Daily Mood Web Questionnaire

The questionnaire was administered on line via a customised web application. The questionnaire was designed to be administered every day, for 40 consecutive days, for each twin. All twins were given a week in which to log in and start the study; after this initial week had passed, new twins were prevented from logging in for the first time, but twins who had started were able to continue.

On logging in for the first time, a twin was required to complete a simple consent form (with a linked information sheet), before completing the questionnaire for the first time; this first login and activity was counted as day 1 for that twin. For each twin independently, the day number was incremented each day after day 1 until day 40, regardless of whether the twin completed the questionnaire each day. After day 40 the study was finished for the twin, and the questionnaire was not presented again if the twin logged in.

The web application allowed twins to log in only between 3pm and 3am on each day. Logins after midnight (and before 3am) were counted for the same twin day number, even though the calendar date had changed. During any given day (3pm to 3am), a twin was only able to complete the questionnaire once.

Over the period of 40 days for each twin, the web application kept track of the number of days completed (questionnaire submitted) and the number of days missed. Twins were required to complete at least 30 days in order to be eligible for rewards; hence they could miss up to 10 days. If a twin missed 11 or more days, before the 40 day study period had elapsed, the twin was said to have "dropped out", and was thenceforward prevented from logging in and completing the questionnaire again.

The text of the questionnaire, as presented on screen, is shown below. In order to complete the questionnaire, a twin was required to respond to all 10 items, by clicking on a radio button next to each item, then to click on the Submit button at the bottom of the screen. The questionnaire could not be submitted if responses were missing for any items.

Note that the same 10 items were presented to every twin on every day, but the order of the 10 items was randomised on screen. However, in the data, the item responses are recorded in the order shown below.

Daily Questionnaire

Today is [current date]. This is day [twin's current day number] of the study.

Today I feel…

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Alert	☐	☐	☐	☐	☐
Ashamed	☐	☐	☐	☐	☐
Upset	☐	☐	☐	☐	☐
Inspired	☐	☐	☐	☐	☐
Nervous	☐	☐	☐	☐	☐
Determined	☐	☐	☐	☐	☐
Attentive	☐	☐	☐	☐	☐
Hostile	☐	☐	☐	☐	☐
Active	☐	☐	☐	☐	☐
Afraid	☐	☐	☐	☐	☐

Submit [button]

Each item response variables is named **mdXXqYY1/2**, where **XX** is the day number (01 to 40) and **YY** is the question number (01 to 10) as shown in the table below:

Item number		Response variable	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
			1	2	3	4	5
1	Alert	mdXXq011/2					
2	Ashamed	mdXXq021/2					
3	Upset	mdXXq031/2					
4	Inspired	mdXXq041/2					
5	Nervous	mdXXq051/2					
6	Determined	mdXXq061/2					
7	Attentive	mdXXq071/2					
8	Hostile	mdXXq081/2					
9	Active	mdXXq091/2					
10	Afraid	mdXXq101/2					

Item responses are coded 1 to 5 as shown in the table. Although the order of items was randomised on presentation to each twin on any given day, the order of items in the data, and the item numbers (1 to 10) are always the same as shown.

Additional dataset variables

Variable name [XX is the day number, 01 to 40)	Meaning	Coding or values
mstartage1/2	Age of twin when activities started	Years (decimal)
mXXdata1/2	Daily data flag: data are present for day number XX	1=yes, 0=no
mdata1/2	Overall data flag: data are present for at least one day out of 40	1=yes, 0=no
mstatus1/2	Status flag to indicate partial or complete participation	0=no participation 1=partial participation: missed more than 10 days 2=complete participation: missed 10 or fewer days out of 40
mdayscomplete1/2	Number of days completed (if twin participated)	1 to 40
mdaysmissed1/2	Number of days missed (if twin participated)	0 to 39
mdXXwday1/2	Day of the week when day XX activity was commenced	1=Sunday, 2=Monday, 3=Tuesday, 4=Wednesday, 5=Thursday, 6=Friday, 7=Saturday
mdXXtime1/2	Duration of day XX activity (interval from start to end)	Seconds (integer)
mdXXpause1/2	Apparently paused during day XX activity (duration > 300 seconds)	1=yes, 0=no
mmedtime1/2	Median time interval from start to end of daily activities	Seconds (decimal, to nearest half second)

Extreme outlying values of **mdXXtime** (> 300 seconds) have been deleted and flagged with variable **mdXXpause**. The value of **mmedtime** were derived using the cleaned values of **mdXXtime**.