#### TEDS Covid-19 questionnaire changes between phases

The Covid-19 questionnaire was repeated in four phases of data collection. Most parts of the questionnaire remained unchanged between phases; this document provides a summary of those measures and items that **did** change. Trivial changes, such as changes in numbering caused by items added or removed, or changes in font or capitalisation, are not described here. The changes are documented in three main sections, describing changes from phase 1 to phase 2, from phase 2 to phase 3, and from phase 3 to phase 4. In each of these sections, there are tabulated lists of dropped questions, added questions and modified questions.

#### Changes from phase 1 to phase 2

From phase 1 to phase 2 overall, 13 questions were added and 13 questions were removed. Significant changes were made in two questions (one of them with multiple parts). The items themselves, for example the response options and coding, are documented in greater detail elsewhere.

#### **Dropped questions**

The following questions were included in phase 1 but were dropped for phase 2.

Variable names	Measure/item	Question text
ucv1emp1	Changes section: employment item 1 (effectively replaced by ucv2emp1a, see added items below)	Are you in full-time or part-time employment? (yes/no)
ucv1lfst16	Changes section: penultimate question.	During the THREE MONTHS PRIOR to the onset of the Coronavirus/COVID-19 crisis in your area, how many hours per night did you sleep on average? (4 response options)
ucv1conm1, ucv1conm2, ucv1conf1, ucv1conf2 [initial screening question not in dataset]	Relationships section: first five items about parent-figures. (with branching)	<ol> <li>Screening question: "Please select the option below that best applies to you." (5 response options about which parent were still alive)</li> <li>Are you currently living with your mother-figure during lockdown? (yes/no)</li> <li>During the last month, about how often have you communicated with your mother (in person, by phone, email, Skype, etc.)? (7 response options)</li> <li>Are you currently living with your father-figure during lockdown? (yes/no)</li> <li>During the last month, about how often have you communicated with your rather (in person, by phone, email, Skype, etc.)? (7 response options)</li> </ol>
ucv1child, ucv1preg [three other questions not in dataset]	Relationships section: final 5 items designed for CoTEDS recruitment. (with branching)	<ol> <li>How many children do you have? (7 options)</li> <li>Do your children (or child) live with you? (5 options)</li> <li>Are you the biological parent of your children (or child)? (4 options)</li> <li>Are you or your partner currently pregnant? (3 options)</li> <li>TEDS have a new study called Children of TEDS (CoTEDS). The aim of CoTEDS is to collect data on TEDS twins' children as they grow up. Would you like any of your children (or child) to be involved? (4 options)</li> </ol>
ucv1lfev	Thoughts and Attitudes section: Life Events (penultimate question in section)	In the last month You lost your job or got into serious financial problems (6 response options)

## **Added questions**

The following questions were not included in phase 1 but were added for phase 2.

Variable name	Measure/item	Question text	Responses
ucv2backuk	Background: first item	Where are you currently located?	Yes/no
[not in dataset]	Background: second item [Branched: presented if located in the UK according to previous question]	Please specify the postcode of your location during lockdown.	Free text, max. 8 characters
ucv2health2b	Health: second part of second item [Branched: presented if the twin had a positive covid-19 infection test according to previous question]	Please specify the type of test(s) used to determine your positive COVID-19 status.	3 response options
ucv2health3g	Health: additional part of the third question (see also below for modifications of this question)	have you had any of the following symptoms, and if so please indicate their severity:  Eye infection	5 response options
ucv2health5h	Health: additional part of the fourth question	have any of the following happened to your family members because of Coronavirus/COVID-19: Furloughed from job	Yes/no
ucv2edu5a	Changes section: three new items	Have your exams been cancelled?	Yes/no
ucv2edu5b	appended to the education questions	Have your exams been replaced by coursework?	Yes/no
ucv2edu6	[Branched: presented if the twin's college was closed according to question two]	How stressful have these changes in college/university been?	5 response options
ucv2emp1a	Changes section: three new items appended at the start of the employment questions, effectively replacing ucv1emp1 (see below, dropped questions).	Which statement best describes your job situation at the start of the coronavirus/COVID-19 crisis, compared with your job situation now?	7 response options
ucv2emp1b	[Branched: 1c is presented if the twin is employed according to	How stressful have these changes related to work been?	6 response options
ucv2emp1c	question 1a]	In your current work, are you considered a key (critical) worker?	Yes/no
ucv2lfst03a	Changes section: inserted after the third question in the Lifestyle changes referring to the past month.	how many times have you NOT followed the government lockdown recommendations?	6 response options
[not in dataset: free text response]	Lifestyle section, final item	If you wish to explain or give context to any of the answers that you provided in your answers to the questions so far, please do so here. (Optional. Maximum 100 characters.)	

## **Modified questions**

The following questions were broadly similar in phase 1 and phase 2, but some changes in wording or structure were made.

Variable names	Measure/item	Changes made
ucv1health3a-f, ucv2health3a-g	Health: third item, with multiple parts. (see also added questions above: part g was added as a new item)	Responses changed from 2 response options (yes/no) to 5 response options (indicating severity as well as yes or no).
ucv1emp2, ucv2emp2	Changes section: second main question about employment [Branched: presented if the twin is employed according to the first question. The response in this second question determines whether the final three employment questions are presented]	Wording changed from:  "Has your workplace closed?"  (phase 1) to  "Are you currently going to your workplace?" (phase 2), both with yes/no responses.

### Changes from phase 2 to phase 3

From phase 2 to phase 3 overall, 1 question was added and 9 questions were removed. Significant changes were made in 8 questions. The items themselves, for example the response options and coding, are documented in greater detail elsewhere.

### **Dropped questions**

The following questions were included in phase 2 but were dropped for phase 3.

Variable names	Measure/item	Question text
[Postcode: not in	Background: second item,	Please specify the postcode of your location
dataset]	numbered 1b	during lockdown.
	[Branched: presented if located in	
	the UK according to previous	
	question]	
ucv2edu2	Changes section: education item 2	Has your college/university building been closed? (yes/no)
[Two variables not	Changes section: education items	3a. Are classes in session? (yes/no)
in dataset:	3a and 3b	
suppressed due to	(effectively replaced by ucv3edu3,	3b. Are you attending classes in person? (yes/no)
very small number	see added items below)	
of responses and	[Branched: presented if college was	
lack of variability]	not closed according to previous	
	question 2]	
ucv2edu4a,	Changes section: education items	4a. Have classes resumed on line? (3 response
ucv2edu4b,	4a, 4b and 4c	options)
ucv2edu4c	(partly replaced by ucv3edu3, see	
	added items below)	4b. Do you have easy access to the internet and a
	[Branched: presented if college was	computer? (yes/no)
	closed according to question 2]	
		4c. Are there assignments for you to complete?
		(yes/no)
ucv2edu5a,	Changes section: education items	5a. Have your exams been cancelled? (yes/no)
ucv2edu5b	5a and 5b	
	[Branched: presented if college was	5b. Have your exams been replaced by
	closed according to question 2]	coursework? (yes/no)

### **Added questions**

The following questions were not included in phase 2 but were added for phase 3.

Variable name	Measure/item	Question text	Responses
ucv3edu3	Changes section: second education item (variable is numbered 3 because it replaces similar items 3a, 3b and 4a that were in phase 2) [Branched: presented if in full-time or part-time education according to question 1]	How are you now attending classes?	3 response options

## **Modified questions**

The following questions were broadly similar in phase 2 and phase 3, but some changes in wording or structure were made.

Variable names	Measure/item	Changes made
ucv2edu6, ucv3edu6	Changes section: final question about education	Wording of question changed from "How stressful have these changes in college/ university been?" (phase 2) to "Since the start of this term, how stressful have changes in university/ college been?"
		An additional response option was included in phase 3: "Not applicable: my situation has not changed"
ucv2emp1a, ucv3emp1a	Changes section: first question about employment	Wording of question changed from "Which statement best describes your job situation at the start of the coronavirus/covid-19 crisis, compared with your job situation now?" (phase 2) to "Which statement best describes your job situation now, in comparison with your job situation during lockdown?"
		The response options were re-written, and reduced from 7 options (phase 2) to 6 options (phase 3), with associated changes to the branching rule arising from this question.
ucv2emp1b, ucv3emp1b	Changes section: second question about employment	Wording of question changed from "How stressful have these changes related to work been?" (phase 2) to "How stressful have you found changes in your job situation since the end of lockdown?"
ucv2emp2/3/4/5, ucv3emp2/3/4/5	Changes section: questions 2, 3, 4 and 5 about employment	The wording of these questions was changed, adding the phrase " since the end of lockdown?" in each case.
ucv2lfst03, ucv3lfst03	Changes section: question 3 about lifestyle changes	An additional response option was included in phase 3: "Not applicable: I have not been restricted from leaving the home"

### Changes from phase 3 to phase 4

From phase 3 to phase 4 overall, 25 questions were added and 10 questions were removed. Significant changes were made in 6 questions. The items themselves, for example the response options and coding, are documented in greater detail elsewhere.

### **Dropped questions**

The following questions were included in phase 3 but were dropped for phase 4.

Variable names	Measure/item	Question text
[Text question, not	Health: text input question that	11. Has the Coronavirus/COVID-19 crisis in your
in dataset except in	followed question 11	area led to any positive changes in your life?
later coded forms]	[Branched: presented if there were	Please specify.
	positive changes according to	
	previous question 11]	
[Text question, not	Changes: text input question that	28. If you wish to explain or give context to any of
in dataset]	appeared at the very end of the	the answers that you provided in your answers to
	section, after question 27.	the questions so far, please do so here.
ucv3comm1	Thoughts and Attitudes section:	I enjoy living in my neighbourhood
ucv3comm2	Community measure dropped	I would prefer to move to a different area if I
	entirely.	could
ucv3comm3	5 items prefaced with "How	I feel a sense of belonging in my neighbourhood
ucv3comm4	strongly do you agree or disagree	I feel like an outsider in my neighbourhood
ucv3comm5	with the following statements	I feel safe in my neighbourhood
	about your neighbourhood?"	
ucv3voln1	Physical Activity section:	How often have you given unpaid help to a
	Volunteering measure dropped	charity, group, or organisation (outside of your
	entirely.	main employment)?
ucv3voln2	3 items prefaced with "During the	How often have you given unpaid help to other
	last month"	people (e.g. a friend, neighbour or someone else
		but not a relative)?
ucv3voln3		How often have you given unpaid help to a
		relative?

### **Added questions**

The following questions were not included in phase 3 but were added for phase 4.

Variable name	Measure/item	Question text	Responses
ucv4health3h	Health: 11 additional parts of the	Problems with sleeping	5 response
ucv4health3i	third question, which is prefaced	Memory problems	options
ucv4health3j	with " have you had any of the	Difficulty concentrating	
ucv4health3k	following symptoms, and if so please	Pains in muscles or joints	
ucv4health3l	indicate their severity:"	Diarrhoea	
ucv4health3m		Stomach (abdominal) pains	
ucv4health3n		Changes to your voice	
ucv4health3o		Hair loss	
ucv4health3p		Unusual racing of the heart	
ucv4health3q		Lightheadedness or dizziness	
ucv4health3r		Unusual sweating	
ucv4health12	Health: new question added at the end of the section	This question is about COVID-19 vaccination. Please select the response that best describes your current position.	5 response options

Variable name	Measure/item	Question text	Responses
ucv4health13	Health: new question added at the end of the section [Branched: presented if offered vaccination according to previous question 12]	Most young adults have not yet been offered the COVID-19 vaccination. Why do you think you were invited to have the vaccination?	4 response options
ucv4health14	Health: new question added at the end of the section	If you have had Coronavirus/COVID-19 symptoms at any time, not just in the past month, how long did the symptoms last?	7 response options
ucv4health15a ucv4health15b ucv4health15c ucv4health15d ucv4health15e ucv4health15f	Health: new 10-part question added at the end of the section.  The items were prefaced with: "We would like to know more about any problems you have had with feeling tired, weak or lacking in energy in the last month.	had problems with tiredness? needed to rest more? felt sleepy or drowsy? had problems starting things? lacked energy? had less strength in your muscles?	4 response options
ucv4health15g ucv4health15h ucv4health15i ucv4health15j	Please select the answer which applies to you most closely. If you have been feeling tired for a long while, then compare yourself to how you felt when you were last well. In the past month have you:"	felt weak? had difficulty concentrating? made slips of the tongue when speaking? found it more difficult to find the correct word?	
ucv4health16	Health: new question added at the end of the section	During the past month, how has your memory been?	4 response options

# **Modified questions**

The following questions were similar in phase 3 and phase 4, but some changes in wording were made.

Variable names	Measure/item	Changes made
ucv4emp1a,	Changes section: questions	The wording of these questions was changed, using
ucv4emp1b,	1a/1b/2/3/4/5 about	phrases about "the current lockdown" instead of
ucv4emp2,	employment	"the end of lockdown" in each case.
ucv4emp3,		
ucv4emp4,		
ucv4emp5		