - was 11.59% (11.01–12.16), which was twice as high as all other age groups in the same survey (Arias-de la Torre et al., 2021). With reference to Greece, another European survey found that 30.8% of a sample of 4,632 people between 50-90 years with a mean age of 67 years were likely to have diagnosable depression based on self-reported symptoms over the previous month (Richardson et al., 2023).

Gender and socioeconomic status as predictors of mental health outcomes in older adults

People in debt – especially women – are affected by higher levels of depression (Hiilamo & Grundy, 2020). In people aged 18-75, women reported higher levels of depression compared to men across various countries in Europe, especially in Eastern and Southern European countries where people experience greater inequalities. Additionally, socioeconomic and family-related factors emerge as significant moderators of this relationship, with both genders experiencing lower depression prevalence when married or cohabiting and enjoying a favorable socioeconomic position (Van de Velde, Bracke & Levencque, 2010). Adults living in deprived areas have a higher risk of late-life depression than those living in more affluent areas (Aretz, 2022).

Migration and acculturation as predictors of mental health outcomes in older adults

Migration status as well as level of acculturation are two factors also associated with mental health outcomes. More specifically, prevalence studies indicated that in Northwestern Europe, Turkish immigrants have a higher prevalence of anxiety and depressive disorders whereas Moroccan immigrants showed highest prevalence in depression, compared to native-born populations (Ünlü Ince et al., 2014; Sempertegui et al., 2023). Additionally,

participating in the host country's culture is associated with a decreased risk of anxiety, depression and co-morbidity of both disorders.

The relationship between loneliness, social isolation and depression in older adults

Loneliness and social isolation are interconnected and strongly associated with self-reported elevated depressive symptoms after controlling for age, gender, employment status and other covariates (Khosravi, Rezvani & Wiewiora, 2016; Wister et al., 2019). Loneliness is shown to be a stronger – and an independent - predictor of depressive symptoms in relation to social isolation (Ge, Yap, Ong & Heng, 2017). On the contrary, social participation is found to improve quality of life and social well-being (Kang, Kim & Poplawski, 2022) and to reduce loneliness (Bertic & Telebuh, 2020; Sen, Prybutok & Prybutok, 2022), social isolation (Nedeljko, Bogataj & Kaucic, 2021) and self-reported depressive symptoms (Kim, Kim & Lee, 2022).

The interaction between digitalization and mental health among older adults

The increase in digitalization that had already begun for the EU countries before the SARS COVID-19 pandemic, has been accelerated by the pandemic and has spread the use of digital technology in all areas of services and business, including health care. Although the use of digital technology has increased over recent years among older adults, still the most frequent technology users tend to be younger people who are considered "digital natives". According to the latest Digital Economy Outlook Report from the Organization for Economic Cooperation and Development, in 2019 58% of those aged 55-74 used the internet frequently (up from only 30% in 2010), compared to 95% of internet users aged 16-24 (OECD, 2020).

In the era of ageing populations across the globe, the rapid digitalisation of communications, healthcare and banking may affect the lives of older adults in a positive or negative way – or perhaps it may not affect them at all.

On the one hand, technology can facilitate remote access to therapeutic interventions and activities, such as cognitive behaviour therapy, brain-strengthening neural exercises and cognitive training, that alleviate physical, emotional or cognitive difficulties (Small et al., 2020). Technology can also help connect isolated older people with their family and the wider community (Oh et al., 2021) and has been shown to alleviate depressive symptoms in isolated older adults (Hajek & Konig, 2021; Lee, Ferraro & Kim, 2021).

On the other hand, digitalisation can be a source of stress and anxiety when it creates barriers to accessing health and social care services or increases their risk to online fraud. Older migrants may be particularly vulnerable as they experience language and cultural barriers that may compound digital barriers or digital risks. To maximise digital opportunities and remove digital barriers for older populations, we need to understand if and how digitalisation can affect their mental health and wellbeing along with loneliness and social engagement.

The gaps in knowledge about mental health in older populations

The gap in knowledge about mental health in older populations has been identified by two scoping reviews that were part of the first deliverable (D1.1) for Work Package 1 of the MENTBEST project. There is very little research on the mental health and wellbeing of older adults in Greece. The country is a particularly interesting test-case for four reasons. First,

Greece is one of the top five countries with the oldest populations in the world – nearly a quarter of its population are over 65 years of age. Second, the country's traditional collectivist societal norms are dominated by in-person interactions and transactions. Third, Greece is currently undergoing a rapid digital transformation under a state law passed on 5th of July 2021. The relevant policy is called "Digital Transformation Bible" and aims to fully digitalise the country by 2025 in all public and private sectors. Finally, Greece is at the crossroads between Eastern and Western Europe, the Middle East, Asia and Africa, therefore has been historically experiencing large waves of migration.

Research questions

The first aim of this study is to investigate the relationship between mental health and wellbeing, and key demographic factors including age, gender, income and migration status, in a sample of the Greek population. The second aim is to explore whether loneliness, social engagement, acculturation and "digital equity" modify the relationship between sociodemographic factors and mental health/wellbeing. To achieve this, we will address the following two questions:

1. Are sociodemographic factors, including age, gender, migration status and income, associated with self-reported scores of depression, anxiety and wellbeing in older adults in Greece?

2. Is the association between sociodemographic factors and self-reported scores of depression, anxiety and wellbeing in older adults in Greece moderated by digital equity, loneliness, social engagement and acculturation (for migrants)?

3. Approach

Method

A cross-sectional survey of adults in Greece drawn from the general population, half of whom were working age adults (18-64 years) and half were older adults (65+ years).

Participants

Adults from the general population, age 18 years and above, residing in Greece, including all genders, different socioeconomic backgrounds as well as 1st and 2nd generation migrants. The sample was stratified by age. It consisted of N = 300 early and middle adulthood participants (N=150 18-39 year olds, N=150 40-64 year olds) and N = 300 older adults. Of the sample of older adults, half (N = 150) were migrants. The sampling framework and the use of strategic recruitment pathways aimed to capture a balanced representation of gender, socioeconomic status, educational level, areas of residency (rural and urban), and migration status. Still, this was a 'convenience' sample with an element of self-selection and without the option of analysing information from those who were invited to participate but did not respond. Data was collected either online through a survey link or by telephone or with a face-to-face interview, once participants provided informed consent to participate in the study. All data collection and storage as part of the survey complied with the EU general data protection regulation (GDPR).

Data was collected by a sub-contracted company (*Alternative Research Solutions,* Home - Alternative RS (alternative-rs.gr)). Given the time constraints and as it was stated in the Grant Agreement, we subcontracted the data collection to a Greek company through a competitive call in line with Greek procurement legislation. The call was announced in SEERC's website, and three independent evaluators (Ana Vivas, Georgia Pappaioannou and Christina Katsoridou) scored the applications (from four companies) based on four criteria (quality of implementation method, quality of application overall, company's track record, and quality of implementation team). Data were collected during the period of 29th of May to 26th of July 2024.

Survey questionnaires

Demographic questionnaire

Sociodemographic information was collected with a standardized self-report questionnaire. We collected information on the following variables: age, gender (male, female, other); marital status and partnership (single, in a relationship, in civil union, married, widow/er, separated); children (yes/number, no); employment status and occupational situation (unemployed, employed part-time, employed full-time, self-employed, retired, student); household; educational status (primary, lower secondary, higher secondary, post-secondary (ex. institute of vocational training), Bachelor's, Master's, Doctorate, none of the above); perceived socio-economic status (SES) (comfortable, getting by, hard to get by, very hard to get by, don't know); functional status (independent, partially dependent, completely dependent); migration status (no, yes/1st generation, yes/2nd generation and length of stay).

Patient Health Questionnaire – Greek version (PHQ-9)

The PHQ-9 (Kroenke, Spitzer & Williams, 2001; Papadopoulos, 2023) is a depressive symptom scale and diagnostic tool based on the 9 diagnostic criteria to screen adult patients for the presence and severity of depressive symptoms or possible depressive disorder. The scale consists of 9 items on a 4-point Likert scale (range 0-3), with higher scores denoting more severe depression. Conventional cut-offs are: 0-9 none or borderline, 10-19 mild-to-moderate, 15-19 moderate-to-severe, 20-27 severe.

Generalised Anxiety Disorder Assessment – Greek version (GAD-7)

The GAD-7 (Spitzer, Kroenke, Williams & Lowe, 2006; Pachoundakis, 2022) is a self-reported questionnaire for screening and severity measuring of generalized anxiety disorder. It consists of 7 items on a 4-point Likert scale. The scores of 5, 10 and 15 represent cut-off points for mild, moderate and severe anxiety respectively. When the score is 10 or greater, further evaluation is recommended with a practitioner due to the presence of likely clinical anxiety.

Loneliness

The Greek validated UCLA Loneliness Scale (Russell, 1996; Antonaki, 2021) is a 20-item scale designed to measure a person's subjective feelings of loneliness as well as of social isolation on a 4-point Likert scale from 1 (Never) to 4 (Often). Ten out of twenty items are reversely scored. The total score ranges from 20 to 80 with a score of 20-40 indicating mild loneliness, 41-60 moderate loneliness and 61-80 severe loneliness.

Mental wellbeing

The Greek validated version of the World Health Organization- Five Well-Being Index (WHO-5) was employed. This is a short self-reported measure of current mental wellbeing. Item response theory analyses with older adults indicate that the measure has good construct validity as a unidimensional scale measuring well-being in these populations (Topp et al., 2015). It consists of five items on a 5-point Likert scale (range 0-5) with a score of 13 and below indicating poor mental wellbeing.

Social engagement

To measure social engagement, the Greek version of the Lubben Social Network Scale was used (Lubben et al., 1988; 2006; Moumtzi, 2023). It is a self-report measure of social engagement including family and friends. This version consists of 12 items on 6-point Likert scale (range 0-5) with the score ranging between 0-60 with higher values indicating better social engagement and lower values indicating limited social network and high risk of isolation.

Acculturation (for migrants)

The level of acculturation was measured with the Lowlands Acculturation Scale (LAS). A scale that consists of 25 items rated on a 5-point Likert-type scale. The LAS can be divided into 5 subscales: Skills, Traditions, Social Integration, Values and Norms; and Feelings of Loss. The scale was translated and back-translated to be used in Greek as used in the study of Ünlü Ince et al. (2014).

Digital equity

Digital literacy was measured by asking the participants whether they could use specific digital activities in phone, computer or tablet devices. The estimation was conducted by the total number of digital activities the subjects can utilize, with higher values indicating better digital skills. This method was followed by other studies (Lee et al., 2021; Foong et al., 2022). The measurement was based on Digital Literacy Questionnaire – Language Teachers (Son, Robb & Charismiadji, 2011) as well as on Mobile Device Proficiency Questionnaire (MDPQ; Roque & Boot, 2016) that has been described by Oh and colleagues (2021) in their review as a more generalized and inclusive instrument and thus favorable for measuring digital literacy to older adults. Additionally, it aligns with all 5 elements of the European Commission's Digital Competence (DigComp) Framework (Vuorikari, Kluzer & Punie, 2022): 1. information and data literacy, 2. communication and collaboration, 3. digital content creation, 4. safety, and 5. problem-solving.

Digital efficacy was measured by the Digital Self-efficacy (Ulfert-Blank & Schmidt, 2022) scale (the translated version has not been psychometrically tested) that derived from Bandura's concept of self-efficacy and the theoretical framework that describes the structure and content of digital competences. The DSE scale measures an individual's perception of efficacy in performing tasks related to the use of digital systems. It is consisted of 25 items on a 6-point Likert scale with higher score indicating higher digital self-efficacy. This measure was translated and back translated to be used in Greek.

Digital accessibility refers to certain difficulties older adults may encounter in their attempts to use digital tools. The measurement was based on the questionnaire used by Lam and colleagues (2020) in their study , which defined this variable by the term unreadiness as meeting the following criteria for disabilities or inexperience with technology: (1) difficulty hearing well enough to use a telephone (even with hearing aids), (2) problems speaking or making oneself understood, (3) possible or probable dementia, (4) difficulty seeing well enough to watch television or read a newspaper (even with glasses), (5) owning no internet-enabled devices or being unaware of how to use them, or (6) no use of email, texting, or internet in the past month.

Data Analysis

Given this report will be made public, we provide below a high-level summary of the dataset we are able to share pre-publication without negatively impacting any future publication. Further, in depth analyses (multivariate models) to answer the main research questions will be included in subsequent scientific publications.

4. Results

4.1 Sociodemographic characteristics of the participants

Non-migrant older adult sample (N-150)

This sample consisted of people 65 years old and above (see Figure 1 for age distribution) who were non-migrants, that is born in Greece from Greek parents.

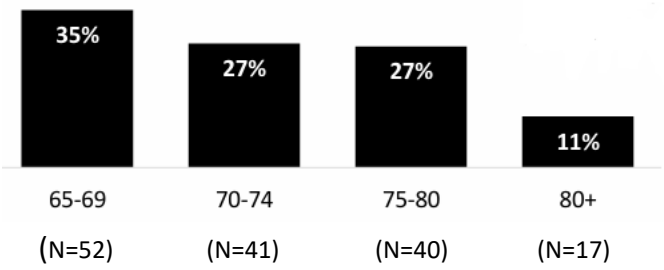

Figure 1. Age distribution in the sample of non-migrant older adults

The mean age was 72.9 years, 53% of the participants identified as women (and 57% as men) and 47% were living in rural areas of Greece (see Figure 2 for the geographical distribution).

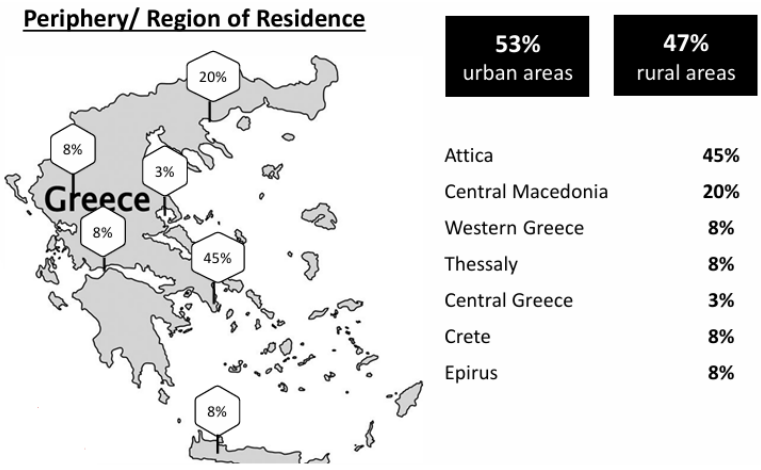

Figure 2. Geographical distribution of the sample of non-migrant older adults.

With regard to other key sociodemographic factors, 45% self-reported that they lived comfortably or were coping with their current household income; whereas 55% reported that they found it difficult or very difficult on their present household income. The majority of the older adult non-migrant participants (59%) had completed basic education and were retired at the time of data collection (81%). Finally, 61% of the participants reported being married at the time of data collection (see Figure 3), 91% of the participants had at least 1 child, 73% reported being functionally independent, 17% reported being semi-dependent and 10% were dependent on others for everyday living.

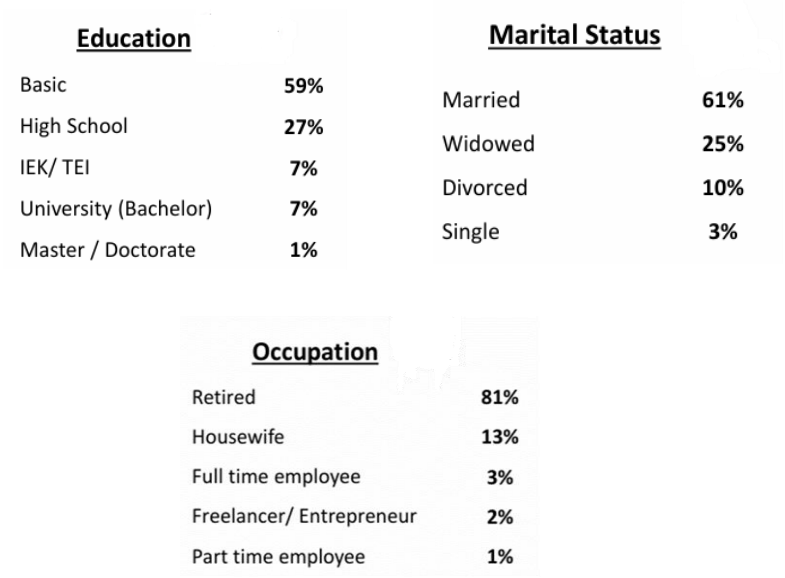

Figure 3. Percentage distribution for key sociodemographic factors.

Migrant older adult sample (N-151)

This sample consisted of people 65 years old and above (see Figure 4 for age distribution) who were first-generation migrants, that is were born in other country than Greece and had migrated to Greece at some point in their lives.

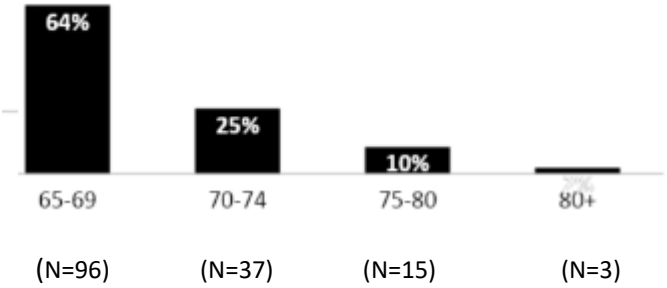

Figure 4. Age distribution for the migrant older adult participants.

The mean age was 69.6 years, 46% of the participants identified as women (54% as men) and 100% were living in urban areas of Greece, since the migrant population is dominant in specific cities. The majority of the participants (49.7%) were of Albanian nationality, who constitute the largest migrant population in Greece (about 4.5% of the total population; see Table 1 below for the nationalities of the migrant older adult participants).

Albania	**49,7%**
Pakistan	**4,6%**
Bulgaria	**4,6%**
Russia	**3,3%**
Georgia	**3,3%**
Romania	**3,3%**
Ukraine	**2,7%**
Poland	**2,7%**
China	**2,7%**
Afghanistan	**2,0%**
Bangladesh	**2,0%**
Egypt	**2,0%**
United Kingdom	**2,0%**
Italy	**2,0%**
India	**2,0%**
Asia (general)	**2,0%**
Nigeria	**1,3%**
Serbia	**1,3%**

Croatia	**0,7%**
Belgium	**0,7%**
France	**0,7%**
Germany	**0,7%**
Spain	**0,7%**
Moldavia	**0,7%**
Africa (general)	**0,7%**
Morocco	**0,7%**
Syria	**0,7%**
Armenia	**0,7%**

Table 1: Nationalities of the migrant older adult participants

With regard to other key sociodemographic factors, 29% self-reported that they lived comfortably or were coping with their current household income; whereas 71% reported that they found it difficult or very difficult on their present household income. The majority of the older adult non-migrant participants (57%) had completed the basic education and only 34% were retired at the time of data collection. Finally, 76% of the participants reported being married at the time of data collection (see Figure 5), 90% of the participants had at least 1 child, 83% reported being functionally independent, 9% reported being semi-dependent and 8% were dependent on others for everyday living.

Marital Status

Married	76%
Divorced	15%
Widowed	7%
Single	1%
In a relationship	1%

Occupation

Retired	34%
Full time employee	20%
Housewife	17%
Part time employee	13%
Freelancer/ Entrepreneur	9%
Unemployed	6%

Education

Basic	57%
High School	29%
University (Bachelor)	9%
IEK/ TEI	5%

Figure 5. Percentage distribution for key sociodemographic factors.

Younger and middle age general population sample (n=332)

This sample consisted of adults ranging in age from 18-64 years old, residents of urban and rural areas of Greece, representative of the general population with regard to gender, age and socio-economic background, and nationality (Greek and migrants). The mean age was 40.9 years, 50% of the participants identified as women and 85% were living in urban areas while 15% were living in rural areas of Greece (See Figures 6 and 7).

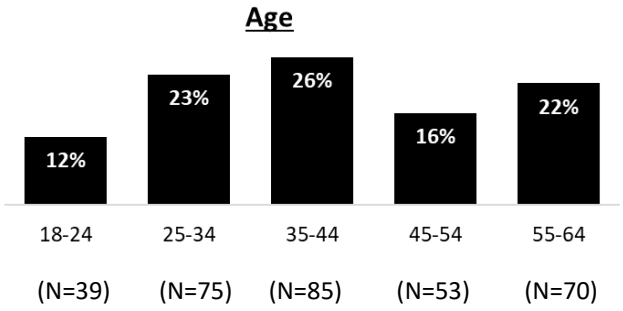

Figure 6. Age distribution

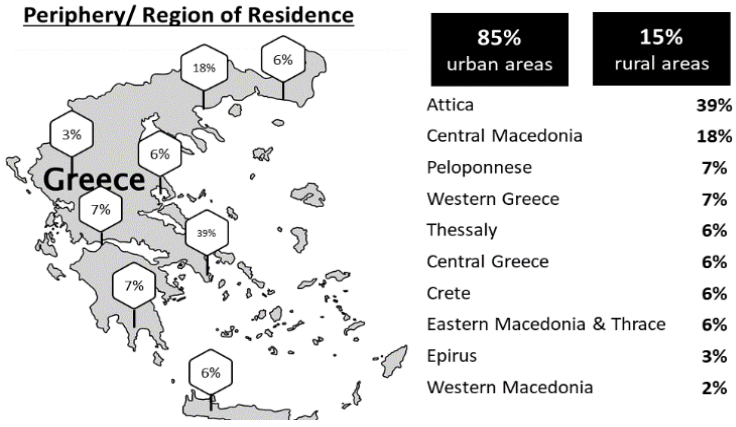

Figure 7. Geographical distribution

With regard to other key sociodemographic factors, 58% self-reported that they lived comfortably or were coping with their current household income; whereas 42% reported that they found it difficult or very difficult on their present household income. The majority of the younger and middle-aged participants (30%) had completed a higher education (university) degree and were full-time employed (57%) at the time of data collection. Finally, 45% of the participants reported being married at the time of data collection (see Figure 8).

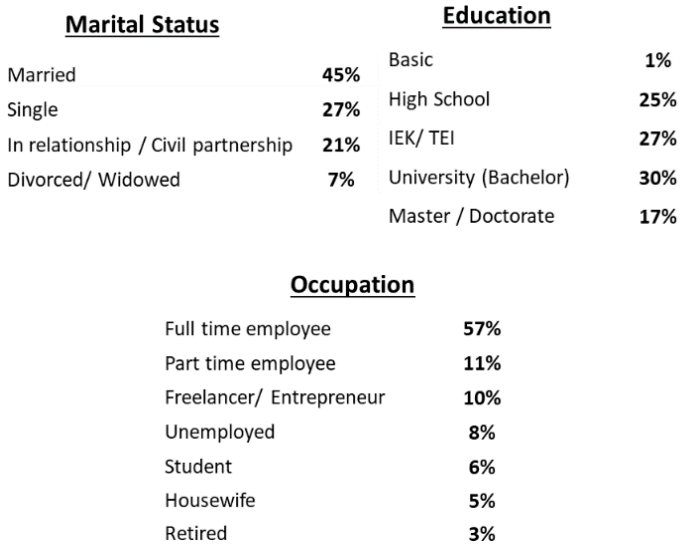

Figure 8. Percentage distribution for key sociodemographic factors.

4.2 Prevalence data on severity of depression and anxiety

Below we summarise the prevalence of current depressive and anxiety disorders assessed as self-reported symptoms via the PHQ-9 and GAD-7 Likert scales. For possible depressive disorder we have used the conventional cut-off of 10 and above. For possible generalised anxiety disorder, we have used the conventional cut-off score of 10 or above, with the further cut-off score of 15 and above for potential severe anxiety.

In the Tables below we present the percentage of people classified in these categories based on the cut-off scores as a function of sub-sample (non-migrant older adults, migrant older adults and younger and middle-aged adults) and key sociodemographic variables that are associated with the occurrence of mental health problems; gender, place of residence (urban vs rural), marital status, employment and socioeconomic status). Prevalence (percentages) for the demographic subgroups (e.g., men, women, Low SES) are calculated from the N for each subgroup (indicated in the second row of each table) and not from the total N of the sample.

Older adult (non-migrant) Participants (n=150)

Table 2. Prevalence of possible depressive disorder (mild to severe depression) as a function of key demographic variable in the sample of non-migrant older adults.

	TOTAL	65-69	70-74	75+	MEN	WOMEN	URBAN	RURAL	LOW FUNCT	MEDIUM FUNCT	HIGH FUNCT
Base:	150	52	41	57	71	79	80	70	15	25	110
Non-clinical/Sub-threshold	80%	26%	24%	21%	39%	41%	42%	37%	8%	8%	63%
Mild to severe depression	20%	8%	3%	5%	8%	12%	11%	9%	2%	8%	10%

	TOTAL	SINGLE	MARRIED	DIVORCED	WIDOWED	HIGH SES	MEDIUM SES	LOW SES	VERY LOW SES	UNEMPLOYED	EMPLOYED	FREELANCE	RETIRED
Base:	150	5	92	15	38	4	63	50	33	20	6	3	121
Non-clinical/Sub-threshold	80%	3%	55%	6%	17%	2%	35%	25%	15%	10%	4%	1%	64%
Mild to severe depression	20%	1%	7%	4%	9%	1%	5%	8%	7%	3%	0%	1%	17%

Table 3. Prevalence of possible anxiety disorder as function of key demographic variables in the sample of non-migrant older adults.

	TOTAL	65-69	70-74	75+	MEN	WOMEN	HIGH SES	MEDIUM SES	LOW SES	VERY LOW SES
Base:	150	52	41	57	71	79	4	63	50	33
No symptoms	44%	14%	17%	13%	24%	20%	1%	21%	14%	8%
Mild anxiety	33%	11%	6%	16%	13%	19%	1%	12%	13%	7%
Moderate anxiety	19%	9%	3%	8%	7%	13%	0%	7%	6%	7%
Severe anxiety	4%	1%	2%	1%	3%	1%	1%	2%	1%	1%

Migrant older adult Participants (n=151)

Table 4. Prevalence of possible depressive disorder (mild to severe depression) as a function of key demographic variable in the sample of migrant older adults.

	TOTAL	65-69	70-74	75+	MEN	WOMEN	LOW FUNCT	MEDIUM FUNCT	HIGH FUNCT
Base:	151	96	37	18	81	70	12	14	125
Non-clinical/Sub-threshold	88%	44%	22%	11%	47%	40%	5%	6%	77%
Mild to severe depression	13%	8%	3%	1%	7%	6%	3%	3%	6%

	TOTAL	SINGLE	MARRIED	DIVORCED	WIDOWED	HIGH SES	MEDIUM SES	LOW SES	VERY LOW SES	UN-EMPLOYED	EMPLOYED	FREELANCE	RETIRED
Base:	151	1	1	115	23	1	43	70	37	36	50	14	51
Non-clinical/Sub-threshold	88%	1%	68%	13%	6%	1%	28%	40%	19%	20%	30%	9%	29%
Mild to severe depression	13%	1%	9%	2%	1%	0%	1%	7%	5%	4%	3%	0%	5%

Table 5. Prevalence of possible anxiety disorder as function of key demographic variables in the sample of migrant older adults.

	TOTAL	65-69	70-74	75+	MEN	WOMEN	HIGH SES	MEDIUM SES	LOW SES	VERY LOW SES
Base:	151	96	37	18	81	70	1	43	70	37
No symptoms	42%	28%	7%	7%	23%	20%	1%	21%	17%	4%
Mild anxiety	41%	26%	12%	3%	23%	18%	0%	7%	23%	11%
Moderate anxiety	12%	7%	4%	1%	5%	7%	0%	0%	6%	6%
Severe anxiety	5%	3%	1%	1%	3%	2%	0%	0%	1%	4%

Young and Middle Age General population participants (n=332)

Table 6. Prevalence of possible depressive disorder (mild to severe depression) as a function of key demographic variable in the sample of young and middle-aged adults.

	TOTAL	18-24	25-39	40-55	55-64	MEN	WOMEN	URBAN	RURAL	LOW FUNCT	MEDIUM FUNCT	HIGH FUNCT
Base:	322	39	116	97	70	161	161	275	47	28	91	203
Non-clinical/Sub-threshold	71%	7%	24%	23%	18%	37%	34%	61%	10%	5%	18%	47%
Mild to severe depression	29%	6%	12%	8%	4%	14%	16%	25%	5%	4%	10%	16%

	TOTAL	SINGLE	IN A RELATIONSHIP	MARRIED	DIVORCED	WIDOWED	HIGH SES	MEDIUM SES	LOW SES	VERY LOW SES	UNEMPLOYED	EMPLOYED	FREELANCE	RETIRED
Base:	322	59	86	156	19	2	30	156	99	37	61	219	33	9
Non-clinical/Sub-threshold	71%	18%	11%	36%	4%	1%	6%	39%	21%	5%	11%	51%	7%	2%
Mild to severe depression	29%	9%	7%	12%	2%	0%	3%	10%	10%	6%	8%	17%	3%	1%

Table 7. Prevalence of possible anxiety disorder as function of key demographic variables in the sample of young and middle-aged adults.

	TOTAL	18-24	25-39	40-55	55-64	MEN	WOMEN	HIGH SES	MEDIUM SES	LOW SES
Base:	322	39	116	97	70	161	161	30	156	99
No symptoms	38%	2%	11%	13%	12%	22%	15%	4%	21%	10%
Mild anxiety	34%	5%	14%	8%	6%	17%	17%	2%	19%	9%
Moderate anxiety	22%	3%	8%	7%	2%	8%	13%	3%	7%	9%
Severe anxiety	7%	2%	2%	2%	1%	2%	4%	1%	1%	2%

5. Impact & Conclusions

This report describes the work conducted in relation to Task 1.4. and summarises the sociodemographic characteristics of the participants included in the **new Greek mental health dataset (n=633)**, and mental health outcomes (depressive and anxiety symptoms) as function of population (older adults, migrant older adults, and younger and middle-aged adults).

To address MENTBEST SO1, we first developed a culturally sensitive framework for the collection of new data about mental health via a population-based survey in Greece, which could serve as a future resource (as stated in the Grant Agreement) that can be adapted and implemented in Albania. Albanian and Greece are neighbourhood countries in the Balkan region and share some mental health contextual and cultural characteristics. Consequently, the framework developed could be adapted to be implemented in Albania. Then, we conducted a cross-sectional population survey in Greece to collect primary data on sociodemographic variables and mental health needs of migrants and older adults in comparison to working age adults in the general population. This is an important new data resource (which will be publicly available as stated in the Grant Agreement) for scientists, mental health stakeholders and policy makers because, as discussed in MENTBEST D1.1 report, there is a gap on mental health data of older adults, and particularly of migrant populations. Further analyses on this dataset could offer important insights into the contribution of key sociodemographic variables which reflect potential vulnerabilities (e.g., migrant status, age, gender, socioeconomic status, employment status), loneliness/social isolation and digital equity to mental health (depressive and anxiety symptoms) and well-being.

To address MENTBEST SO1, we took into consideration the current Greek context which is undergoing a drastic digital transformation, and is one of the main entry points in Europe for migration. We included a wide range of measures, in addition to mental health and well-being, such as loneliness, social engagement, acculturation (for migrants), digital literacy, digital efficacy and digital accessibility. Insights into the role of these variable from future analyses could form the basis for targeted interventions addressing specific populations and modifiable risk factors (e.g., digital literacy). In the report, we provided a detailed aggregation and summary of the sociodemographic characteristics as a function of population: older adults, migrant older adults and younger and middle-aged adults. We also provided a first descriptive summary of mental health outcomes (depression and anxiety) of interest for MENTBEST and in relation to the populations of interest for COMBINA.

This report will be made available to the MENTBEST consortium via the MENTBEST Teams Channel. And the recommendations, key results from further analyses conducted for relevant scientific publications will be discussed in a series of meetings with the relevant WPs.

6. Appendix A

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