UK Biobank

Mental health web-based questionnaire

Version 1.3

http://www.ukbiobank.ac.uk/



This document details the rationale and procedure for administration of the mental health web-based questionnaire for UK Biobank.

Contents

1.	Introduction – scientific rationale	2
2.	List of contributors	3
3.	Content	4
4.	Piloting	7
5.	Administration	7
6.	Generation of derived mental health phenotypes	8
7.	References	8
Apr	pendix: Questions and format of the questionnaire	10

1. Introduction – scientific rationale

In January 2015 approximately 50 delegates contributed to a workshop which was held to identify how UK Biobank could be used for researching mental illness. A smaller Expert Working Group was then convened to devise the questionnaire (see Section 2).

Owing to the waxing and waning of symptoms throughout a lifetime and across a spectrum of mental disorders, it was acknowledged that different strategies were required to identify those with life-time experiences of mental disorders. The existing data from the baseline questionnaire was limited, and it was therefore felt important to enrich UK Biobank's phenotyping of mental disorders.

In addition to identifying episodes of mental illness though routine medical records (which UK Biobank has established linkages to), it was agreed that this may not identify many common mental disorders that often do not present to primary or secondary care and often do not receive a formal diagnosis. As such, the Expert Working Group recommended that UK Biobank collect self-reported information that captures symptoms of possible mental disorders using standard validated assessments. The focus was predominantly on the most common disorders – depression and anxiety. It was also recommended that there should be a number of initial screening questionnaires so one can with greater confidence identify a group of participants with no past or present disorders. The group also recommended brief questionnaires on life events, past trauma, childhood exposure and substance use, as major environmental exposures for mental disorders.

Much genetic research in mental health focuses on the comparison of people who have had at least one episode over their life time with those that have not. It was therefore recommended that the questionnaire should capture both current and lifetime mental disorders and symptoms.

The mental health questionnaire is based, in part, on the World Health Organisation's Composite International Diagnostic Interview (CIDI), alongside complementary tools that have been widely used in mental health research and have established validity and reliability. The CIDI forms the basis of many other major research studies, including those contributing to the work of the international Psychiatric Genomics Consortium, in order to promote comparability between studies.

2. List of contributors

Matthew Hotopf, King's College London (Chair)
Katrina Davis, King's College London
Elaine Fox, University of Oxford
Louise Howard, King's College London
Ann John, Swansea University
Rose McCabe, University of Exeter
Andrew McIntosh, University of Edinburgh
Daniel Smith, University of Glasgow
Stan Zammit, Cardiff University

3. Content

The following table provides details of the tools/scales used in mental health questionnaire.

Domain/question topic	Purpose	Source/tool	Notes about source/tool	Reference
A. Screening questions	To comprehensively screen for presence and absence of any mental health condition, by asking about mental health history in three different ways. This will enable comparisons of respondents who are susceptible to mental illness with those who are more resilient.		A list of psychiatric diagnoses is presented to prompt people who may not have thought of their condition as a mental illness.	
B. Current Depression	Maps onto criteria for major depression and indicates likely presence / absence and severity of current depression. This will allow assessments of how depression is related to other illnesses or situations.	9-question	An established research and clinical tool. This includes repeating the four PHQ questions asked at the baseline assessment clinic and some additional questions to enable likely categorical diagnosis of depression and estimation of severity.	Manea L et al (2012)
B. Lifetime Depression	To enable studies in genomics and other areas that require an assessment of whether respondents have ever experienced depression.	CIDI-SF (Composite International Diagnostic Interview – Short Form), depression module, lifetime version	The CIDI is a World Health Organisation (WHO) instrument for mental health surveys. The short-form was derived from the CIDI, and the current lifetime history version was adapted and validated in 4000 people in the USA. Including it allows comparison between the UKB cohort and other cohorts in the international Psychiatric Genetics Consortium.	Kessler RC et al (1998)
B. Lifetime manic symptoms	To identify people that have experienced symptoms that may indicate a bipolar affective disorder, in order to distinguish them from those with unipolar depression	Bespoke	These questions were also included in the baseline assessment clinic for the last one-third of UK Biobank participants.	Smith D et al (2013)
C. Current anxiety disorder	To identify participants with and without anxiety disorders in order to assess the impact of anxiety alongside depression.	Generalised Anxiety Disorder – 7 questions (GAD-7)	A tool commonly used in research and clinical practice with PHQ-9.	Kroenke K et al (2010)

C. Lifetime anxiety disorder	To enable an assessment of the occurrence of anxiety. It adds value to data on the "neuroticism" trait measured at the baseline assessment, as it is able to give a likely diagnosis, separating out subjects whose anxiety became pathological at points during their lives, from those who remained well.		The CIDI-SF lifetime version is derived from a World Health Organisation (WHO) instrument for mental health surveys. It allows comparison between the UKB cohort and other cohorts in the international Psychiatric Genetics Consortium.	Kessler RC et al (1998)
D. Addictions	To enable an assessment of a variety of addictions.	Bespoke	Responses to these questions ascertain lifetime and current addictions. The selected addictions were identified from the literature and by consulting the consortium: alcohol, medication including sedatives and painkillers, illicit drugs, and behaviours such as gambling	
E. Alcohol Use	To enable a comprehensive assessment of patterns in alcohol use with a view to defining misuse and addiction.	Alcohol Use Disorders Identification Test (AUDIT)	Developed by the WHO and extensively used and studied.	Reinert DF and Allen JP (2007)
E. Cannabis Use	To enable an assessment of cannabis use.	Bespoke	Two questions that can identify those with casual and heavy cannabis	
F. Unusual experiences	To enable an assessment of unusual experiences that may be markers of tendency towards psychosis or may be a harbinger of neurodegenerative disease.	CIDI, psychosis module, lifetime version, abridged	The CIDI lifetime version is a World Health Organisation (WHO) instrument for mental health surveys. The CIDI questions were adapted for self-report and reduced in number to as few questions as possible to tap into this theme, while making it possible to compare with the World Mental Health Surveys.	McGrath et al (2015)
G. Adverse events in childhood	To allow an assessment of the associations between adverse events in childhood and mental and physical health.	Childhood Trauma Screener – 5 item (CTS-5)	This is the short version of the Childhood Trauma Questionnaire, designed for adults to rate adverse events that may have happened in childhood.	Bellis M et al (2014); Bernstein DP et al (1994); Glaesmer H et al (2013)

G. Adverse events in adult life	To allow an assessment of the associations between adverse events in adult life and mental and physical health.	Bespoke	Using the same structure as the CTS, the questions were adapted from the national crime survey for being a victim of crime and adult domestic violence. Questions were also asked about specific known triggers for post-traumatic stress disorder.	Khalifeh H et al (2015)
G. Post-traumatic stress disorder	To allow an assessment of the occurrence of post-traumatic stress disorder.	Post-traumatic stress disorder Check List – civilian Short version (PCL-S)	Maps onto the DSM-IV criteria and is well-validated.	Wilkins KC et al (2011)
H. Self-harm and suicidal thoughts	To allow an assessment of the frequency of self- harm and suicidal thoughts (with a view to assessing the impact of mental health issues on this outcome).	Bespoke	There were no instruments that were considered adequate, especially in terms of distinguishing between self-harm without suicidal intent and suicide attempts. The working group devised a set of questions, which we have piloted for acceptability.	
J. Subjective wellbeing	To assess the subjective well-being of UK Biobank participants. Included in response to piloting, where participants felt that ending on traumatic experiences and self-harm was uncomfortable.	Bespoke (from existing questions)	Three questions are asked. Two from the UK Biobank baseline assessment provide a euthymic ('positive emotion') aspect of wellbeing and one from the WHO-Quality Of Life (WHOQOL) provides a 'meaning' (eudemonic) measure of wellbeing.	Forgeard MJ et al (2011)
K. Free-text box	To enable participants to add any further information about their mental health status.		Comment box was included in response to piloting, although UK Biobank do not intend to release these comments to researchers at the current time.	
End	Participants are informed that UK Biobank cannot offer help on issues arising. This last page contains links to MIND, survivors trust, victim support, alcohol concern and Samaritans in case they need further support quickly. It also asks them to contact their GP if they would like help with mental health.			

The full list of questions can be found in Appendix 1.

4. Piloting

- **4.1:** The mental health questionnaire underwent small-scale piloting, including among members of a service user advisory group at the National Institute of Health Research Maudsley Biomedical Research Centre to assess acceptability and questionnaire duration for those with multiple mental health episodes.
- **4.2:** The questionnaire also underwent larger-scale piloting in 13,000 volunteers aged 50 years or older who had signed up to the PROTECT study on cognitive ageing http://www.protectstudy.org.uk/default.aspx, funded by the National Institute of Health Research Maudsley Biomedical Research Unit in Dementia.
- **4.3:** Following feedback from these pilot studies, minor modifications were made that including clarifying some questions, providing a comment box at the end for participants to give more detail should they wish to do so, and including links to mental health support networks.

5. Administration

- **5.1:** UK Biobank's re-contact approach for those participants with an email address is as follows:
- an initial invitation email (which included a hyperlink to their personalised questionnaire);
- a reminder email to non-responders sent 2 weeks after the initial invite;
- a reminder send to partial responders (i.e. who only completed part of the questionnaire)
 2 weeks after they started the questionnaire;
- a 'last-chance' invitation sent to non-responders 4 months after the initial invite.
- **5.2:** 82% of participants completed the questionnaire in less than 25 minutes.
- **5.3:** Overall, 339,229 participants were sent an email invitation, of whom 158,835 (46.8%) fully completed the questionnaire (as of October 2017). A further 416 participants accessed the questionnaire via the participant website without having received an email invite (because they have not provided UK Biobank with a valid email address).

- **5.4:** Participants for whom we do not have an email address will be encouraged via the annual newsletter (to be sent Q4 2017) to complete the online questionnaire by logging directly onto the participant website.
- **5.5:** Email invitations are also routinely sent to those participants who have recently updated their email address (and who have not yet completed the questionnaire). We therefore anticipate that data will continue to accrue for a small number of participants.
- **5.6:** Please note that UK Biobank has identified a small number of possible mismatches in the linkage of the questionnaire (e.g., where participants who share an email address may have completed their partner's questionnaire). We will release these data once these discrepancies have been resolved.

6. Generation of derived mental health phenotypes

6.1: The Mental Health Expert Working Group (led by Prof Matthew Hotopf, KCL) aim to generate summary derived data-fields related to mental health outcomes, which will be incorporated into the Resource and available for research use in due course.

7. References

- Bellis, M. A., et al. National household survey of adverse childhood experiences and their relationship with resilience to health-harming behaviors in England. BMC Medicine, 2014. 12(1): 72.
- Bernstein, David P., et al. Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American Journal of Psychiatry*, 1994. 151(8): 1132.
- Forgeard, M. J., et al. Doing the right thing: Measuring wellbeing for public policy. International Journal of Wellbeing, 2011. 1(1).
- Glaesmer H, et al. The childhood trauma screener (CTS)-development and validation of cutoff-scores for classificatory diagnostics. *Psychiatrische Praxis*, 2013. 40(4): p. 220-226.
- Kessler RC, et al. The World Health Organization composite international diagnostic interview short-form (CIDI-SF). *International Journal of Methods in Psychiatric Research*, 1998. 7(4): p. 171-185.
- Khalifeh, H., et al. Recent intimate partner violence among people with chronic mental illness: findings from a national cross-sectional survey. The British Journal of Psychiatry, 2015. 207(3): 207-212

- Kroenke K, et al. The Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales: a systematic review. *General Hospital Psychiatry*, 2010. 32(4): p. 345-59.
- Manea L, et al. Optimal cut-off score for diagnosing depression with the Patient Health Questionnaire (PHQ-9): a meta-analysis. *CMAJ*, 2012. 184(3): p. E191-6.
- McGrath JJ, et al. Psychotic Experiences in the General Population: A Cross-National Analysis Based on 31 261 Respondents From 18 Countries. *JAMA Psychiatry* 2015;72(7):697–705. doi:10.1001/jamapsychiatry.2015.0575
- Reinert DF and Allen JP. The alcohol use disorders identification test: an update of research findings. *Alcoholism: Clinical and Experimental Research*, 2007. 31(2): p. 185-199.
- Smith DJ et al. Prevalence and characteristics of probable major depression and bipolar disorder within UK Biobank: cross-sectional study of 172,751 participants. *PLoS One*, 2013. 8(11): p. e75362.
- Wilkins KC et al., Synthesis of the psychometric properties of the PTSD checklist (PCL) military, civilian and specific versions. *Depression and Anxiety*, 2011. 28(7): p. 596-606

Appendix: Questions and format of the questionnaire

Introduction

Section A: presence and absence of any mental health condition.

Section B: present and past depression and/or bipolar affective disorder.

Section C: generalised anxiety disorder.

Section D: addictions.

Section E: alcohol and cannabis use.

Section F: unusual and psychotic experiences.

Section G: events in childhood or adult life.

Section H: harm behaviours. Section J: subjective wellbeing. End page provides links to support.

Q.No	Field ID	Stem	Responses
Introduction			
INTRO1		We are interested in knowing more about the stresses and strains of life and your mental health. We realise that some of the questions are sensitive and may be difficult to answer but we hope you will feel able to take part. Participating in this questionnaire will help us understand mental health problems like depression and post traumatic stress disorder better. It's important we hear from people who have had these sorts of problems as well as people who have not.	- Next
		Your answers will be kept confidential. None of the information you provide will be sent to your GP or any other agencies.	
		We will not act on any concerns you raise in this questionnaire, and are not able to offer you any help based on the answers you give. However, information on where to find help for the issues in this questionnaire will be shown at the end.	
		Do not worry if you cannot answer a question – you can always press the "prefer not to answer" option and move on.	
Start1		To help you as you work your way through the questionnaire: • Most devices will allow you to click or tap the description beside a choice button to select it Click or tap on this sentence Click /tap here and over here • The progress bar at the bottom of each page (see below) is split into blocks, with each block representing a different section of the questionnaire.	- Next
Identity check		First, we need to check a couple of things.	
ID1		Please confirm your month and year of birth	mmm yyyy
[no number on implementati on]			

[no number			- 01 Male - 02 Female
on implementati on]			- UZ Female
INTRO2		Now let's start with a few general questions about mental distress.	
INTRO2restar t		Now let's continue from where you left off	
Section A: presence and absence of any mental health condition.			
A1	20500	In your life, have you suffered from a period of mental distress that prevented you from doing your usual activities?	[Select one from] - 01 Yes - 02 No - UN Do not know - DA Prefer not to answer
A2	20499	In your life, did you seek or receive help from a professional (medical doctor, psychologist, social worker, counsellor, nurse, clergy, or other helping professional) for mental distress, psychological problems or unusual experiences?	[Select one from] - 01 Yes - 02 No - UN Do not know - DA Prefer not to answer
A3	20544	Have you been diagnosed with one or more of the following mental health problems by a professional, even if you don't have it currently? (tick all that apply): By professional we mean: any doctor, nurse or person with specialist training (such as a psychologist or therapist). Please include disorders even if you did not need treatment for them or if you did not agree with the diagnosis.	[Select up to seven from] - 01 Depression - 02 Mania, hypomania, bipolar or manic-depression - 03 Anxiety, nerves or generalized anxiety disorder - 04 Social anxiety or social phobia - 05 Agoraphobia - 06 Any other phobia (eg disabling fear of heights or spiders - 07 Panic attacks - 08 Obsessive compulsive disorder (OCD) - 00 None of the above DA Prefer not to answer
A4	20544	Have you been diagnosed with one or more of the following; mental health problems by a professional, even if you don't have it currently? (tick all that apply): By professional we mean: any doctor, nurse or person with specialist training (such as a psychologist or therapist). Please include disorders even if you did not need treatment for them or if you did not agree with the diagnosis.	[Select up to eight from] - 01 Anorexia nervosa - 02 Bulimia nervosa - 03 Psychological over-eating or binge-eating - 04 Schizophrenia - 05 Any other type of psychosis or psychotic illness - 06 A personality disorder - 07 Autism, Asperger's or autistic spectrum disorder 08 Attention deficit or attention deficit and hyperactivity disorder

			(ADD/ADHD) - 00 None of the above DA Prefer not to answer
Section B: present and past depression and/or bipolar affective disorder.			
INTRO3		We next want to ask a few questions about your mood and feelings recently:	- Next
B1	a) 20514 b) 20510 c) 20534 d) 20519 e) 20511 f) 20507 g) 20508 h) 20518 i) 20513	Over the last 2 weeks, how often have you been bothered by any of the following problems? a. Little interest or pleasure in doing things b. Feeling down, depressed, or hopeless c. Trouble falling or staying asleep, or sleeping too much d. Feeling tired or having little energy e. Poor appetite or overeating f. Feeling bad about yourself or that you are a failure or have let yourself or your family down g. Trouble concentrating on things, such as reading the newspaper or watching television h. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual i. Thoughts that you would be better off dead or of hurting yourself in some way	[Select one from the following for each of the statements] - 01 Not at all - 02 Several days - 03 More than half the days - 04 Nearly every day - DA Prefer not to answer
BSTEM1		Now we want to know some more about sympton	ns in your lifetime
B2	20446	Have you ever had a time in your life when you felt sad, blue, or depressed for two weeks or more in a row?	[Select one from] - 01 Yes - 00 No - DA Prefer not to answer
В3	20441	Have you ever had a time in your life lasting two weeks or more when you lost interest in most things like hobbies, work, or activities that usually give you pleasure?	[Select one from] - 01 Yes - 00 No - DA Prefer not to answer
BSTEM2		Please think of the two-week period in your life when your feelings of depression or loss of interest were worst:	Display throughout following questions B4 to B14
B4	20447	Did this worst period start within two months of the death of someone close to you or after a stressful or traumatic event in your life?	[Select one from] - 01 Yes - 00 No - DA Prefer not to answer
B5	20436 (Fraction of day affected)	How much of the day did these feelings usually last?	- 04 All day long - 03 Most of the day - 02 About half of the day - 01 Less than half of the day - NA Do not know - DA Prefer not to answer
B6	20439 (Frequency of depressed days)	Did you feel this way	03 Every day02 Almost every day01 Less oftenNA Do not know

			- DA Prefer not to
			answer
B7	20449	Did you feel more tired out or low on energy than is	- 01 Yes
		usual for you?	- 00 No
			- NA Do not know
			- DA Prefer not to
DO	20526	Did you goin or loop weight without trying or did	answer
B8	20536	Did you gain or lose weight without trying, or did you stay about the same weight?	- 01 Gained weight- 02 Lost weight
		you stay about the same weight?	- 02 Lost weight
			lost some weight
			during the episode
			- 00 Stayed about the
			same or was on a diet
			 NA Do not know
			 DA Prefer not to
			answer
B9	20532	Did your sleep change?	- 01 Yes
			- 00 No
			- NA Do not know
			 DA Prefer not to answer
B9a		Was that:	[Three questions
Dou	a) 20533	a Trouble falling asleep	grouped together,
	b) 20535	b Waking too early	each with forced
	c) 20534	c Sleeping too much	choice]
	•		- 01 Yes
			- 00 No
B10	20435	Did you have a lot more trouble concentrating than	- 01 Yes
		usual?	- 00 No
			- NA Do not know
			- DA Prefer not to
B11	20450	People sometimes feel down on themselves, no	- 01 Yes
БП	20430	good, worthless. Did you feel this way?	- 00 No
		good, worthess. Did you reer this way:	- NA Do not know
			- DA Prefer not to
			answer
B12	20437	Did you think a lot about death – either your own,	- 01 Yes
		someone else's or death in general?	- 00 No
			- UN Do not know
			- DA Prefer not to
D42	20420	Ab t b t tb tid t tb 0	answer
B13	20438	About how long altogether did you feel this way?	- 01 Less than a
	(Duration of worst	Count the time before, during and after the worst two weeks.	month - 02 Between one and
	depression)	two weeks.	three months
	шоргосогогі,		- 03 Over three
			months, but less than
			six months
			- 04 Over six months,
			but less than 12
			months
			- 05 One to two years
			- 06 Over two years
			 DA Prefer not to answer
B14	20440	Think about your roles at the time of this episode,	- 03 A lot
J.7	20770	including study / employment, childcare and	- 02 Somewhat
		housework, leisure pursuits. How much did these	- 01 A little
		problems interfere with your life or activities?	- 00 Not at all
			- DA Prefer not to
			answer
BSTEM3		Regarding times in your life when you have had	Display throughout
		feelings of depression or loss of interest:	following questions
			B15 to B20

B15	20442	Llow many pariodo did you have in your life lands	- 01 One
		How many periods did you have in your life lasting two or more weeks where you felt like this?	- 02 Several- DA Prefer not to answer
B15a	20442	Enter number	BBOX1: Integer box 2 – 999 BBOX1 & "number of times" OR
D46	20422	About how old ware you the FIDCT time you had a	- 01 Too many to count / One episode ran into the next.
B16	20433	About how old were you the FIRST time you had a period of two weeks like this? (Whether or not you received any help for it.)	BBOX2: Integer box 2 to current age BBOX2 & "years of age when first felt this way" OR - UN Do not know OR - DA Prefer not to answer
B17	20445	Did this episode occur within months of giving birth? Or has it been suggested you had post-natal depression?	- 01 Yes - 00 No - NA Not applicable - UN Do not know - DA Prefer not to
B18	20434	About how old were you the LAST time you had a period of two weeks like this? (Whether or not you received any help for it)	BBOX3: Integer box 2 to current age BBOX3 & "years of age when last felt this way" Or - UN Don't know Or - DA Prefer not to answer
B19	20448	Did you ever tell a professional about these problems (medical doctor, psychologist, social worker, counsellor, nurse, clergy, or other helping professional)?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
B20	20546	Did you ever try the following for these problems? (tick all that apply)	[Select up to three] - 01 Medication prescribed to you (for at least two weeks) - 02 Unprescribed medication (more than once) - 03 Drugs or alcohol (more than once) - 00 None of the above - DA Prefer not to say
B21	20547	Did you ever try talking therapies for these problems, or other structured activities you regard as therapeutic? Include only those you attended more than once.	[Select up to two] - 01 Talking therapies, such as psychotherapy, counselling, group therapy or CBT - 02 Other therapeutic activities such as mindfulness, yoga or art classes - 00 None of the above - DA Prefer not to answer

BSTEM4		Now we want to know about some different symptoms.	- Next
B22	20501	Have you ever had a period of time when you were feeling so good, "high", "excited", or "hyper" that other people thought you were not your normal self or you were so "hyper" that you got into trouble?	- 01 Yes- 00 No- UN Do not know- DA Prefer not to answer
B23	20502	Have you ever had a period of time when you were so irritable that you found yourself shouting at people or starting fights or arguments?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
B24	20548	Please try to remember a period when you were in a "high" or "irritable" state and select all of the following that apply:	[Select up to eight] - 01 I was more active than usual - 02 I was more talkative than usual - 03 I needed less sleep than usual - 04 I was more creative or had more ideas than usual - 05 I was more restless than usual - 06 I was more confident than usual - 07 My thoughts were racing - 08 I was easily distracted - 00 None of the above - DA Prefer not to answer
B25	20492	What is the longest time that these "high" or "irritable" periods have lasted?	[Choose one of] - 01 Less than 24 hours - 02 At least a day, but less than a week - 03 A week or more - UN Do not know - DA Prefer not to answer
B26	20493	How much of a problem have these "high" or "irritable" periods caused you?	- 00 No problems - 01 Needed treatment or caused problems with work, relationships, finances, the law or other aspects of life UN Do not know - DA Prefer not to say
Section C: generalised anxiety disorder.			
INTRO4 C1	a) 20506 b) 20509 c) 20520 d) 20515 e) 20516 f) 20505 g) 20512	We want to know some more about anxiety Over the last 2 weeks, how often have you been bothered by any of the following problems? a) Feeling nervous, anxious or on edge b) Not being able to stop or control worrying c) Worrying too much about different things Nex84.2ET Q EMC r	Next

		happen	
		[7 questions on one screen in grid]	
C2	20421	Have you ever had a period lasting one month or longer when most of the time you felt worried, tense, or anxious?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
C2a	20420	What is the longest period of time that this kind of worrying has ever continued?	Cbox2: Integer 0-99 Cbox1: Integer 0-11 Cbox02 & "year(s) and" & Cbox01 & "month(s)" OR - 03 All my life / as long as I can remember
C3	20425	People differ a lot in how much they worry about things. Did you ever have a time when you worried a lot more than most people would in your situation?	01 Yes00 NoUN Do not knowDA Prefer not to answer
CSTEM1		Please think of the period in your life when you have felt worried, tense, anxious, or more worried than most people would in your situation. This could be in the past, or it could be continuing now.	Display throughout following questions C4 to C10
C4	20542	During that period, was your worry stronger than in other people?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
C5	20538	Did you worry most days?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
C6	20543	Did you usually worry about one particular thing, such as your job security or the failing health of a loved one, or more than one thing?	- 01 One thing - 02 More than one thing - UN Do not know - DA Prefer not to answer
C7	20541	Did you find it difficult to stop worrying?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
C8	20540	Did you ever have different worries on your mind at the same time?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
C9	20539	How often was your worry so strong that you couldn't put it out of your mind no matter how hard you tried?	- 03 Often - 02 Sometimes - 01 Rarely - 00 Never - UN Do not know - DA Prefer not to answer
C10	20537	How often did you find it difficult to control your worry?	- 03 Often - 02 Sometimes - 01 Rarely - 00 Never - UN Do not know - DA Prefer not to answer

C11	a) 20426 b) 20423 c) 20429 d) 20419 e) 20422 f) 20417 g) 20427	When you were worried or anxious, were you also: a) Restless? b) Keyed up or on edge? c) Easily tired? d) Having difficulty keeping your mind on what you were doing? e) More irritable than usual? f) Having tense, sore, or aching muscles? g) Often having trouble falling or staying asleep? [Seven questions on one screen]	Force choice: - 01 Yes - 02 No - NA Do not know For following options:
CSTEM2		Regarding times in your life when you have felt worried, tense or anxious:	Display throughout following questions C12 to C15
C12	20428	Did you ever tell a professional about these problems (medical doctor, psychologist, social worker, counsellor, nurse, clergy, or other helping professional)?	- 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
C13	20549	Did you ever use the following for the worry or the problems it caused? (tick all that apply): Please include any treatments that you have already told us about under 'depression' if they were also for anxiety:	 - 01 Medication prescribed to you (for at least two weeks) - 02 Unprescribed medication (more than once) - 03 Drugs or alcohol (more than once) - 00 None of the above - DA Prefer not to say
C14	20550	Did you ever try talking therapies for these problems, or other structured activities you regard as therapeutic? Include only those you attended more than once. Please include any treatments that you have already told us about under "depression" if they were also for anxiety:	[Select up to two] - 01 Talking therapies, such as psychotherapy, counselling, group therapy or CBT - 02 Other therapeutic activities such as mindfulness, yoga or art classes - 00 None of the above - DA Prefer not to answer
C15	20418	Think about your roles at the time of this episode, including study / employment, childcare and housework, leisure pursuits. How much did these problems interfere with your life or activities?	[Choose one of] - 03 A lot - 02 Somewhat - 01 A little - 00 Not at all - DA Prefer not to answer
Section D:			
addictions. INTRO5		Now we'd like to ask you a few questions about	
D1	20401	addiction and dependence Have you been addicted to or dependent on one or more things, including substances (not cigarettes/coffee) or behaviours (such as gambling)?	[Select one from] - 01 Yes - 00 No - UN Do not know - DA Prefer not to answer

D2	20406	Have you been addicted to alcohol?	[Select one from] - 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
D2a	20415	Is this addiction ongoing?	[Select one from] - 01 Yes - 00 No - DA Prefer not to answer
D2b	20404	Have you been physically dependent on alcohol? This means experiencing withdrawal symptoms, such as sweating, shaking and nausea, if you didn't drink.	[Select one from] - 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
D3	20503	Have you been addicted to or dependent on prescription or over-the-counter medication?	[Select one from] - 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
D3a	20551	Was this addiction or dependence to one of the following? (tick all that apply)	[Select up to three from] - 01 A sedative, benzodiazepine or sleeping tablet - 02 A painkiller - 00 Something else - UN Do not know - DA Prefer not to answer
D3b	20504	Is this addiction or dependence ongoing?	[Select one from] - 01 Yes - 00 No - DA Prefer not to answer
D4	20456	Have you been addicted to Illicit or recreational drugs?	[Select one from] - 01 Yes - 00 No - UN Do not know - DA Prefer not to
D4a	20457	Is this addiction or dependence ongoing?	[Select one from] - 01 Yes - 00 No - DA Prefer not to answer
D5	20431	Have you been addicted to a behaviour (such as gambling) or to anything else we have not mentioned?	[Select one from] - 01 Yes - 00 No - UN Do not know - DA Prefer not to answer
D5a	20552	Were you addicted to: (tick all that apply)	[Select up to two from] - 01 A behaviour - 02 Something else not mentioned - DA Prefer not to answer
D5b	20432	Are these addictions ongoing?	[Select one from] - 01 Yes - 00 No - DA Prefer not to

			answer
Section E: alcohol and cannabis use	ə.		
INTRO6		Next we would like to ask you about alcohol, as we think it may influence mental health. Your answers will remain confidential so please be honest.	Next
ESTEM1		The next questions are about how frequently you drink alcohol.	Stay on screen for questions E1-E1b
E1	20414	How often do you have a drink containing alcohol?	[Choose one from] - 00 Never - 01 Monthly or less - 02 2 to 4 times a month - 03 2 to 3 times a week - 04 4 or more times a week - DA Prefer not to answer
ESTEM2		In the next two questions, a "drink" is defined as one alcohol. Typical units in common alcoholic beverages	น เคราะ เมื่อ เมื่อ เมื่อ เมื่อ เมื่อ เมื่อ questions E1a and E1b
		Pint or can of beer/lager/cider 2 units	
		Single shot of spirits (25ml) 1 unit	
		Small glass of fortified wine 1 unit	
		Standard glass of wine (175ml) 2 units	
		Large glass of wine (250ml) 3 units	
		Bottle of wine (75cl) 9 units	
E1A	20403	How many drinks containing alcohol do you have on a typical day when you are drinking? By "drink" we mean one unit of alcohol.	[Choose one from] - 01 1 or 2 - 02 3 or 4 - 03 5 or 6 - 04 7, 8, or 9 - 05 10 or more - DA Prefer not to answer
E1B	20416	How often do you have six or more drinks on one	[Choose one from]
		occasion? By "drink" we mean one unit of alcohol.	 01 Never 02 Less than monthly 03 Monthly 04 Weekly 05 Daily or almost daily DA Prefer not to answer
E2	20413	How often during the last year have you found that you were not able to stop drinking once you had started?	[Choose one from] - 00 Never - 01 Less than monthly - 02 Monthly - 03 Weekly - 04 Daily or almost daily - DA Prefer not to answer
E3	20407	How often during the last year have you failed to do what was normally expected from you because of drinking?	[Choose one from] - 01 Never - 02 Less than monthly - 03 Monthly

			- 04 Weekly- 05 Daily or almost daily- DA Prefer not to answer
E4	20412	How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	[Choose one from] - 01 Never - 02 Less than monthly - 03 Monthly - 04 Weekly - 05 Daily or almost daily - DA Prefer not to answer
E5	20409	How often during the last year have you had a feeling of guilt or remorse after drinking?	[Choose from] - 01 Never - 02 Less than monthly - 03 Monthly - 04 Weekly - 05 Daily or almost daily - DA Prefer not to answer
E 6	20408	How often during the last year have you been unable to remember what happened the night before because you had been drinking?	[Choose one from] - 01 Never - 02 Less than monthly - 03 Monthly - 04 Weekly - 05 Daily or almost daily - DA Prefer not to answer
E7	20411	Have you or someone else been injured as a result of your drinking?	[Choose one from] - 00 No -01 Yes, but not in the still lear - 02 Yes, during the still lear 575 82.8 reW*n003JE - D.A. Prefer not to
E8	20405		ØI I ₱ ₩ CI

E9a	20454	Considering when you were taking cannabis most regularly, how often did you take it?	[Choose one from] - 01. Less than once a month - 02. Once a month or more, but not every week - 03. Once a week or more, but not every day - 04. Every day - NA Do not know - DA Prefer not to
E9b	20455	About how old were you when you last had cannabis?	answer EBox1: Integer box 2 to current age EBox1 & "years old"
Section F: unusual and psychotic experiences.			
INTRO7		The next set of questions is about unusual experiences that you may have had, like seeing visions or hearing voices. We believe that these things may be quite common, but we don't know for sure. So please take your time and think carefully before answering.	
F1	20471	Did you ever see something that wasn't really there that other people could not see? Please do not include any times when you were dreaming or half-asleep or under the influence of alcohol or drugs.	[Choose one from] - 01 Yes - 00 No - NA Do not know - DA Prefer not to answer
F1a	20473	About how many times in your life did this happen (when you were not dreaming, not half-asleep, and not under the influence of alcohol or drugs)?	FBOX1: Integer box 1 – 999 FBOX1 & "time(s)" OR - 01 Too many to count - NA Do not know - DA Prefer not to answer
F2	20463	Did you ever hear things that other people said did not exist, like strange voices coming from inside your head talking to you or about you, or voices coming out of the air when there was no one around? Please do not include any times when you were dreaming or half-asleep or under the influence of alcohol or drugs.	[Choose one from] - 01 Yes - 00 No - DA Prefer not to say - NA Don't know
F2a	20465	About how many times in your life did this happen (when you were not dreaming, not half-asleep, and not under the influence of alcohol or drugs)?	FBOX2: Integer box 1 – 999 FBOX2 & "time(s)" OR - 01 Too many to count - NA Do not know - DA Prefer not to answer
F3	20474	Did you ever believe that a strange force was trying to communicate directly with you by sending special signs or signals that you could understand but that no one else could understand (for example through the radio or television)? Please do not include any times when you were	[Choose one from] - 01 Yes - 00 No - NA Do not know - DA Prefer not to answer

		dreaming or half-asleep or under the influence of alcohol or drugs.	
F3a	20476	About how many times in your life did this happen (when you were not dreaming, not half-asleep, and not under the influence of alcohol or drugs)?	FBOX3: Integer box 1 – 999 FBOX3 & "time(s)" OR - 01 Too many to count - NA Do not know - DA Prefer not to answer
F4	20468	Did you ever believe that that there was an unjust plot going on to harm you or to have people follow you, and which your family and friends did not believe existed? Please do not include any times when you were dreaming or half-asleep or under the influence of alcohol or drugs.	[Choose one from] - 01 Yes - 00 No - NA Do not know - DA Prefer not to answer
F4a	20470	About how many times in your life did this happen (when you were not dreaming, not half-asleep, and not under the influence of alcohol or drugs)?	FBOX4: Integer box 1 – 999 FBOX4 & "time(s)" OR - 01 Too many to count - NA Do not know - DA Prefer not to answer
F5	20467	How often did any of these experiences happen in the past 1 year (seeing a vision, hearing a voice, or believing that something strange was trying to communicate with you, or there was a plot against you)?	[Choose one from] - 00 Not at all - 01 Once or twice - 02 Less than once a month - 03 More than once a month - 04 Nearly every day or daily - DA Prefer not to answer
F6	20461	How old were you (approximately) when you first had one of these experiences (seeing a vision, hearing a voice, or believing that something strange was trying to communicate with you, or there was a plot against you)?	FBOX5: Integer box 2 to current age FBOX5 & "years old" OR - 01 As long as I can remember - NA Do not know - DA Prefer not to answer
F7	20462	How distressing did you find having any of these experiences (seeing a vision, hearing a voice, or believing that something strange was trying to communicate with you, or there was a plot against you)?	[Choose one from] - 00 Not distressing at all, it was a positive experience - 01 Not distressing, a neutral experience - 02 A bit distressing - 03 Quite distressing - 04 Very distressing - NA Do not know - DA Prefer not to answer
F8	20477	Did you ever talk to a doctor, counsellor, psychiatrist or other health professional about any of these experiences (seeing a vision, hearing a voice, or believing that something strange was trying to communicate with you, or there was a plot against you)?	[Choose one from] - 01 Yes - 00 No - NA Do not know - DA Prefer not to answer

F9	20466	Were you ever prescribed a medication by a health professional for any of these experiences (seeing a vision, hearing a voice, or believing that something strange was trying to communicate with you, or there was a plot against you)?	[Choose one from] - 01 Yes - 00 No - NA Do not know - DA Prefer not to answer
Section G: events in childhood or adult life.			answer
INTRO8		This section asks about your childhood and some possible stresses and strains of life. The answers you give will remain confidential.	
G1	a) 20489 b) 20488 c) 20487 d) 20490 e) 20491	When I was growing up a) I felt loved b) People in my family hit me so hard that it left me with bruises or marks c) I felt that someone in my family hated me d) Someone molested me (sexually) e) There was someone to take me to the doctor if I needed it	[Select one from] - 00 Never true - 01 Rarely true - 02 Sometimes true - 03 Often - 04 Very often true - DA Prefer not to answer`
		[Five questions on one screen with same options.]	
G2	a) 20522 b) 20523 c) 20521 d) 20524 e) 20525	Since I was sixteen a) I have been in a confiding relationship b) A partner or ex-partner deliberately hit me or used violence in any other way c) A partner or ex-partner repeatedly belittled me to the extent that I felt worthless d) A partner or ex-partner sexually interfered with me, or forced me to have sex against my wishes e) There was money to pay the rent or mortgage when I needed it	[Select one from] - 00 Never true - 01 Rarely true - 02 Sometimes true - 03 Often - 04 Very often true - DA Prefer not to answer
G3	a) 20531 b) 20529 c) 20526 d) 20530 e) 20528 f) 20527	[Five questions on one screen with same options.] In your life, have you? a) Been a victim of a sexual assault, whether by a stranger or someone you knew b) Been attacked, mugged, robbed, or been the victim of a physically violent crime c) Been in a serious accident that you believed to be life-threatening at the time d) Witnessed a sudden violent death (eg. murder, suicide, aftermath of an accident) e) Been diagnosed with a life-threatening illness f) Been involved in combat or exposed to a warzone (either in the military or as a civilian) [Six questions on one screen with the same	[Select one from] - 00 Never - 01 Yes, but not in the last 12 months - 02 Yes, within the last 12 months - DA Prefer not to answer
G4	a) 20497 b) 20498 c) 20495	options.] Next is a list of problems and complaints that people sometimes have in response to such extremely stressful experiences. Please indicate how much you have been bothered by that problem in the past month: a) Repeated, disturbing memories, thoughts, or images of a stressful experience? b) Feeling very upset when something reminded you of a stressful experience? c) Avoiding activities or situations because they reminded you of a stressful experience? [Three questions on the same screen with the options]	- [Choose one of] - 00 Not at all - 01 A little bit - 02 Moderately - 03 Quite a bit - 04 Extremely - DA Prefer not to answer

G5	a) 20496	Please indicate how much you have been bothered	[Choose one of]
	b) 20494	by that problem in the past month:	- 00 Not at all - 01 A little bit
		a) Feeling distant or cut off from other people?b) Feeling irritable or having angry outbursts?	- 02 Moderately- 03 Quite a bit- 04 Extremely
		[Two questions on the same screen with the options]	- DA Prefer not to answer
Section H: harm behaviours.		· · ·	
INTRO9		This section is about thoughts that some people have when they are distressed.	- Next
H1	20479	Many people have thoughts that life is not worth living. Have you felt that way?	[Choose one of] - 00 No - 01 Yes, once - 02 Yes, more than once - DA Prefer not to answer
H2	20485	Have you contemplated harming yourself (for example by cutting, biting, hitting yourself or taking an overdose)?	[Choose one of] - 00 No - 01 Yes, once - 02 Yes, more than once - DA Prefer not to answer
H2a	20486	Have you felt this way in the last 12 months?	[Choose one of] - 00 No - 01 Yes - DA Prefer not to answer
Н3	20480	Have you deliberately harmed yourself, whether or not you meant to end your life?	[Choose one of] - 00 No - 01 Yes - DA Prefer not to answer
НЗа	20482	How many times have you harmed yourself?	[Choose one of] - 01 1 - 02 2 - 03 3 or more - DA Prefer not to answer
H3b	20481	Have you harmed yourself in the last 12 months, whether or not you meant to end your life?	[Choose one of] - 00 No - 01 Yes - DA Prefer not to answer
H4	20553	Have you done any of the following to harm or endanger yourself? (tick all that apply)	[Choose up to five] - 01 Self-injury such as self-cutting, scratching or hitting, etc 02 Ingesting a medication in excess of the normal dose - 03 Ingesting alcohol or a recreational or illicit drug - 04 Swallowing dangerous objects or products - 05 Stopping prescribed medication - 00 something not listed - DA Prefer not to

			answer
H5	20483	Have you harmed yourself with the intention to end your life?	[Choose one] - 00 No - 01 Yes - DA Prefer not to
Н5а	20484	Was this in the last 12 months?	answer [Choose one] - 00 No - 01 Yes - DA Prefer not to
H6	20554	Following any time when you took an overdose or deliberately tried to harm yourself did you (tick all that apply)	answer [Choose up to five] - 01 Need hospital treatment (eg A&E)? - 02 See anyone from psychiatric or mental health services, including liaison services? - 03 See your GP? - 04 Receive help from friends / family / neighbours? - 05 Use a helpline / voluntary organization? - 00 None of the above - DA Prefer not to
Section J: subjective wellbeing.			answer
INTRO10		Finally we would like to know how you feel about things in general	
J1	20458	In general how happy are you?	- 01 Extremely happy - 02 Very happy - 03 Moderately happy - 04 Moderately unhappy - 05 Very unhappy - 06 Extremely unhappy - UN Do not know - DA Prefer not to answer
J2	20459	In general how happy are you with your HEALTH?	- 01 Extremely happy - 02 Very happy - 03 Moderately happy - 04 Moderately unhappy - 05 Very unhappy - 06 Extremely unhappy - UN Do not know - DA Prefer not to answer
J3	20460	To what extent do you feel your life to be meaningful?	 - 01 Not at all - 02 A little - 03 A moderate amount - 04 Very much - 05 An extreme amount0.17 216.29 0.47

J4	Please use the space below to tell us any further information relevant to this questionnaire. Any information you provide here will not be made available to researchers for research purposes. Please remember that we will not action any concerns you raise in this questionnaire; details of possible sources of support are provided on the next screen [max 1000 characters].	Text box: 1000 characters
END	Please note: after you press the Save and finish button below, you will no longer be able to change your answers. Thank you very much for taking the time to	
	complete this questionnaire. Your help is greatly appreciated.	Close browser tab; or
	If you feel you need any further help with the issues in this questionnaire, we recommend talking it through with someone you trust, including your GP.	Click on 'Go back to the Participant Area'; or
	You can find out more about mental health and illness from Mind (www.mind.org.uk). General tips to help you cope with everyday things like money, work, and more are available from: http://www.mind.org.uk/information-support/tips-for-everyday-living/	Click on 'Go to the UK Biobank Home Page'.
	For support with specific issues, further information is available from: www.thesurvivorstrust.org (sexual violence) https://www.victimsupport.org.uk/help-victims (other crime and violence) https://www.drinkaware.co.uk (alcohol) http://www.combatstress.org.uk/ (information for military veterans) http://www.mind.org.uk/news- campaigns/campaigns/bluelight/ (information for emergency service personnel) https://www.rnli.org/aboutus/lifeguardsandbeaches/ Pages/volunteer-lifeguards/support-and- advice.aspx (information for RNLI_employees and volunteers).	
	If you are very upset or do not feel safe, please contact someone as soon as possible. The Samaritans can be contacted on Freephone 116 123, or email jo@samaritans.org. Alternatively, please visit www.samaritans.org	
	You may now close this browser tab, if you so wish.	