Impact evaluation of the "ABCs of Mental Health" in Denmark and the role of mental health-promoting beliefs and actions

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Abstract

Purpose - The purpose of this paper is to investigate the overall campaign reach and impact of the ABCs of Mental Health in Denmark; a secondary objective is to investigate how mental health-promoting beliefs and actions are associated with good mental health.

Design/methodology/approach – A questionnaire was administered to two representative cross-sectional samples of the Danish population (1,508 respondents in 2019; 1,507 respondents in 2021) via an online survey. The data were subsequently pooled together into one sample consisting of 3,015 respondents. In addition to questions pertaining to campaign reach and impact, the questionnaire also included a validated scale for mental well-being and questions about beliefs and actions in regard to enhancing mental health.

Findings – About 7.6% had been reached by the campaign (familiar with ABC name or messages), or 11.9% when also counting familiarity with campaign slogans. Among these, respondents reported (proportions in parentheses) that the campaign had 1) made them reflect on their mental health (74.2%), talk to friends and family about mental health (35.5%), given them new knowledge about what they can do to enhance mental health (78.4%), or take action to enhance their own mental health (16.2%). An internal well-being locus of control and proactive behaviours towards enhancing mental health are shown to be associated with higher mean scores on mental well-being, lower odds of low mental well-being and higher odds of higher mental wellbeing.

Originality/value - An internal well-being locus of control and proactive behaviours towards enhancing mental health are suggested to both prevent low levels of mental well-being and promoting high levels of mental well-being. The results indicate that the ABCs of Mental Health campaign may be implemented to promote such beliefs and actions universally throughout the population.

Keywords Mental health, Mental health promotion, Well-being, Prevention, Impact evaluation Paper type Research paper

Introduction

There is increasing recognition in the scientific community that mental health promotion which has been labelled "The New Frontier" within prevention (Fusar-Poli and Santini, 2021) holds transdiagnostic, trans-staging and lifespan potentials for enhancing primary prevention strategies, as well as those of secondary and tertiary prevention (Fusar-Poli et al., 2021). However, although higher levels of mental well-being are prospectively associated with a lower risk of common mental disorders (Santini et al., 2022a), somatic health problems or chronic conditions (De Neve et al., 2013; Salovey et al., 2000), as well as social/health-care costs (Santini et al., 2021a; Santini et al., 2021b), mental health promotion strategies are not widely implemented. Whilst prevention within mental health is concerned with avoiding mental illness, mental health promotion is concerned with improving positive aspects of mental health, often

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by enhancing the capacity of individuals, families, groups and communities to strengthen or support positive emotional, cognitive, behavioural, social and environmental factors (Hodgson et al., 1996; WHO, 2002). The past decades of empirical research have consolidated approaches to prevent ill-health (Fusar-Poli et al., 2021); meanwhile, the potentials of fostering and promoting mental well-being have largely remained unexploited, resulting in a marginal population-level impact. There is, therefore, an urgent need to add to the evidence base regarding the potential of universal mental health promotion programmes in promoting good mental health and preventing poor mental health.

Act-Belong-Commit is the world's first comprehensive, population-wide, community-based mental health promotion campaign (Donovan and Anwar McHenry, 2014; Koushede and Donovan, 2022). Act-Belong-Commit is a practical framework for health and non-health professionals to promote mental health in the general population as well as in specific settings. The Act-Belong-Commit campaign encourages individuals to engage in mentally healthy behaviours while simultaneously partnering and collaborating with organisations to provide supportive environments for good mental health. The Act-Belong-Commit framework essentially promotes three evidence-based behavioural domains that contribute to enhancing mental health:

- keeping physically, mentally, socially and spiritually active (Act);
- (developing or) strengthening a sense of belonging through social support networks and participation in group and community activities (Belong); and
- taking on challenges and committing to activities and hobbies that provide meaning and purpose (Commit).

The Act-Belong-Commit campaign is a universal campaign targeting the whole population across all demographics and regardless of mental or physical health status. Follow-up research from Australia has revealed that the campaign effectively attracts the attention and involvement of those with and without a diagnosed mental illness (Donovan et al., 2016), providing support for the universal approach. Programme evaluations of the campaign in Australia indicate that the Act-Belong-Commit is relevant among adults as well as children and youth in school settings (Anwar-McHenry et al., 2016; Anwar-McHenry et al., 2020). Furthermore, the three domains apply across cultures, although the articulation and emphasis of each of the domains may vary between cultures (possibly due to translation and other related factors) (Nielsen et al., 2017).

The campaign originated in Australia and has subsequently been adapted and implemented in Denmark, where it was renamed the ABCs of Mental Health (Koushede et al., 2015; Koushede and Donovan, 2022). In Denmark, the three underlying domains have been articulated as - "Do something (actively); Do something with someone; Do something meaningful". These three form the key domains of the Danish programme are referred to as the ABC messages. Apart from campaign material (generally distributed on the ABC website, social media profiles, newsletters, etc.) that explicitly raises awareness about the three domains, the campaign also includes various ways of communicating the campaign messages, with slogans such as "Do something good for others, you decide how" and "Welcome to the club! Keep active with others and enhance your mental health". The ABCs of Mental Health in Denmark is organised as an interdisciplinary and intersectoral partnership. Overall, the ABC partnership seeks to promote mental health by raising awareness of mental health and mental health-promoting lifestyles and behaviours through campaign activities based on the ABC messages. The ABC partnership creates exposure by regularly distributing campaign materials and also collaborating to do so more closely on specific occasions, such as the week of the World Mental Health Day. Simultaneously, the ABC partnership works with a structural approach (e.g. capacity building) as a means to improve societal conditions conducive to good mental health (Hinrichsen et al., 2020; Koushede and Donovan, 2022).

The ABC partnership is led by the University of Copenhagen and has grown and expanded significantly since the beginning in 2014, and it currently comprises over 65 partners, including 41 municipalities and one region (the Region of Southern Denmark). The Danish ABC model differs somewhat from the Australian model, in that various components of the campaign are developed and implemented through one or more of the partners rather than only through the central "hub". Also, the campaign in Australia has been supported by substantial mass and targeted media advertising to a much greater extent than the campaign in Denmark. More information about the campaign in Australia and Denmark (and the differences between the models) can be found elsewhere (Donovan et al., 2021; Koushede and Donovan, 2022). Impact evaluations from Australia have shown that the campaign has been effective in reaching substantial proportions of the general population in Western Australia (Anwar-McHenry et al., 2012). However, the reach of the ABCs of Mental Health campaign in Denmark, i.e. the extent to which the campaign has successfully reached the general population, has not yet been evaluated. Moreover, although recent research from other country settings has documented associations between mental health promoting beliefs and actions and a range of mental health outcomes (Farnier et al., 2021), more research is needed to investigate the extent to which these associations apply elsewhere, such as in the Danish setting. In the current study, our primary objective was to investigate the overall reach and impact of the ABCs of Mental Health campaign in Denmark. A secondary objective was to investigate mental health-promoting beliefs and actions and their associations to different levels of mental well-being.

Methods

Data collection

An online survey representative of the Danish adult population was conducted through the survey agency "YouGov" which was commissioned to conduct the online survey. The survey was conducted for two cross-sectional rounds: the first round in August 2019 was completed by 1,508 respondents; the second round was conducted in November 2021 and completed by 1,507 respondents. Whilst the samples were generally representative of the Danish adult population, the data were weighted on key demographic variables (gender, age, geographical location) prior to analysis as a means to further increase representativeness.

Questionnaire items relating to direct and indirect campaign reach

Respondents were asked a number of questions to assess the reach of the ABCs of Mental Health campaign and various other campaigns in Denmark. Direct campaign reach (i.e. familiarity with the campaign name) was measured by asking:

- Q1. Which organisations and/or institutions that are working with mental health are you familiar with or have you heard about?
- Q2. Which of the following campaigns/initiatives working with mental health and wellbeing are you familiar with or have heard about?

And, for each of these given a range of options, including "The ABCs of Mental Health". Another question to assess direct campaign reach (in this case familiarity with the ABC messages):

Q3. Which of the following slogans are you familiar with or have heard about?

And, given a range of options, including the ABC messages: "Do something; Do something with someone; Do something meaningful". Indirect reach, i.e. familiarity with various ABC campaign slogans, was measured with the same question:

Q4. Which of the following slogans are you familiar with or have heard about?

And, indirect reach responses, including the following slogans, used in the campaign: "Do something good for others, you decide how" and "Welcome to the club! Keep active with others and enhance your mental health". Responding in the affirmative to any of these was considered as being reached by the ABCs of Mental Health campaign. For the calculation of campaign reach, each affirmative response was only counted once, i.e. participants were not counted twice if they were familiar with, e.g. the campaign name AND the campaign slogan.

Questionnaire items relating to impact of the ABCs of Mental Health campaign

Respondents reporting any familiarity with the ABCs of Mental Health campaign were presented with four items about the impact of the campaign on their attitudes and actions towards mental health. First, they were asked if the campaign had made them reflect on their own mental health ("Have you reflected on your own mental health as a result of having heard about the campaign message/slogan?'), with the response options: no, not at all; yes, to a very little extent; yes, to some extent; yes, to a large extent; yes, to a very large extent. Respondents reporting "to some extent" or more were considered as having been impacted by the campaign in terms of reflecting on their own mental health. Next, respondents were asked if they had talked to friends or family about mental health after having heard about the campaign ("Did you speak to friends or family about mental health as a result of having heard about the campaign message/slogan?"), with the response options: yes; no. Next, respondents were asked if the campaign had given them new knowledge about enhancing mental health ("Has the campaign given you new knowledge about what you can do to enhance your own mental health?"), with the response options: no, not at all; yes, to a very little extent; yes, to some extent; yes, to a large extent; yes, to a very large extent. Respondents reporting "to some extent" or more were considered as having been impacted by the campaign in terms of new knowledge about mental health. Lastly, respondents were asked if they had taken action to enhance their mental health after having heard about the campaign ("Did you actively do something to enhance your own mental health as a result of hearing about the campaign?"), with the response options: yes; no. For the two items on 'reflecting on mental health' and 'knowledge about mental health', we wanted to exclude when the campaign had a negligible impact ("to a very little extent"), and therefore chose "to some extent" or more as indicative of campaign impact.

Questionnaire items related to beliefs and actions in regard to enhancing mental health

To investigate the role of mental health-promoting beliefs and actions as factors associated with different levels of mental well-being, the following questions were presented to all respondents regardless of their familiarity with the campaign. Firstly, respondents were asked "To what extent do you believe that you can do something to keep mentally healthy?", with the response options: not at all; to a very little extent; to some extent; to a large extent; to a very large extent. Respondents answering "yes, to a large extent" or "yes, to a very large extent" were considered as believing that one can do something to keep mentally healthy. Directly after, the respondents were then given an open question:

Q5. What can you do to keep mentally healthy?

Next, respondents were asked about their actions in regard to enhancing mental health:

Q6. Within the past two weeks, to what extent did you actively do something to enhance your mental health?

With the same response options: not at all; to a very little extent; to some extent; to a large extent; to a very large extent. Respondents answering "yes, to a large extent" or "yes, to a very large extent" were considered as having actively done something to enhance their mental health. For the two items on mental health-promoting beliefs and actions, we only chose the last two "yes" response categories because we wanted to capture clear affirmative responses.

Mental well-being

The Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS) is a validated measure used to monitor mental well-being in the general population and is based on a conceptualisation of mental well-being as feeling good and functioning well. The scale has been validated in Denmark (Koushede et al., 2019). SWEMWBS consists of seven positively worded questions pertaining to mental well-being experienced within the past 14 days:

- 1. I have been feeling optimistic about the future.
- 2. I have been feeling useful.
- 3. I have been feeling relaxed.
- 4. I have been dealing with problems well.
- 5. I have been thinking clearly.
- 6. I have been feeling close to other people.
- 7. I have been able to make up my own mind about things.

Response options were: none of the time (score 1); rarely (score 2); some of the time (score 3); often (score 4); all of the time (score 5). Summing item scores leads to a score between 7 and 35; the higher the score, the higher mental well-being. The final scores were then transformed to enhance scaling properties (available online) (Stewart-Brown, 2015). Finally, cut-points for SWEMWBS have been proposed for three population groups in the general population: a low mental well-being category, a high mental well-being category and a moderate mental wellbeing category. This prior categorisation has led to fixed cut-points for SWEMWBS (on the transformed metric score), which are used in the current study, as follows: low mental wellbeing score 7.00-19.98; moderate mental well-being 19.99-29.30; high mental well-being 29.31-35.00. These cut-points have recently been shown to significantly predict differential risk for common mental disorders (Santini et al., 2020a).

Covariates

The covariates were as follows: gender (female; male), age group (18-29; 30-39; 40-49; 50-59; 60+), marital status (not married/not in a registered partnership/not cohabiting; married/in a registered partnership/cohabiting), Danish region (Capital City Region; Zealand Region; Region of Southern Denmark; Mid Jutland Region; North Jutland Region), education (primary education/high school; tertiary), occupational status (not active on the labour market, e.g. retired or unemployed; student; employed; other). Maintenance of physical health was assessed with the question:

Q7. Within the past two weeks, to which extent have you actively taken care to maintain your physical health?

With the response options: not at all; to a very little extent; to some extent; to a large extent; to a very large extent. Respondents answering "yes, to a large extent" or "yes, to a very large extent" were considered as actively maintaining their physical health.

Finally, we were also interested in investigating the distribution of responses to selected items for people with and without a mental health problem/illness. To assess the presence of a current mental health problem/illness (self-reported), respondents were asked "In the past 12 months, have you been in contact with a medical doctor, psychiatrist, psychologist, or other health professional regarding a mental health problem or mental illness?", with the response options: yes; no.

Statistical and qualitative analysis

The data from 2019 and 2021 were pooled into one data set (N = 3,015) to evaluate overall proportions over the period 2019–2021 (all proportions at each time point both in terms of reach and impact – 2019 and 2021 – were very similar and not significantly different from each other, p > 0.1). Overall campaign reach and impact of the ABCs of Mental Health campaign was assessed by weighted proportions. To assess adjusted mean differences in mental well-being for different groups, we conducted regression analyses and margin estimations. Lastly, we used multinomial logistic regression to identify associations of beliefs and actions in regard to enhancing mental health with high and low mental well-being (outcome), relative to moderate mental well-being. In our multinomial regression models, we stratified by groups with or without a mental health problem or illness. All models included the key variables (beliefs and actions in regard to enhancing mental health) as well as gender, age group, region, marital status, education, occupational status and maintenance of physical health. STATA version 13 was used to perform all statistical analyses. In terms of the qualitative analysis of the open-ended question, NVivo Enterprise Pro 2020 was used. The responses to the open-ended questions were coded into inductively developed categories. In the categorisation, we were "true" to the initial wording of the answers given by the respondents. Authors 2 and 3 conducted the coding in collaboration to ensure consistency in the identified categories. Some respondents provided several statements in response to the question, and other respondents answered the question with only one word. Regardless of the character of the response, all respondents who provided an answer are represented in at least one category.

Results

The sample was approximately equally distributed across groups in terms of gender, age and region. Sample characteristics are shown in Table 1.

Overall campaign reach

Overall, out of the 3,015 respondents, a total of 224 (7.6%) had been reached by the campaign (familiar with ABC name or messages), or 350 (11.9%) when also counting familiarity with campaign slogans. More specifically, direct reach only (familiarity with the campaign name/ABC messages, but not slogans) was 151 (5.0%); indirect reach only (familiarity with the slogans, but not the campaign name/ABC messages) was 126 (4.3%); both indirect and direct reach (familiarity with both) was 73 (2.6%). In terms of campaign reach by the specific slogans (not shown in Table 2), the proportions were (proportions may overlap): Do something, Do something with someone, Do something meaningful 127 (4.4%); Welcome to the club! Keep active with others and enhance your mental health 87 (3.2%); Do something good for others, you decide how 135 (4.7%).

Among respondents without a mental health problem or illness, the proportion of individuals that had been reached (direct and indirect) by the ABCs of Mental Health campaign (familiarity with campaign name or slogan) was 237 (10.4%), while the proportion among respondents with a mental health problem or illness was 97 (16.9%).

In terms of where respondents had heard about the ABCs of Mental Health campaign (not shown in Table 2), sources were as follows (proportions may overlap): media coverage (e.g. newspapers, radio, TV) 24.9%; social media (e.g. Facebook, Instagram, LinkedIn) 26.0%; newsletters 13.5%; through family, friends or colleagues 12.8%; through work 32.1%; at events, activities or a similar context 14.2%; other sources 4.7%.

| Characteristic | Category | Ν | (%) |
|--|--|------------|------|
| Sex | Female | 1,554 | 50.6 |
| Age | 18–29 years | 569 | 19.9 |
| | 30–39 years | 451 | 14.7 |
| | 40–49 years | 515 | 16.7 |
| | 50–59 years | 516 | 17.1 |
| | 60+ years | 964 | 31.6 |
| Marital status | Not married/not in a registered partnership/not cohabiting | 1,170 | 39.2 |
| | Married/in a registered partnership/cohabiting | 1,845 | 60.8 |
| Region | Capital City Region | 957 | 31.6 |
| | Zealand Region | 442 | 14.5 |
| | Region of Southern Denmark | 631 | 21.1 |
| | Mid Jutland Region | 675 | 22.5 |
| | North Jutland Region | 310 | 10.3 |
| Education | Primary education/high school | 655 | 22.2 |
| | Tertiary | 2,334 | 77.8 |
| Occupational status | Not active on the labour market (retired; unemployed) | 978 | 32.2 |
| | Student | 326 | 11.3 |
| | Employed | 1,579 | 52.0 |
| | Other | 132 | 4.4 |
| Maintenance of physical health | Yes | 1,287 | 45.0 |
| Beliefs in regard to enhancing mental health | Belief that one can do something to keep mentally healthy | 1,766 | 63.3 |
| Actions in regard to enhancing mental health | Did something to enhance mental health within past two weeks | 1,285 | 48.3 |
| Mental health problem or illness | Present | 601 | 20.9 |
| Mental well-being ^a – continuous | Mean (SD) | 24.6 (4.6) | |
| Mental well-being ^a – categorical | Low | 481 | 17.8 |
| | Moderate | 1,917 | 70.0 |
| | High | 329 | 12.2 |

| Table 2 | Column percentages of campaign reach for the whole sample and stratified by presence/absence of menta |
|---------|---|
| | health problem/illness |

| Reach category | All respondents $(N = 3,015)$ | No mental health problem $(N = 2,283)$ | Mental health problem (N = 601) |
|---|-------------------------------|--|---------------------------------|
| Direct reach only (familiarity with campaign name/ABC messages) Indirect reach only (familiarity with campaign slogans) Both direct and indirect reach <i>Total reach</i> | 151 (5.0%) | 110 (4.8%) | 36 (5.9%) |
| | 126 (4.3%) | 83 (3.7%) | 40 (6.9%) |
| | 73 (2.6%) | 44 (1.9%) | 21 (4.1%) |
| | 350 (11.9%) | 237 (10.4%) | <i>97 (16.9%)</i> |

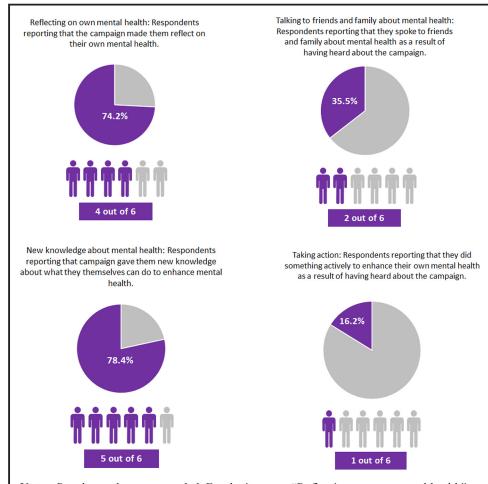
Impacts of the ABCs of Mental Health campaign

Figure 1 shows the campaign impact among respondents reporting any familiarity with the ABCs of Mental Health campaign. Of those, 74.2% reported that the campaign had made them reflect on their own mental health, and 35.5% said that they talked to family and friends about mental health after having heard about the ABCs of Mental Health. About 78.4% reported that the campaign gave them new knowledge about what they themselves can do to enhance their own mental health, while 16.2% said that they did something actively to enhance their mental health as a result of hearing about the ABCs of Mental Health.

Figure 2 shows the weighted proportions of campaign impact stratified by groups with and without a mental health problem or illness. The proportions among respondent with a mental health problem were generally greater in each category, with the exception of reporting that the ABCs of Mental Health had given them new knowledge about what they themselves can do to enhance their mental health, in this case the proportion was lower than for those without a mental health problem.



Campaign impact among respondents reporting any familiarity with the ABCs of Mental Health campaign



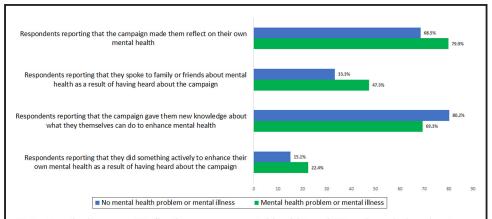
Notes: People graphs were rounded. For the items on "Reflecting on own mental health" and "New knowledge about mental health", respondents reporting "yes, to some extent", "yes, to a large extent" or "yes, to a very large extent" were considered as having been impacted by the campaign

Mental health-promoting beliefs and actions and associations with good mental health

The remaining analyses were conducted across the entire sample. The two variables (beliefs in regard to enhancing mental health; actions in regard to enhancing mental health) were positively correlated with each other, r = 0.35, p < 0.05. Figure 3 shows the adjusted mean scores of mental wellbeing (continuous scale) stratified by groups with and without a mental health problem or illness. For each set of variables (beliefs in regard to enhancing mental health; actions in regard to enhancing mental health), all the adjusted means were significantly different from each other (p < 0.001). Consistently, individuals who believed that one can do something to keep mentally healthy had significantly higher mean scores of mental well-being than those who did not and individuals who did something actively to enhance their mental health had significantly higher mean scores of mental well-being than those who did not. This was the case regardless of presence of absence of a mental health problem or illness.

Out of the 3,015 respondents, a total 87,8% answered the open-ended question:

Campaign impact by presence/absence of mental health problems/illness Figure 2



Note: For the items on "Reflecting on own mental health" and "New knowledge about mental health", respondents reporting "yes, to some extent", "yes, to a large extent" or "yes, to a very large extent" were considered as having been impacted by the campaign

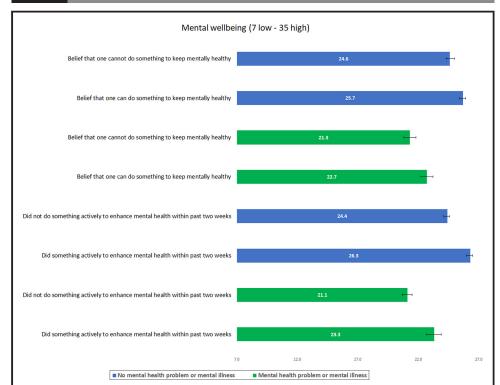
Q8. What can you do to keep mentally healthy?

Based on the respondents' answers, a total of 92 categories were made. Appendix 1 shows all 92 categories as well as an elaboration of the types of statements the categories are based on. Table 3 illustrates the categories given by at least 1% of the respondents. Answers with e.g. only one letter or symbol were categorised as "Unanswered" (12,2%). Unclear statements were categorised into the four categories: other (8.1%), do not know (6%), inconclusive (1.8%) and nothing/limited/little (1.1%) (see Appendix 1 for a detailed description of the categories).

The relatively large number of categories suggest that people point to many different things when answering the question. However, based on the categories, five themes can be deduced as prominent, namely, the themes: social relations, health behaviour, relaxation, positive mindset and use of the brain. Table 3 shows several larger categories that relates to the theme social relations, such as: social life and relations (13%), talk to others (5.5%) and friends and family (4.9%). The importance of physical health and health behaviour for mental health is also a prominent theme among the respondents, as shown by the categories such as: exercise and training (12.8%), eat healthy (7.2%) and healthy lifestyle and physical health (2.4%). The table also shows a theme regarding relaxation represented with categories such as: sleep (6.5%), reduce stress/avoid stress (6%) and relaxation and rest (4.1%), and a theme concerning having a positive mentality exemplified with the categories: Positive mentality and optimism (8.9%) and meditation and mindfulness (5.7%). Likewise, the categories crossword/sudoku/solitaire (3.4%), brain exercise and challenge the brain (3.1%) and to use the brain and keep the brain busy (2.8%) point to that using the brain also is a central theme when asked about what can be done to keep mentally healthy. In addition to the five themes, the two categories read (7.3%) and walk (4.1%) are noteworthy as these categories appear as segregated from the rest of the categories, but at the same time, constitute relatively large categories.

Lastly, our multinomial regression models (stratified by groups with and without a mental health problem or illness, see Table 4) show that believing that one can do something to keep mentally healthy was associated with significantly lower odds for low mental well-being and significantly higher odds of high mental well-being. Similarly, actively doing something to enhance mental health was associated with significantly lower odds of low mental well-being and significantly higher odds of high mental wellbeing. This was the case regardless of presence or absence of a mental health problem





Notes: Error bars depict 95% confidence intervals. All mean estimations were adjusted and included the following covariates: the key variables (beliefs and actions in regard to enhancing mental health), gender, age group, region, marital status, education, occupational status and maintenance of physical health. For the item on "beliefs in regard to enhancing mental health" (belief that one can or cannot do something to keep mentally healthy), respondents answering "yes, to a large extent" or "yes, to a very large extent" were considered as believing that one can do something to keep mentally healthy. For the item "actions in regard to enhancing mental health" (doing or not doing something actively to enhance mental health within past two weeks), respondents answering "yes, to a large extent" or "yes, to a very large extent" were considered as having done something actively to enhance mental health a Based on the continuous Short Warwick-Edinburgh Mental Wellbeing Scale (range 7-35)

or illness, although believing that one can do something to keep mentally healthy did not reach statistical significance in the case of high mental well-being as the outcome. However, the pattern of associations remained the same and the lack of significance may be attributed to lacking statistical power for this group (there were only 26 individuals with a mental health problem or illness in the high mental well-being group). Overall, the strength of the associations was generally stronger for "actions in regard to enhancing mental health" as compared to "beliefs in regard to enhancing mental health".

Discussion

Overall, in a representative sample of the Danish population, 7.6% report awareness or familiarity with the ABCs of Mental Health campaign - or 11.9% when also counting familiarity with campaign slogans - over the period 2019-2021. A major objective of the

| Table 3 What can you do to keep mentally healthy? | |
|--|------------------|
| Category | (%) ¹ |
| Social life and relations (e.g. be social, have a social network, be with people, meet people, seek out communities) | 13 |
| Exercise and training (e.g. keep in shape, exercise, exercise daily, train or fitness) | 12.8 |
| Positive mentality and optimism (e.g. think positive, be optimistic, "just say never mind") | 8.9 |
| Read (e.g. read books, read newspapers) | 7.3 |
| Eat healthy (e.g. eat greens, healthy diet, avoid sucker or get proper food) | 7.2 |
| Sleep (e.g. a good night's sleep, sleep well, go to bed early, sleep) | 6.5 |
| Reduce stress/avoid stress (e.g. be aware of stress, stressless life, avoid stress at work, remove stressors) | 6 |
| Meditation and mindfulness (e.g. practice mindfulness, meditate) | 5.7 5.5 |
| Talk to others (e.g. talk to people, talk to others, talk to friends or family, conversation) | 5.5 4.9 |
| Friends and family (e.g. have good friends, talks to friends and family, be with friends and family) Relaxation and rest (e.g. remember to relax, rest, recharge, pull the plug) | 4.9 |
| Walk (e.g. go for a walk with others, go for walks in nature) | 4.1 |
| Talk about problems (e.g. be open about problems, talk to someone if you are having a hard time) | 3.8 |
| Do things that you enjoy/do things that makes you happy (e.g. prioritise things that makes one happy) | 3.5 |
| Crossword/sudoku/solitaire (e.g. doing crossword, solve sudoku, play solitaire) | 3.4 |
| Brain exercises and challenge the brain (e.g. train the brain, mental exercises, solve tasks) | 3.1 |
| Use the brain and keep the brain busy (e.g. use your head, keep mentally active) | 2.8 |
| Nature (e.g. experience nature, visit the nature, enjoy the nature, out in the open, walk in the woods) | 2.7 |
| Be active (e.g. stay active, keep occupied, active lifestyle) | 2.4 |
| Healthy lifestyle and physical health (e.g. live healthy, stay physically healthy) | 2.4 |
| Fresh air (e.g. get fresh air, get outside or fresh air) | 2.3 |
| Take care of oneself (e.g. think of myself, be good to oneself, take care of oneself, prioritise myself) | 2.3 |
| Positive vs negative people, situations and contexts (e.g. avoid people with a negative influence) | 2 |
| Professional help (e.g. therapy, go to a psychologist, psychiatrist, take medication, consult a doctor) | 1.9 |
| Keep informed (e.g. keep up with the news, keep up with politics, keep me updated) | 1.7 |
| Physically active (e.g. be physical active, keep physical) | 1.7 |
| Challenge oneself and be curious (e.g. challenge oneself, learn something new, study) | 1.6 |
| Hobbies and leisure activities (e.g. have interests, spend time on hobbies or engage in leisure activities) | 1.5 |
| Self-development (e.g. write journal, work with yourself, seek knowledge about mental health or self-development) | 1.5 |
| Music (e.g. listen to music, sing, play an instrument) | 1.3 |
| Set boundaries (e.g. say no, knowing my limits, set boundaries, say no to things that you do not feel like doing) | 1.3 |
| Work environment (e.g. job satisfaction, having good colleagues, work life balance, avoid too much work) | 1.2 |
| Listen to the body (e.g. listen to my body signals, notice how you feel) | 1.2 |
| Seek help/ask for help (e.g. seek help, ask for help, seek help if you have problems or seek help when you need it) | 1.2 |
| Play games (e.g. play computer games, phone, play board games, make puzzle, poker, bridge) | 1.2 |
| Think and reflect (e.g. think, find time for reflection, think about philosophy, reflect on things) | 1.1 1.1 |
| Take a break (e.g. take breaks, give oneself mental breaks or take time for breaks in everyday life) Unanswered (e.g. answers with only one letter e.g., "j" or symbols ".", an empty space) | 12.2 |
| Other (statements that stand alone (less than three)) | 8.1 |
| Do not know (e.g. do not know, no idea or "?") | 6 |
| Inconclusive (e.g. unclear statement, statements such as "it is very individual") | 1.8 |
| Nothing/limited/little (e.g. nothing special, too little, not so much) | 1.1 |
| Note: ¹ The respondents have been able to give several answers, for which reason the total percentage is over 100 | 1.1 |

ABCs of Mental Health is to frame mental health positively and as something that matters to everyone. Further, an objective is to reduce stigma about mental health problems (by framing mental health positively) and to create a new mindset about mental health, namely:

- that mental health is much more than simply the absence of mental illness and symptoms of psychopathology, but also very much a matter of what it means to be 'mentally healthy' (which is relevant for everyone); and
- that mental health is dynamic and people themselves can do something to influence their mental health (Lyubomirski et al., 2005; Koushede and Donovan, 2022).

According to our results, among the respondents who had been reached by the ABCs of Mental Health campaign, respondents predominantly (74%) reported that the campaign had made them reflect on their own mental health and one-third (36%) spoke to family and

| Multinomial logistic regression model: predictors (ORs) of high and low mental well-being ^a | | | | | | |
|--|---------------------------------|---|---------|----------------|--|---------|
| Predictor variable | | No mental w mental wel 95% CI | , | | r mental illne h mental wel 95% CI | |
| Belief that one cannot do something to keep mentally healthy | 1 | | | 1 | | |
| Belief that one can do something to keep mentally healthy | 0.68 | 0.50, 0.94 | 0.020 | 1.82 | 1.26, 2.64 | 0.002 |
| Did not do something actively to enhance mental health within past two weeks | 1 | | | 1 | | |
| Did something actively to enhance mental health within past two weeks | 0.37 | 0.26, 0.54 | < 0.001 | 2.15 | 1.58, 2.92 | < 0.001 |
| | Mental health problem or mental | | | nental illness | 3 | |
| | Lov | Low mental well-being High mental well-bein | | l-being | | |
| Belief that one cannot do something to keep mentally healthy | 1 | | | 1 | | |
| Belief that one can do something to keep mentally healthy | 0.47 | 0.31, 0.71 | < 0.001 | 1.40 | 0.46, 4.19 | 0.552 |
| Did not do something actively to enhance mental health within past two weeks | | | | 1 | | |
| Did something actively to enhance mental health within past two weeks | 0.51 | 0.32, 0.80 | 0.003 | 6.46 | 1.97, 21.2 | 0.002 |

Notes: Estimates for outcomes on high and low mental well-being were made relative to moderate mental well-being as part of the same multinomial regression model. All models included the key variables (beliefs and actions in regard to enhancing mental health) as well as the following covariates: gender, age group, region, marital status, education, occupational status and maintenance of physical health. For the item on "beliefs in regard to enhancing mental health" (belief that one can or cannot do something to keep mentally healthy), respondents answering "yes, to a large extent" or "yes, to a very large extent" were considered as believing that one can do something to keep mentally healthy. For the item "actions in regard to enhancing mental health" (doing or not doing something actively to enhance mental health within past two weeks), respondents answering "yes, to a large extent" or "yes, to a very large extent" were considered as having done something actively to enhance mental health. ^aBased on the SWEMWBS (range 7–35), categorical variable

> friends about mental health after having heard about the campaign. Thus, our results suggest that the campaign has been successful - at least to some extent - in reaching this objective, which would also appear to be supported further by the remaining impact indicators we included in the study.

> Specifically, respondents predominantly (78.4%) reported that the campaign had given them new knowledge about what they can do to enhance their mental health, while some (16.2%) also reported having acted upon the campaign messages, i.e. they did something actively to enhance their mental health as a result of having heard about the campaign and the ABC messages. Regarding the latter finding, it may be noted that facilitating behaviour change is difficult across all disciplines (Kelly and Barker, 2016; Bauman et al., 2006), which may explain the lower proportion of affirmative responses relative to the other campaign impact indicators. Other factors influencing behaviour change may be found in the literature on health literacy.

> For example, Baker (2006) proposes several aspects such as the individuals/recipient's prior knowledge, the complexity and difficulty of the messaging and contextual factors that all influence the process of forming new knowledge and personal attitudes that can lead to behaviour change. Regarding the contextual factors, prior research (Wakefield et al., 2010) suggests that the likelihood of achieving behaviour change through campaigns is substantially increased by the application of multiple interventions, such as campaigns combined with community-based initiatives and policies that support the desired behaviour change. Another thing to consider is that many people may also already be engaging in various activities that are promoting and sustaining good mental health. Thus, the objective of the ABCs of Mental Health campaign is not necessarily to encourage that people engage in more activities, but rather to increase awareness that the ABC activities that people already engage in are important for mental health and to encourage them to continue to prioritise those activities.

> Our results also showed that substantial proportions of both those with and without a mental health problem are reached and have been impacted by the ABCs of Mental Health campaign. This is in line with Act-Belong-Commit impact evaluations from Australia, also suggesting that the campaign reaches both people with and without mental health problems in a population (Anwar-McHenry et al., 2012; Donovan et al., 2016). The reach

proportion was slightly greater for those with a mental health problem as compared to those without a mental health problem, in line with results from Australia showing that the campaign appears to attract relatively more attention and involvement from groups with diagnosed mental illness than from those without (Anwar-McHenry et al., 2012; Donovan et al., 2016), and that the campaign also stimulates information-seeking and help-seeking among people experiencing mental health problems (Drane et al., 2022). The results from Australia have further shown that people with a mental health problem or a diagnosed mental illness find the campaign empowering by 1) providing a simple and practical ABC for enhancing mental health, which may also be used as a tool for recovery similar to other applied frameworks (Piat et al., 2017; Dell et al., 2021), and 2) destigmatising, exactly because the ABCs of Mental Health campaign is a universal approach that targets whole populations (i.e. the campaign is "for everyone", and hence, their involvement is not defined by their mental illness). As stated earlier, a major objective of the ABCs of Mental Health campaign is to promote mental health universally irrespective of (mental) health status and our results indicate that the campaign holds the potential to do so.

We also investigated how mental health promoting beliefs and actions were associated with different levels of mental well-being. We found that individuals who believe that they themselves can do something to keep mentally healthy score higher on mental well-being than individuals who do not, and individuals who do something actively to enhance their mental health score higher on mental well-being than individuals who do not. In terms of "beliefs in regard to enhancing mental health", it may be noted that the means were adjusted for sociodemographics as well as "actions in regard to enhancing mental health" (which was also the case in our multinomial logistic regression discussed below). In other words, believing that one can do something to enhance mental health is independently associated with a higher level of mental well-being, regardless of whether one actually does something actively to enhance it. An explanation for this might be that simply having a belief that one can do something to enhance mental health may influence one's outlook, behaviour, lifestyle etc., which in turn associates with a higher level of mental well-being, even if the person is not consciously doing something specific to enhance mental health.

A person's "belief in regard to enhancing mental health" may be considered a mental health-specific variant of locus of control, similar to a recently validated Well-being Locus of Control Scale (WB-LOC12) (Farnier et al., 2021). An internal well-being locus of control implies the capacity to recognise the potential to which an individual can influence her or his own mental health, while an external locus of control implies an attitude that mental health and well-being is mainly or solely influenced by external forces, e.g. influenced by others or by chance. It is of interest that the validation study of the WB-LOC12 scale included a separate measure of positive activities (practicing a sport; having a good time with friends; having a good time by oneself; working on personal projects meaningful to oneself; practising meditation; practising yoga, relaxation or other physical well-being activities; or doing personal development practices or exercises), and these activities would appear to be consistent with the ABC messages.

According to their results (Farnier et al., 2021), an internal well-being locus of control correlated positively with positive activities, while an external well-being locus of control correlated negatively with positive activities. In other words, individuals that engage in activities consistent with the ABC messages tend to have an internal well-being locus of control, and vice-versa. In our study, we also found a similar correlation between beliefs in regard to enhancing mental health and actions in regard to enhancing mental health. Further, according to the WB-LOC12 validation study (Farnier et al., 2021), an internal wellbeing locus of control correlated positively with mental well-being and subjective happiness, as well as negatively with depression, anxiety and stress, while the opposite

was the case for an external locus of control. This pattern aligns with our results showing associations with low and high mental well-being.

In terms of our qualitative analysis, with 92 identified categories based on the responses to the open-ended question "What can you do to keep mentally healthy", responses illustrate the vast variety of possible actions that people point to as a means to keeping mentally healthy. Five themes in particular stand out as being reported frequently: social relations, health behaviour, relaxation, positive mindset and use of the brain. In addition to the five themes, the two categories read and walk also appear as some relatively large categories, but at the same time, stand as thematically separated from the remaining categories. Although it could be argued that the categories could be included in some of the mentioned themes, e.g. health behaviour or use of the brain, we believe they stand out because they are based on the specific (often singular) statement to perform the action "read" or "walk".

While the majority of the sample responded to the question with some suggestion for action, about 50% reported that they had done so only to some extent or less within the past two weeks (Table 1). There may be various reasons for not engaging in mentally healthy behaviours, and we can only speculate as to what they may be. One reason may be that although most people intuitively know what they can do to enhance their mental health, they often forget to prioritise it in their daily lives (Nielsen et al., 2017; Donovan et al., 2007). An alternative possibility may be that they wanted to prioritise it, but they did not manage to find the opportunity for it. One group (about 7%) did not know what could be done or thought that nothing or very little could be done to enhance mental health. Our findings show that there is a need to both increase awareness about what can be done to enhance mental health and to encourage and provide opportunities for people to actually do so. This is a core component of the ABCs of Mental Health campaign. Our results generally support the argument that it is important to have mental health campaigns – such as the ABCs of Mental Health campaign and partnership - that promote an internal wellbeing locus of control, i.e. that increase awareness that individuals can do something to enhance their own mental health; encourage them to prioritise and engage in activities that they intuitively know are important for keeping mentally healthy; and provide them with suggestions and opportunities to actually engage in mentally healthy behaviours and lifestyles, all of which are associated with better mental health.

Lastly, our multinomial logistic regression models showed that having a belief that one can do something to keep mentally healthy (as compared to not having this belief) was associated with lower odds of low mental well-being and higher odds of high mental wellbeing. Similarly, doing something actively to enhance mental health (as compared to not doing something) was associated with lower odds of low mental well-being and higher odds of high mental well-being. In other words, our results indicate that beliefs and actions towards enhancing mental health may both prevent poor mental health (low levels of mental well-being), as well as promote good mental health (high levels of mental well-being). With recent research demonstrating that higher levels of mental well-being are inversely associated with risk for developing a common mental disorder at a future time point (Santini et al., 2022a) as well as future health and social care costs (Santini et al., 2021b), our findings could have major implications for public mental health and mental illness disease burden. However, longitudinal and intervention research is needed to establish this. Both in terms of adjusted means and our multinomial logistic regression analyses, our results suggest that the associations of "actions in regard to enhancing mental health" with mental well-being are stronger than those of "beliefs in regard to enhancing mental wellbeing". Thus, our results indicate the greatest benefit to mental health would occur when individuals both believe that they can do something to enhance their mental health, as well as taking action to do so. Overall, our results add to the evidence base (Donovan et al., 2021; Hinrichsen et al., 2020; Jalleh et al., 2013; Koushede and Donovan, 2022) regarding the potential of the ABCs of

Mental Health campaign to promote such beliefs and actions universally throughout the population.

Strengths and limitations

The strengths of the study include data representative of the Danish population on key demographics, as well as the use of a validated scale for measuring mental well-being. Some limitations deserve mentioning. Firstly, our data were collected through a survey agency, which may both present some advantages in terms of encouraging participation, but may also introduce some biases (Cook et al., 2000). Pros and cons of collecting data through survey agencies should be kept in mind when interpreting the results. Secondly, our data were cross-sectional and thus precludes inferences regarding causality. Our analytical models reflect associations, but there is a possibility for reverse causality, and longitudinal research is needed to investigate the associations over time. Thirdly, our data predominantly involve self-report data, and although this is a standard approach (and often the only viable option) to assess attitudes and behaviours relating to mental health, it can also introduce issues of self-report bias and common methods variance, particularly in our logistic regression analyses. Lastly, the stratification of groups with and without a mental health problem or illness was based on self-reported information by the respondents and distributions might have differed if we had access to data with medical diagnoses or healthcare service use.

Conclusion

Universal mental health promotion is now considered the new frontier within preventive strategies and the ABCs of Mental Health is one such approach, which aims to strengthen positive aspects of mental health in the general population, i.e. among patient and nonpatient groups alike. Using representative survey data, we set out to evaluate the impact of the ABCs of Mental Health in Denmark and to investigate mental health-promoting beliefs and actions and how these are associated with different levels of mental well-being. Our impact evaluation results showed that 7.6% had been reached by the campaign (familiar with ABC name or messages) - or 11.9% when also counting familiarity with campaign slogans – over the period 2019–2021. Among these, over two-thirds reported that the ABCs of Mental Health campaign made them reflect on their own mental health or gave them new knowledge about what they themselves can do to keep mentally healthy, while about onethird reported they spoke to family or friends about mental health after becoming familiar with the campaign. About 16.2% reported that they did something actively to enhance their mental health as a result of hearing about the campaign and the ABC messages.

In our analyses on mental health-promoting beliefs and actions, we found that individuals who believe that they can do something to enhance their mental health scored higher on mental well-being than individuals who do not, and that individuals who do something to enhance their mental health scored higher on mental well-being than individuals who do not. Our multinomial logistic regression models showed similar patterns, namely, that beliefs and actions towards enhancing mental health are suggested (based on cross-sectional results) to both prevent poor mental health (low levels of mental well-being), as well as to promote good mental health (high levels of mental well-being). Altogether, our results support the argument that it is important to have mental health campaigns - such as the ABCs of Mental Health campaign and partnership - that promote an internal well-being locus of control, i.e. that increase awareness that individuals can do something to enhance their own mental health; encourage them to prioritise and engage in activities that they intuitively know are important for keeping mentally healthy; and provide them with suggestions and opportunities to actually engage in mentally healthy behaviours and lifestyles, all of which are associated with better mental health.

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| Code | Description | 1 |
|---------------------------------------|--|---|
| Association activities | Refers to statements such as: participate in associations, be active in associations or organisations | |
| Avoid overload, busyness and | Refers to statements such as: avoid busyness, avoid too many tasks at once or do not take on | - |
| oo many tasks | too many tasks | |
| Avoid speculations and worries | Refers to statements such as: do not think too much, do not overthink or do not worry | |
| Be active Be aware of one's own well- | Refers to statements such as: active, stay active, activity, keep occupied or active lifestyle Refers to statements such as: attention to my well-being or be aware of one's mental health | |
| peing | Defend to etate and a cook as the belongs the belonged as achieve belongs in life | |
| Be balanced Be candid | Refers to statements such as: be in balance, be balanced or achieve balance in life Refers to statements such as: open-minded, be frank with other people, openness or be open | |
| Be creative | about feelings Refers to statements such as: be creative or specific types of creative activities such as | |
| de creative | painting, sewing, drawing, knitting, needlework or writing | |
| Be grateful | Refers to statements such as: be grateful, gratitude or show gratitude | |
| Be happy | Refers to statements such as: be happy, joy or be in a good mood | |
| Be honest | Refers to statements such as: be honest, honesty or be honest with yourself and others | |
| Be kind to oneself | Refers to statement such as: love oneself, talk nicely to oneself, treat yourself properly, believe | |
| | in oneself or self-esteem | |
| Be oneself | Refers to statements such as: be myself, be true to yourself or know who you are | |
| Bicycle | Refers to statement such as: ride a bike or cycle | |
| Brain exercises and challenge | Refers to statements such as: train the brain, do exercises for the brain, brain exercises, mental | |
| he brain | exercises, solve tasks or challenge the brain | |
| Breathing | Refers to statements such as: breathing exercises, respiratory therapy or breath | |
| Challenge oneself and be | Refers to statements such as: challenge oneself, learn something new, be curious, study or | |
| urious Prossword/sudoku/solitaire | learn a new language | 1 |
| Cultural life | Refers to statements such as: doing crossword, solve sudoku or play solitaire Refers to statements such as: attend concerts, go to the theatre, go to the cinema, attend | |
| Juliurur me | presentations or talks | |
| Dance | Refers to statement such as: dance, dancing, dance with others or concrete types of dances | |
| Daylight | Refers to statements such as: sunlight, daylight, get enough sunlight, sunbath, get out in the daylight | |
| Demands and expectations of oneself | Refers to statements such as: do not make too great demands on oneself, avoid perfectionism or know your own limitations | |
| Discuss and debate | Refers to statement such as: discussing or participates in debates and discussions | |
| Oo not know | Refers to statements such as: do not know, no idea or "?" | 1 |
| Oo things that you enjoy/do | Refers to statements such as: do things that makes me happy, do things that I like to do, do | 1 |
| hings that makes you happy | things that I love, do things that makes you in a good mood or prioritise things that make one | |
| | happy | |
| Eat healthy | Refers to statements such as: eat healthy, eat greens, healthy diet, diet, varied diet, avoid | 2 |
| | sucker or get proper food | |
| Enjoy life/live life | Refers to statements such as: live a good life, live life or enjoy life | |
| Exercise and training | Refers to statements such as: keep in shape, exercise, exercise daily, train or fitness | 3 |
| Extrovert | Refers to statements such as: be extrovert | |
| aith and religion | Refers to statements such as: be religious, believe in Good, believe in Jesus, be spiritually active or pray | |
| Food | Refers to statements such as: food, cook good food, eat delicious food or go out for dinner | |
| Friends and family | Refers to statements such as: spend time with friends, family, have good friends, talks to friends | 1 |
| | and family or be with friends and family | |
| resh air | Refers to statements such as: get fresh air, get more fresh air, get outside or fresh air | |
| Gardening | Refers to statements such as: gardening, cultivate my garden or take care of my garden | |
| Get out | Refers to statements such as: get out of the house, get out or getting out daily | |
| Good experiences | Refers to statements such as: experiences, enjoy experiences, experience something, have good experiences with others | |

| Table A1 | | |
|---|---|-----------|
| Code | Description | n |
| Healthy lifestyle and physical | Refers to statements such as: live healthy, healthy lifestyle, stay physically healthy or mental | 71 |
| health Hobbies and leisure activities | health is the same as physical health Refers to statements such as: have interests, have healthy interests, spend time on hobbies or | 44 |
| i lobbles and leisure activities | engage in leisure activities | 44 |
| Holidays/take a day off | Refers to statements such as: take a vacation, take a day off or make sure to take a day off | 15 |
| Inconclusive | Refers to statements where it is not possible to deduce the meaning of it or statements that do | 54 |
| Kaan informed | now answer the question such as "it is very individual" or "for complex an issue to answer" | 51 |
| Keep informed | Refers to statements such as: to keep informed about society, keep up with the news, keep me updated or keep up with politics | 31 |
| Laugh | Refers to statements such as: laugh, smile, laughter | 23 |
| Listen to the body | Refers to statements such as: listen to my body, listen to my body signals or notice how you feel | 37 |
| Listen to oneself | Refers to statements such as: listen to oneself or learn to listen to oneself | 10 |
| Meditation and mindfulness Meaningfulness | Refers to statements such as: meditate, meditation, mindfulness or practice mindfulness Refers to statements such as: do something meaningful, have a meaningful everyday life or | 173 11 |
| Wearingtuiness | meaningful occupation | - ' ' |
| Movies, series and television | Refers to statement such as: watch good movies, watch series or watch TV | 15 |
| Music | Refers to statement such as: music, listen to music, sing or play an instrument | 39 |
| Nature | Refers to statements such as: stay in nature, experience nature, visit the nature, enjoy the | 82 |
| NI- | nature, out in the open, long walks in nature or walk in the woods | 00 |
| No or reduced use of drugs and alcohol | Refers to statements such as: avoid alcohol or drugs, do not use drugs, avoid smoking or keep a low alcohol assumption | 26 |
| Nothing/limited/little | Refers to statements such as: nothing, nothing special, too little or not so much | 32 |
| Others | Refers to statements that stand alone (less than 3) and therefore cannot be categorised | 243 |
| Pace | Refers to statements such as: do things in your own pace or slow down the pace | 5 |
| Pets | Refers to statements such as: have animals, walk det dog or have a pet | 15 |
| Physically active | Refers to statements such as: be physically active, be physical active or keep physical | 50 |
| Play games | Refers to statements such as: play computer games, play games on the phone, play board | 35 |
| Positive mentality and | games, make puzzle or play certain types of games such as poker or bridge Refers to statements such as: think positive, be optimistic, be positive, stay positive or "just say | 268 |
| optimism | never mind" | 200 |
| Positive vs negative people, | Refers to statements such as: socialise with people with a good influence, avoid people with a | 59 |
| situations and contexts | negative influence, avoid thinks that affect you in a negative direction or replace negative things | |
| Presence | Refers to statements such as: presence or be present | 4 |
| Professional help | Refers to statements such as: therapy, go to a psychologist, psychiatrist, take medication, consult a doctor or talk to a professional | 57 |
| Read | Refers to statements such as: read books, read, read good books or read newspapers | 221 |
| Reduce stress/avoid stress | Refers to statements such as: be aware of stress and stress symptoms, stress reduction, de- | 181 |
| | stress, stressless life, avoid stress at work, less stress or remove stressors | |
| Reduce screen time | Refers to statement such as: take breaks from social media, turn off the mobile or reduce | 21 |
| Relaxation and rest | screen time Refers to statements such as: remember to relax, rest, recharge or pull the plug | 125 |
| Run | Refers to statements such as: run or long runs | 19 |
| Seek help/ask for help | Refers to statements such as: seek help, ask for help, seek help if you have problems or seek | 35 |
| | help when you need it | |
| Self-development | Refers to statement such as: write journal, work with yourself, work on self-development or seek | 44 |
| Sexual health | out knowledge about mental health or self-development Refers to statements such as: have sex, sex or masturbate | 6 |
| Set boundaries | Refers to statements such as: say no, knowing my limits, set boundaries or say no to things that | 6 39 |
| oct bournaines | you do not feel like doing | 00 |
| Sleep | Refers to statements such as: a good night's sleep, sleep well, go to bed early or sleep | 195 |
| Solicitude | Refers to statements such as: help others, be helpful, please others, show interest in others, be | 29 |
| 0.1 | aware of others, show care for others or do something good for others | |
| Solve, tackle or act on | Refers to statements such as: solve problems when they occur, address issues or problem- | 14 |
| problems Sport | solving Refers to the statement such as: sport and specific types of sports, e.g. swimming, rowing, | 25 |
| Орон | ping-pong or gymnastics | 23 |
| | | inued) |
| | (conti | , raca) |
| | | |

| Code | Description | n |
|---|--|-----------|
| Structure, planning and good | Refers to statements such as: make good routines, structure your everyday life, have good | 28 |
| habits Social life and relations | habits or planning Refers to statements such as: be social, have a social network, be with people, meet people or seek out communities or nurture social relations | 391 |
| Take a break | Refers statements such as: take breaks, give oneself mental breaks or take time for breaks in everyday life | 33 |
| Take care of oneself | Refers to statement such as: think of myself, do good things for oneself, be good to oneself, look after yourself, take care of oneself or prioritise myself | 68 |
| Take time out for yourself/do something alone | Refers to statements such as: spend time on myself, be alone, prioritise time alone, as well as descriptions of activities one does alone such as "walks alone" or "do creatives activities alone" | 19 |
| Talk about problems | Refers to statement such as: be open about problems, talk to someone if you are having a hard time, talks to others about how you are feeling or talk about what is going on | 114 |
| Talk to others | Refers to statement such as: talk to people, talk to others, talk to friends or family or conversation | 165 |
| Think and reflect | Refers to statements such as: think, find time for reflection, think about philosophy or reflect on things | 34 |
| Tranquillity | Refers to statement such as: tranquillity, peace and quiet, give oneself peace or make sure of quiet moments | 26 |
| Travel Use the brain and keep the brain busy | Refers to statements such as: travel or travel the world Refers to statements such as: use the brain, use your head, keep mentally active or keep the brain busy | 6 85 |
| Vitamins | Refers to statements such as: eat vitamins or take D vitamin | 4 |
| Voluntary work Walk | Refers to statements such as: do voluntary work, engage in voluntary work, be a volunteer Refers to statements such as: walk, go for a walk, go for a walk with others or go for walks in nature | 12 125 |
| Winter swimming | Refers to statements such as: winter bathing or winter swimming | 3 |
| Work Work environment | Refers to statements such as: go to work, get a good job or occupation Refers to statements such as: job satisfaction, having good colleagues, work life balance, avoid too much work, avoid stress at work or remember to take breaks at work | 20 37 |
| Yoga Unanswered | Refers to statements such as: practice yoga or yoga Refers to answers with only one letter e.g. "j" or symbols "", a combination of indiscriminate letters, e.g. "wjslkgiosgjgsjnh" or an empty space | 27 368 |

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