

Survey indicators

MINDFUL

Indicators and their domains are presented, their background is elucidated and descriptions are provided. Review of use in population surveys is presented with data on validity and reliability estimates of the survey measures if available.

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<i>For future consideration</i>	<i>Virhe. Kirjanmerkkiä ei ole määritetty.</i>
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New survey indicators

AUDIT-5

Indicator domain: Disease specific morbidity, *alcohol dependence*

Background: Excessive use of alcohol and alcohol dependence is commonly associated with mental ill-health. Excessive use is also hazardous for general health. The original AUDIT 10-item questionnaire was developed from a six-country collaborative project (1).

Description: Five item measure that can be administered as a self-report scale or used in an interview. AUDIT is derived from Alcohol Use Disorders Identification Test. AUDIT is a screening instrument for hazardous and harmful alcohol consumption. The five item version was developed based on a survey study among primary care attendees (2) and it includes items 1, 2, 4, 5 and 10 from the original version.

Use in population surveys: The AUDIT-5 has been used in two previous studies that focused on health service users (2,3). It has not been used in studies regarding the general population. The five item version has given a reasonable accuracy for screening patients in primary care (2). Thirty-eight studies have been conducted regarding identification of problem drinking in primary care. Eleven screened for at-risk, hazardous, or harmful drinking; 27 screened for alcohol abuse and dependence (4). There are no studies using AUDIT-5 in the general population. However, CAGE has performed poorly in a non-clinical sample and in a representative sample of the German general adult population (5, 6). AUDIT has been used e.g. in a Finnish population study (7).

Data from comparison of CAGE and TWEAK among the general population suggest that while the performance of screening instruments may vary across demographic subgroups in the general population, instruments may perform equally well for identifying problem drinkers in general populations as in clinical populations (8). a Canadian survey found that CAGE was not a usable tool for screening heavy drinking in the general population (9).

Validity: In the validation study (2) CIDI alcohol use module was administered by an investigator. The study did not mention whether the assessments were conducted in a blinded manner or not. Additionally, the primary care physician on a form a list of clinical signs often associated with alcohol consumption noted drinking behaviour during the previous 12 months and noted the intake of psychotropic drugs during two weeks before examination. Area under receiver operating characteristic (ROC) curve was 0.931 (95%CI: 0.919 – 0.944).

A comparison of AUDIT, AUDIT-5 and CAGE among elderly people referred to mental health service the ROC of AUDIT was 0.961, of AUDIT-5 was 0.964 and of CAGE 0.780. The AUDIT-5 performed as well as AUDIT. AUDIT-5 performed best

of the three scales with a sensitivity of 75 %, specificity of 97.2 % and positive predictive power of 83.3 % when the previously suggested cut-off point.

A recent systematic review found that AUDIT was most effective in identifying subjects with at-risk, hazardous, or harmful drinking (sensitivity, 51%-97%; specificity, 78%-96%), while the CAGE questions proved superior for detecting alcohol abuse and dependence (sensitivity, 43%-94%; specificity, 70%-97%) (4).

Reliability: Test-retest data are not available. Using five points as a cut-off point gave sensitivity of 0.79 and a specificity of 0.95. The positive predictive value was 0.73. The probability of a subject scoring less than five having alcohol problems was less than 4 %.

MINDFUL Recommendation: A cutpoint of ≥ 5 is recommended.

Reference:

1. Saunders JB, Aaslund OG, Babor TF, de la Fuente JR, Grant M. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative project on early detection of persons with harmful alcohol consumption – II. *Addiction* 1993;88:791-804.
2. Piccinelli M, Tessari E, Bortolomasi M, Piasere O, Semenzin M, Garzotto N, Tansella M. Efficacy of the alcohol use disorders identification test as a screening for hazardous alcohol intake and related disorders in primary care: a validity study. *BMJ* 1997;314:420-4.
3. Philpot M, Pearson N, Petratos V, Dayanandan R, Silverman M, Marshall J. Screening for problem drinking in older people referred to mental health service: a comparison of CAGE and AUDIT. *Aging and Mental Health* 2003;7:171-175.
4. Fiellin DA, Reid MC, O'Connor PG. Screening for alcohol problems in primary care: a systematic review. *Arch Intern Med.* 2000;160:1977-89.
5. Koppes LL, Twisk JW, Snel J, Van Mechelen W, Kemper HC. Comparison of short questionnaires on alcohol drinking behavior in a nonclinical population of 36-year-old men and women. *Subst Use Misuse.* 2004;39:1041-60.
6. Buhler A, Kraus L, Augustin R, Kramer S. Screening for alcohol-related problems in the general population using CAGE and DSM-IV: characteristics of congruently and incongruently identified participants. *Addict Behav* 2004;29:867-78.
7. Holmila M. Intoxication and hazardous use of alcohol: results from the 1992 Finnish Drinking Habits Study. *Addiction.* 1995;90:785-92.
8. Cherpitel CJ. Screening for alcohol problems in the U.S. general population: a comparison of the CAGE and TWEAK by gender, ethnicity, and services utilization. *J Stud Alcohol.* 1999;60:705-11.
9. Bisson J, Nadeau L, e Demers A. The validity of the CAGE scale to screen for heavy drinking and drinking problems in a general population survey *Addiction* 1999;94:715-722.

Self-Esteem Scale

Indicator domain: Determinant, personal conditions, positive mental health

Background: Global self-esteem is defined as one's overall sense of worthiness as a person. Self-esteem is negatively associated with neuroticism (negative emotionality) and functions thus as an anxiety buffer. Self-esteem consists of two dimensions: self-liking (the self as a social object, sense of self as a good person, as socially relevant contributing to group harmony) and self-competence (self as a causal agent, sense of self-confidence and capability, efficaciousness). Individualistic cultures may give emphasis to self-competence whereas collectivist cultures may give emphasis to self-liking. Attachment styles thought to be associated with self-esteem. Self-esteem acts as an anxiety buffer and low level of self-esteem is associated with depressed mood. Self-esteem has additionally described as an ingredient of the affective link between oneself and others.

Description: 10-item survey indicator. It displays a transparent factor structure and has been translated to most Indo-European languages. A four-point likert scale is used with scores from 1 to 4, total range of 10-40.

Use in population surveys: SES was recently used in a survey study among 53 nations from different cultures. Rosenberg Self Esteem Scale is the most widely used measure of self-esteem. SES has been also included in the European School Survey Project on Alcohol and Drugs (ESPAD) survey covering 30 countries.

Validity: Factor structure has been fairly well replicated across many nations and several cultures (average Tucker's congruence = 0.987). Negatively associated with neuroticism (negative emotionality) and positively associated with extraversion (positive emotionality).

Reliability: Mean reliability across several nations $\alpha = 0.81$. Guttman split-half reliability = 0.73.

MINDFUL Recommendation: The mean of SES is considered as the indicator.

Reference: Schmitt DP, Allik J. Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: exploring the universal and culture-specific features of global self-esteem. *J Pers Soc Psychol* 2005;89:623-642.

Hewitt JP. The social construction of self-esteem. In: Snyder CR, Lopez SJ eds. *Handbook of positive psychology*. New York: Oxford University Press, 2002, pp: 135-147.

Strengths and difficulties questionnaire (SDQ)

Indicator domain: Health status, Generic morbidity

Background: Psychiatric disorders in childhood and adolescence are common in the population. SDQ screens for internalizing, externalizing, conduct and attention deficit disorders. The SDQ is a brief behavioural screening questionnaire about 3-16 year olds and it can be completed in 5 minutes. It exists in several versions to meet the needs of researchers, clinicians and educationalists.

Description: In more detail those at risk for developing psychiatric disorders can be detected by the scores on the instrument. Most authors conclude that the instrument seems to present an efficient and economical screening instrument for preventive research on large community samples. The SDQ seems to have made a rather quick entrance into psychiatric epidemiological research, and to have become a valid and reliable alternative to the much used Youth Self Report (YSR) and Child Behaviour Checklist (CBCL). There are self-report, teacher and parent versions of the scale. The SDQ is a behavioural screening questionnaire measuring four behavioural symptoms: emotional symptoms, conduct problems, hyperactivity/inattention, and peer relationship problems. It includes 25 items (emotional, conduct, hyperactivity/inattention, and prosocial behavior) and assessment of 5 domains of functioning. The predictive algorithm generates "unlikely", "possible" or "probable" ratings for psychiatric disorders described above.

In addition to likelihood of disorders, the SDQ gives an estimate of adjustment. Good adjustment is defined here as prosocial behaviours manifested as good peer relationships and a low level of emotional symptoms.

Validity: SDQ-self report scores have the comparable AUC-values (area under curve) to YSR/CBCL-scores in predicting clinical diagnosis. The SDQ has been validated in a number of studies (1) and in a number of countries, i.e. Germany, UK, the Netherlands, Australia, Norway, Sweden, Italy, Spain, Portugal, Croatia, and France.

Reliability: Reliabilities of the different scales are (12):

- Emotional symptoms: $\alpha=0.68$
- Conduct problems, $\alpha=0.52$
- Hyperactivity-inattention, $\alpha=0.68$
- Peer problems, $\alpha=0.44$

Use in population surveys: has been used in several population surveys (2,3,4,5,6,7,8,9,10,11).

MINDFUL recommendation is that the scores from parent ratings are prioritized among 10-year old children. In the absence of parent ratings teacher ratings are used. Self-rate measures are used among adolescents, i.e. persons ≥ 13 years of age. The "total difficulties" score is used as an indicator of likelihood of a diagnosis. The scores of prosocial behaviours are used as a measure of adjustment.

Reference:

1. Goodman R. Psychometric Properties of the Strengths and Difficulties Questionnaire. *Journal of the American Academy of Child & Adolescent Psychiatry* 2001; 40:1337-1345.
2. Becker, A., Hagenberg, N., Roessner, V., Woerner, W., Rothenberger A. (2004). Evaluation of the self-reported SDQ in a clinical setting: Do self-reports tell us more than ratings by adult informants? *European Child and Adolescent Psychiatry*, 13, Suppl 2, 17-24.
3. Hawes, DJ, Dadds, MR (2004). Australian data and psychometric properties of the Strengths and Difficulties Questionnaire. *Australian and New Zealand journal of psychiatry*, 38, 644-651.
4. Klasen, H, Woerner, W, Wolke, D, Meyer, R et al (2000). Comparing the German versions of the Strengths and Difficulties Questionnaire (SDQ-Deu) and the Child behavior checklist. *European Child and Adolescent Psychiatry*, 9, 271-276.
5. Marzocchi, GM, Capron, C., Di Pietro, M, Tauleria, W., Duyme, M., Frigerio, A. et al (2004). The use of the Strengths and Difficulties Questionnaire (SDQ) in Southern European countries. *European Child and Adolescent Psychiatry*, 13, Suppl 2, 40-46.
6. Mathai, J, Anderson, P, Bourne, A (2004). Comparing psychiatric diagnoses generated by the Strength and Difficulties Questionnaire with diagnoses made by clinicians. *Australian and New Zealand journal of psychiatry*, 38, 639-643.
7. Muris, P, Meesters, C, Berg, F van den (2003). The Strengths and Difficulties Questionnaire. Further evidence for its reliability and validity in a community sample of Dutch children and adolescents. *European Child and Adolescent Psychiatry*, 12, 1-8.
8. Obel, C, Heiervan, W., Rodriguez, A et al (2004). The Strength and Difficulties Questionnaire (SDQ) in the Nordic countries. *European Child and Adolescent Psychiatry*, 13, Suppl 2, 32-39.
9. Ronning, JA, Handegaart, BH, Sourander, A., Mørch, WT (2004). The Strength and Difficulties Questionnaire as a screening instrument in Norwegian community samples. *European Child and Adolescent Psychiatry*, 13, 73-82.
10. Smedje, J, Broman, JE, Hetta, J, Knorrning, AL von (1999). Psychometric properties of a Swedish version of the Strengths and Difficulties Questionnaire. *European Child and Adolescent Psychiatry*, 8, 63-70.
11. Widenfelt, BM van, Goedhart, AW, Treffers, PD, Goodman, R. (2003). Dutch version of the Strengths and Difficulties Questionnaire (SDQ). *European Child and Adolescent Psychiatry*, 12, 281-289.
12. Ravens-Sieberer U, Torsheim T, Välimaa R, Nickel J Erhardt M, Holstein B, Cavallo F, Hetland J. HBSC Research Protocol for 2005/06 Survey. Section 2, Scientific rationales for focus areas: Positive Health Positive Health

Childhood adversities

Indicator domain: Determinant, Determinant, social and cultural environment

Background: Childhood adversities are significantly associated with both physical and mental ill health.

Description: Childhood adversities are associated with depression and its prognosis in adulthood as well as increased somatic morbidity and mortality in both childhood and adulthood. Childhood adversities are strongly associated with vulnerability and background several factors (such as personality and genotype) moderate the outcome of the adversity. Adversity is defined here a major negative event in childhood or adolescence challenging seriously one's ability to cope.

Definition: National Comorbidity Survey: Life event history section, four items inquiring sexual abuse (rape and sexual molestation), physical abuse and serious neglect before the respondent was 18 years old, The measure of childhood adversity using these items is based on retrospective recollection.

1. You were raped (someone had sexual intercourse with you when you did not want to by threatening you or using some degree of force) (<18 years of age)
2. You were sexually molested (someone touched you or felt your genitals when you did not want them to) (<18 years of age)
3. You were physically abused as a child
4. You were seriously neglected as a child

Use in population surveys: Has been used as a measure in the National Comorbidity Survey: Life event history section (1).

Validity: The presence of any adversity was significantly associated with major depression among men and women (OR= ca. 3) and cardiovascular diseases among women (OR= ca. 9).

Reliability: No studies reporting reliability are available.

MINDFUL recommendation is that the presence of any adversity among persons aged 18 or more is used as an indicator.

Reference:

1. Batten SV, Aslan M, Maciejewski PK, Mazure CM. Childhood maltreatment as a risk factor for adult cardiovascular disease and depression. *J Clin Psychiatry*. 2004;65:249-54.

Previously defined survey indicators

Mental Health Index (MHI-5)

Indicator domain: Generic morbidity, psychological distress

Background: Elevated levels of psychological distress have been linked to increased mortality. Psychological distress is a risk factor for various illnesses. Non-specific psychological distress as a dimension of psychopathology can be straightforwardly and cost-effectively measured in the general population. Elevated scores on these scales indicate that something is wrong, but they were not developed to yield specific diagnoses. Furthermore, psychological distress seems to express more accurately the urgency with which treatment was needed, while diagnoses gave information about help eventually needed (1). The MHI-5 has comparable psychometric performance to the GHQ-12, and can be used to measure and compare mental health in defined populations. Operational advantages of the MHI-5 over the GHQ-12 are that it is in the public domain, is part of a general health measure (SF-36) and is shorter (2).

Description: Five item survey measure from RAND-36 (3).

Use in population surveys: Has been widely used in population surveys (1,2,3,4,5,6,7). Routine use of the SF-36 in a general hospital psychiatric outpatient clinic has been found feasible, and the results were reliable, valid, and helpful to clinicians (8).

Validity: Provides estimate comparable to other measures of psychological distress, associated with service use and decreased level of functioning (3,5). A comparison between MHI-5 and GHQ-12 found that both instruments were equally sensitive to socio-economic characteristics and to levels of social support. The scores on the two instruments were highly correlated (Spearman rank correlation-0.73) (2). A study of a random population sample found that the area under the receiver operating characteristics curve (AUC) of 0.72 in identifying any DSM-IV Axis I disorder using the MHI-5 (except substance use) was not satisfactory (9). The MHI-5 revealed best performance for mood (AUC: 0.88) followed by anxiety disorders (AUC: 0.71). Sensitivity and specificity were poor for somatoform and substance use disorders, especially in cases without comorbid mood or anxiety disorder. The power to detect mood and anxiety disorders of the MHI-5 was better for the 4-week compared with the 12-month diagnoses. The MHI-5 was recommended as a screen for mood disorders. Compared to Diagnostic Interview Schedule diagnoses the MHI-5 provided estimates of areas under curve ranging from 0.739 (for anxiety disorders) to 0.892 (for major depression) (10).

Reliability: Reliability estimates have exceeded 0.7 in diverse populations for all dimensions of the SF-36 (11).

MINDFUL Recommendation: Cutpoint for population norm: 76 (mean of two figures presented above) Cutpoint to predict disorder: 56

Reference:

1. Korkeila J. Measuring Aspects of Mental Health. *Stakes: Themes* 2000; 6.
2. McCabe CJ, Thomas KJ, Brazier JE, Coleman P. Measuring the mental health status of a population: a comparison of the GHQ-12 and the SF-36 (MHI-5). *Br J Psychiatry* 1996; 169: 517-21.
3. Ware JE, Snow KK, Kosinski M, Gandek B. SF-36 Health survey Manual and Interpretation Guide. New England Medical Center. MA, Boston: The Health Institute, 1993.
4. Shaw, J et al. Comparison of the Depression Screening Characteristics of the CES-D, MHI-5, and MCS-12 in Primary Care. AHSR Annual Meeting 2000: Behavioural Health
5. Bijl, RV, Ravelli, A. (2000) Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Psychological Medicine* 2000(30):657-668.
6. Korkeila J, Lehtinen V, Dalgard OS, Kovess V, Madianos M, Salize HJ. Piloting a minimum data set for mental health indicators for Europe. (in press *Journal of Mental Health*).
7. Kovess, V. and "The State of Mental Health in The European Union" collaborators. *The State of Mental Health in the European Union. European Communities, 2004*
http://www.europa.eu.int/comm/health/ph_projects/2001/monitoring/fp_monitoring_2001_frep_06_en.pdf
8. Adler DA, Bungay KM, Cynn DJ, Kosinski M. Patient-based health status assessments in an outpatient psychiatry setting. *Psychiatr Serv.* 2000;51:341-8.
9. Rumpf HJ, Meyer C, Hapke U, John U. Screening for mental health: validity of the MHI-5 using DSM-IV Axis I psychiatric disorders as gold standard. *Psychiatry Res.* 2001 Dec 31;105(3):243-53.
10. Berwick DM, Murphy JM, Goldman PA, Ware JE Jr, Barsky AJ, Weinstein MC. Performance of a five-item mental health screening test. *Med Care.* 1991;29:169-76.
11. Namjoshi MA, Buesching DP. A review of the health-related quality of life literature in bipolar disorder. *Qual Life Res* 2001;10:105-15.

Energy vitality

Indicator domain: Generic morbidity, positive mental health

Background: Well-being has been linked to better general and mental health, promotion and prevention activities may increase the level of well-being.

Description: A four item survey measure from RAND-36.

Use in population surveys: Has been widely used in population surveys (1,2). Routine use of the SF-36 in a general hospital psychiatric outpatient clinic has been found feasible, and the results were reliable, valid, and helpful to clinicians (3,4).

Validity: Associated positively with other measures of quality of life and low level of symptomatology (1,2) and negatively with mental health (4).

Reliability: Reliability estimates have exceeded 0.7 in diverse populations for all dimensions of the SF-36 (5).

MINDFUL Recommendation: Cutpoint for population norm: 70, cutpoint for disorder: 62

Reference:

1. Ware JE, Snow KK, Kosinski M, Gandek B. SF-36 Health survey Manual and Interpretation Guide. New England Medical Center. MA, Boston: The Health Institute, 1993.
2. Bijl, RV, Ravelli, A. (2000) Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Psychological Medicine* 2000(30):657-66.
3. Adler DA, Bungay KM, Cynn DJ, Kosinski M. Patient-based health status assessments in an outpatient psychiatry setting. *Psychiatr Serv.* 2000;51:341-8.
4. Lehtinen V, Sohlman B, Kovess-Masfety V. Level of positive mental health in the European Union: results from the Eurobarometer 2002 survey. *Clin Pract Epidemiol Ment Health.* 2005 Jul 21;1:9.
5. Namjoshi MA, Buesching DP. A review of the health-related quality of life literature in bipolar disorder. *Qual Life Res* 2001;10:105-15.

Role limitation due to emotional problems

Indicator domain: Generic morbidity

Background: Mental ill-health is a significant cause of disability; the importance of disability caused by mental disorders is increasing. Mental ill-health is also significantly associated to lost workdays (1).

Description: Three item survey measure from RAND-36: Question number 5 (a, b, c): Role limitations due to emotional problems.

Use in population surveys: Has been widely used in several population surveys (2,3). Routine use of the SF-36 in a general hospital psychiatric outpatient clinic has been found feasible, and the results were reliable, valid, and helpful to clinicians (4).

Validity: Associated positively with measures of disability and mental ill health.

Reliability: Reliability estimates have exceeded 0.7 in diverse populations for all dimensions of the SF-36 (5).

MINDFUL Recommendation: Cutpoint for population norm: 89, cutpoint for disorder: 80. Role limitation is calculated in the following manner: $(5a+5b+5c)-3/3 \times 100$ (if subject answers yes => 0 pts, if no then 1 pt); range 0-100; Cutpoint for role limitation 65 or less. Source of population norm: NEMESIS (3)

Reference:

1. Ware JE, Snow KK, Kosinski M, Gandek B. SF-36 Health survey Manual and Interpretation Guide. New England Medical Center. MA, Boston: The Health Institute, 1993.
2. Bijl, RV, Ravelli, A. (2000) Current and residual functional disability associated with psychopathology: findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Psychological Medicine* 2000(30):657-668.
3. Korkeila J, Lehtinen V, Dalgard OS, Kovess V, Madianos M, Salize HJ. Piloting a minimum data set for mental health indicators for Europe. (in press *Journal of Mental Health*).
4. Adler DA, Bungay KM, Cynn DJ, Kosinski M. Patient-based health status assessments in an outpatient psychiatry setting. *Psychiatr Serv.* 2000;51:341-8.
5. Namjoshi MA, Buesching DP. A review of the health-related quality of life literature in bipolar disorder. *Qual Life Res* 2001;10:105-15.

CIDI-SF (The World Health Organization Composite International Diagnostic Interview Short-Form)

Indicator domain: Disease specific morbidity,

Major depression and any anxiety disorder

Background: Depressive disorders are prevalent in the general public. The prevalence of depression is increasing and significance of depression as a cause for disability is increasing. Anxiety disorders are prevalent in the general public. Majority of mental ill-health in the general public consists of anxiety-depressive states.

Description: A structured psychiatric diagnostic instrument drafted by that has been found a reliable instrument for diagnosing psychiatric disorders in the general population WHO (1,2). CIDI has been widely used in several nations and across cultures (3). Pilot testing in a nationally representative telephone survey found that the full set of CIDI-SF scales can be administered in an average of seven minutes compared to over an hour for the full CIDI (1).

Use in population surveys: CIDI-SF has been previously used in survey studies (4,5).

Validity: Validity of CIDI has been found to be good using Present State Examination, Schedules for Clinical Assessment in Neuropsychiatry, clinician's checklists or LEAD (longitudinal, expert, all data) as a gold standard (2).

Reliability: CIDI gives a good test-retest reliability and an excellent inter-rater reliability. Overall classification of the CIDI-SF accuracy ranged from a low of 93% for major depressive episode to a high of over 99% for generalized anxiety disorder (1). Probability of CIDI major depression caseness using CIDI-SF was between 0.8895 and 0.9083 if the score was from 5 to 7, respectively.

MINDFUL Recommendation: A diagnosis of major depression or any anxiety disorder is used as an indicator of disease specific morbidity.

Reference:

1. Kessler RC, Andrews G, Mroczek D, Ustun B, Wittchen H-U. The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). *Int J Methods Psychiatr Research* 1998;7:172-85.
2. Andrews G, Peters L. The psychometric properties of the Composite International Diagnostic Interview. *Soc Psychiatry Psychiatr Epidemiol* 1998;33:80-8.
3. Demyttenaere K, Bruffaerts R, Posada-Villa J, et al.; WHO World Mental Health Survey Consortium. Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. *JAMA*. 2004 Jun 2;291(21):2581-90.
4. Wilkins K, Beaudet MP. Work stress and health. Statistics Canada: Health reports 10: 47-62, 1998.

5. Korkeila J, Lehtinen V, Dalgard OS, Kovess V, Madianos M, Salize HJ. Piloting a minimum data set for mental health indicators for Europe. (in press *Journal of Mental Health*).

List of Threatening Experiences

Indicator domain: Determinant, social and cultural environment

Background: Life events can be defined as major occurrences in one's life that require psychological adjustment to some degree. Studies have investigated major life events judged as undesirable, uncontrollable or life threatening as risk factors for mental ill-health and physical illnesses.

Description: A 12-item survey measure probing various stressful events in a person's life (1). Response alternatives are "yes" or "no"

Use in population surveys: Has been used in several population surveys (2,3,4,5).

Validity: Concurrent validity: for events prior 6 months to the data collection the sensitivity was 0.89 and specificity 0.74 using Bedford College Life Events and Difficulties Scales (LEDS) as a gold standard, for events 3 months to the data collection the sensitivity was 0.89 and 0.74 respectively (1).

Reliability: Cohen's κ values ranged between 0.78 and 1 for the 12 items. Agreement ratings with other informants on the events reached Cohen's κ values ranging from 0.7 to 0.9. Agreement of LEDS interview with relative informants' LTE ratings at 3 months was 0.84 and at 6 months 0.66 (1).

MINDFUL Recommendation: Cutpoint: 2 events within half a year

Reference:

1. Brugha, TS, Bebbington, P, Tennant, C et al. The List of Threatening Experiences: a subset of 12 life event categories with considerable long term contextual threat. *Psychol Med* 15: 189-194, 1985
2. Bebbington P, Hamdi E, Ghubash R. The Dubai Community Psychiatric Survey. IV. Life events, chronic difficulties and psychiatric morbidity. *Soc Psychiatry Psychiatr Epidemiol* 1998;10:501-9.
3. Michalak EE, Tam EM, Manjunath CV, Yatham LN, Levitt AJ, Levitan RD, Lam RW. Hard times and good friends: negative life events and social support in patients with seasonal and nonseasonal depression. *Can J Psychiatry* 2004;49:408-11.
4. Dalgard OS, Dowrick C, Lehtinen V, et al. The ODIN Group. Negative life events, social support and gender difference in depression. A multinational community survey with data from the ODIN study. (*submitted manuscript*)
5. Korkeila J, Lehtinen V, Dalgard OS, Kovess V, Madianos M, Salize HJ. Piloting a minimum data set for mental health indicators for Europe. (*in press Journal of Mental Health*).

Suicide attempts

Indicator domain: Health status: Disease specific morbidity

Background: An important outcome variable concerning mental ill-health

Description: Single item question in the CIDI.

Use in population surveys: Has been used with the CIDI.

MINDFUL Recommendation: A reported attempt is used as indicator.

Reference:

1. Kessler RC, Andrews G, Mroczek D, Ustun B, Wittchen H-U. The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). *Int J Methods Psychiatr Research* 1998;7:172-85.

Oslo-3

Indicator domain: Determinant, social and cultural environment

Background: Social support is a protective factor in times of stress, low levels of social support have been linked to increased rates of depression, somatic illnesses and mortality.

Description: Social support has been proposed to buffer against stress outcomes and depression. Prospective studies do not provide much support to the stress-buffering hypothesis, but indicate that social support has an independent influence on mental health (i.e. chronic strain hypothesis). Oslo-3 is a composite scale measuring both perception of support and social network.

Validity: Oslo-3 is negatively associated in a statistically significant manner with anxiety and depression measures.

Reliability: Internal reliability: Cronbach's $\alpha = 0.6$.

Availability: Reported as a sum variable in the Eurobarometer data, piloting mental health indicators

MINDFUL Recommendation: Each item will be reported separately.

Reference: Dowrick, C et al. (1998). The outcome of depression international network (ODIN). Background, methods and field trials. Br J Psychiatry; 172: 359-363

Sense of mastery

Indicator domain: Determinant, personal conditions, positive mental health

Background: Sense of mastery is a form of perceived personal control. Personal control refers to a sense of control over the events in one's life. Sense of mastery can be viewed as a form of perceived personal control. Low levels of sense of mastery have been linked to mental and general ill-health. Sense of mastery acts as a mediator between stress factors and various health outcomes.

Description: seven items, which were ranked on a four-point scale ranging from "strongly agree" (1) to "strongly disagree" (4). (The coding on the last two items was reversed). The responses to all items are summed (ranging from 7 to 28), high scores indicated superior mastery and scores of less than 20 are categorized as having low mastery (1,2).

Use in population surveys: Sense of mastery has been used in several population studies (2,3,4)

Validity: Low level of mastery has been shown to have a positive correlation with mental and general ill-health (1,2,3,4,5). High level of mastery is positively associated with measures of social support and coping (1).

Reliability: In the study by Wilkins et al reliability was found to be satisfactory (Cronbach's alpha = 0.76) (2). Correlations (LISREL) between sense of mastery scores at time 1 and at time 2 four years later was 0.44 (1).

MINDFUL Recommendation: Cutpoint: <20 points signifies low mastery (the 7-item version). Number of persons exceeding cutpoint for satisfactory level of sense of mastery within a country per 100 000 inhabitants in year.

Reference:

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4. Pudrovska T, Schieman S, Pearlin LI, Nguyen K. The sense of mastery as a mediator and moderator in the association between economic hardship and health in late life *J Aging Health* 2005;17: 634-660.
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