The 25 questions in the GCQ have been derived from children's own views of what made their lives good or bad. The development of the measure began in 1993 with approaches to children to as- certain what they considered affected their quality of life. Eighty children aged 6, 11 and 13 years were approached in schools and asked to identify what made their lives good or bad, all children were asked to identify both positive and negative influences. A large proportion of the answers directly related to interpersonal relationships and how the children felt they were perceived by important others. The GCQ includes a general satisfaction question, ``how much of the time they feel happy with their life''.

The format for the questionnaire has been given great consideration. Children are reassured that there are no right or wrong answers via a story format in the measure, whereby five children chat about different things. In the sample question, for example, all the children are talking about how often they like to watch television. One child always likes watching television, one child often likes watching television, one child sometimes likes watching television, one child hardly ever likes watching television and the other child never likes watching television. No child is indicated to be better than the others are and all have different views. As well as being a non-threatening introduction to the measure, this initial question introduces the child to the five-point frequency scale. The child completing the questionnaire is asked to relate to the responses of the children in the story, first ticking the child they feel is most like themselves, then later ticking the child they would most like to be. These provide the perceived-self score and the preferred-self score. As quality of life can be assessed by measuring satisfaction with how life is compared to how one might want or expect it to be [3, 10, 11] the discrepancy between the two scores for each question provides the QOL score. For ease of interpretation and discussion, the discrepancy totals are transformed in order for high scores to indicate a high quality of life.

A Likert scale is used with five options (always, often, sometimes, hardly ever, never) and all questions are phrased to fit these responses. A Likert scale was considered to be simple enough for the children to understand and previous research has shown that children can use a Likert scale meaningfully if shown how to do so [2, 14]. The initial sample question also allows the researcher to ascertain whether the child has understood the frequency continuum. The story format makes the measure

more child-friendly, but the layout is also visually attractive to the children. Instead of tick boxes there are `tick girls' or `tick boys' which also allows the measure to read ``Tick the boy most like you''. As the GCQ is sex-specific, five boys or five girls talking, it simplifies the language.

The children first complete all 25 questions relating to the child they feel is most like themselves, they are then instructed to turn to a further answer section and answer the questions relating to the child they would most like to be. The layout of the form ensures that this is understood by completely separating the first 25 tick boxes (for the questions relating to the child they feel is most like themselves) from the second 25 tick boxes (for the questions relating to the child they would most like to be). The researcher reads out the questions when required. To assess whether a child completing the measure can carry out the task meaningfully the sample question outlined in the section on the GCQ measure, is at the beginning of the story.

1. How often they have fun
2. How often they are happy and smiling
3. How often they worry about things*
4. How often they spend time with friends
5. How often they have enough friends
6. How much of the time other people understood how they felt
7. How much of the time they are picked on*
8. How often they help others
9. How often they hurt other people*
10. How often they get upset*
11. How often they feel bored*
12. How often they can go to someone if they have a problem
13. How much of the time they like their parents
14. How much of the time they think their parents love them
15. How often they are told o ff (at home)*
16. How often they are allowed to choose for themselves
17. How much of the time they feel happy with their life
18. How often they are really ill*
19. How often this stops them from doing things that they want to do*
20. How happy they are about the way they look

21. How often they feel different from other children*

22. How often they try hard with their work

23. How often they are told o ff by the teacher*

24. How often they feel more clever than other children

25. How often they are good at sport

* Scoring reversed for these items.

From September 2007 the measure is available from the publisher Hogrefe. The measure also comes with a full manual outlining detailed administration and scoring information, as well as psychometric details. Contact details below.

Hogrefe Ltd.
Burgner House
4630 Kingsgate
Oxford Business Park South
OX4 2SU
UK

Tel: +44 (0) 1865 402900
Fax: +44 (0) 1865 402888
www.hogrefe.co.uk

Using the Generic Children's Quality of life measure.

Go through the initial question with the child (on the front sheet) about watching television. At this stage ascertain whether the child is able to:
a) read the questionnaire and
b) understand how to use the tick boys/girls correctly.

If their reading skills are not too good then you will need to read through the questionnaire with them, using the story style.

Instruct the child to go through the questions ticking each child most like themselves. When they have done all 25 of the questions this way, help them fold the sheet over to reveal the new boys/girls. Instruct them to go through the questions again, this time ticking the child they would most like to be.

Note any difficulties the child has as they complete the questionnaire.

The instructions for completion ensure that children are aware that no particular answer is considered correct, as they are referenced to five boys or girls, all of whom feel differently about things. Initially children are asked to rate how they see their lives, and they are then asked to rate how they would like it to be. The discrimination between ratings of actual life, and preferred life give a measure of satisfaction with life, that is to say, their own perception of their quality of life.

Scoring the answers is as follows

The most important score quality of life score, that is the discrimination between ratings of actual life, and preferred life.

Whilst it is not *strictly* necessary to give a 'direction' to the answers to each self or preferred question to arrive at the quality of score, it is necessary to arrive at the self score, which has its uses too. Giving direction to the questions is (nominally) as follows:

For questions 3 7 9 10 11 15 18 19 **21*** 23

(*do not include in self score as is strongly bidirectional)

always	often	sometimes	hardly ever	never
1	2	3	4	5

For questions 1 2 4 5 6 8 12 13 14 16 17 20 22 24 25

always	often	sometimes	hardly ever	never
5	4	3	2	1

To arrive at the more important quality of life score discrepancies are calculated between the response to each question's actual and preferred score. **Discrepancies are not given a**

negative or positive value (ie 5-3=2, and 2-4=2) this is important as the aim is to measure the discrepancy, and it is the size of the discrepancy that counts, not the direction.

For ease of comprehension and interpretation each question's discrepancy value is then 'reversed' so that a high QoL has a high score (ie. total discrepancy is changed from 4 to 0, high discrepancy is changed from 3 to 1, moderate discrepancy of 2 remains as 2, low discrepancy is changed from 1 to 3 and no discrepancy is changed from 0 to 4)

Proxy assessment - we recommend that if used as a proxy measure then the measure should be completed as the proxy thinks the child will complete it, rather than as the proxy feels about the child's life.

Name   Position

NORMATIV   data used in normative data set as in Quality of Life Resear   1
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F1
           Write Format: F1

           Value   Label
              0   not used in normative study
              1   used in normative study

D_O_B   2
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: DATE9
           Write Format: DATE9

DATE_OF_   date of testing   3
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: DATE9
           Write Format: DATE9

JARMAN   jarman score from individual children's postcodes (1991 cens   4
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2

E_DISTRI   ennumeration district (from child's postcode)   5
           Measurement Level: Nominal
           Column Width: Unknown   Alignment: Left
           Print Format: A8
           Write Format: A8

AGE   6
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2

AGEBAND   age in whole years   7
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2

SEX   8
           Measurement Level: Ordinal
           Column Width: 6 Alignment: Right
           Print Format: F11.2
           Write Format: F11.2

           Value   Label
            1.00   boy
            2.00   girl

```
 CODE       individual child id code                                 9
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


 PRIM_SEC   primary or secondary school                             10
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2
            Value    Label
             1.00    primary
             2.00    secondary


 RUR_URB    rural - urban setting of the school                     11
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2
            Value    Label
             1.00    rural
             2.00    urban


 AFFLUENC   affluence setting of the school                         12
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2
            Value    Label
             1.00    affluent
             2.00    non affluent


 YEARNO     school year no.                                         13
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


 SUBNO      subject number [in that school in that class] first digit    14
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


 SUBNO2     subject number [in that school in that class] second digit   15
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


 PERC1      perceived self q 1 [fun]                                16
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2
```

PERC2   perceived self q 2 [happy/smiling]   17
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2

PERC3   perceived self q 3 [worry]   18
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F12.2
           Write Format: F12.2

PERC4   perceived self q 4 [time_friends]   19
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2

PERC5   perceived self q 5 [enough_friends]   20
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2

PERC6   perceived self q 6 [understood]   21
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2

PERC7   perceived self q 7 [picked on]   22
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F12.2
           Write Format: F12.2

PERC8   perceived self q 8 [help others]   23
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2

PERC9   perceived self q 9 [hurt others]   24
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F12.2
           Write Format: F12.2

PERC10   perceived self q 10 [upset]   25
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F12.2
           Write Format: F12.2

PERC11   perceived self q 11 [bored]   26
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F12.2
           Write Format: F12.2

PERC12   perceived self q 12 [go with problem]   27
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2

```
                Write Format: F11.2


PERC13      perceived self q 13 [like parents]                          28
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


PERC14      perceived self q 14 [parents love them]                     29
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


PERC15      perceived self q 15 [told off_home]                         30
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F12.2
            Write Format: F12.2


PERC16      perceived self q 16 [choose]                                31
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


PERC17      perceived self q 17 [happy with life] -NB general satisfacti  32
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


PERC18      perceived self q 18 [really ill]                            33
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F12.2
            Write Format: F12.2


PERC19      perceived self q 19 [ill stops them]                        34
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


PERC20      perceived self q 20 [way look]                              35
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


PERC21      perceived self q 21 [feel different]                        36
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2


PERC22      perceived self q 22 [try hard]                              37
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2
```

PERC23   perceived self q 23 [told off_teacher]   38
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PERC24   perceived self q 24 [clever]   39
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PERC25   perceived self q 25 [sport]   40
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF1   preferred self q 1 [fun]   41
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF2   preferred self q 2 [happy/smiling]   42
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF3   preferred self q 3 [worry]   43
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF4   preferred self q 4 [time_friends]   44
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF5   preferred self q 5 [enough_friends]   45
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF6   preferred self q 6 [understood]   46
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF7   preferred self q 7 [picked on]   47
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

```
PREF8      preferred self q 8 [help others]                         48
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF9      preferred self q 9 [hurt others]                         49
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF10     preferred self q 10 [upset]                              50
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF11     preferred self q 11 [bored]                              51
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF12     preferred self q 12 [go with problem]                    52
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF13     preferred self q 13 [like parents]                       53
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF14     preferred self q 14 [parents love them]                  54
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF15     preferred self q 15 [told off_home]                      55
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF16     preferred self q 16 [choose]                             56
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2


PREF17     preferred self q 17 [happy with life] -NB general satisfacti   57
           Measurement Level: Ordinal
           Column Width: Unknown   Alignment: Right
           Print Format: F11.2
           Write Format: F11.2
```

PREF18   preferred self q 18 [really ill]   58
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF19   preferred self q 19 [ill stops them]   59
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF20   preferred self q 20 [way look]   60
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF21   preferred self q 21 [feel different]   61
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF22   preferred self q 22 [try hard]   62
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF23   preferred self q 23 [told off_teacher]   63
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF24   preferred self q 24 [clever]   64
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

PREF25   preferred self q 25 [sport]   65
            Measurement Level: Ordinal
            Column Width: Unknown   Alignment: Right
            Print Format: F11.2
            Write Format: F11.2

DIFF_1   difference score q 1 [fun]   66
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2

DIFF_2   difference score q 2 [happy/smiling]   67
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2

```
DIFF_3      difference score q 3 [worry]                                    68
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_4      difference score q 4 [time_friends]                             69
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_5      difference score q 5 [enough_friends]                           70
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_6      difference score q 6 [understood]                               71
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_7      difference score q 7 [picked on]                                72
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_8      difference score q 8 [help others]                              73
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_9      difference score q 9 [hurt others]                              74
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_10     difference score q 10 [upset]                                   75
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_11     difference score q 11 [bored]                                   76
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2


DIFF_12     difference score q 12 [go with problem]                         77
            Measurement Level: Scale
            Column Width: Unknown   Alignment: Right
            Print Format: F8.2
            Write Format: F8.2
```

```
 DIFF_13   difference score q 13 [like parents]                              78
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_14   difference score q 14 [parents love them]                         79
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_15   difference score q 15 [told off_home]                             80
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_16   difference score q 16 [choose]                                    81
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_17   difference score q 17 [happy with life] -NB general satisfac      82
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_18   difference score q 18 [really ill]                                83
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_19   difference score q 19 [ill stops them]                            84
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_20   difference score q 20 [way look]                                  85
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_21   difference score q 21 [feel different]                            86
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


 DIFF_22   difference score q 22 [try hard]                                  87
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2
```

```
DIFF_23    difference score q 23 [told off_teacher]                       88
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


DIFF_24    difference score q 24 [clever]                                  89
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


DIFF_25    difference score q 25 [sport]                                   90
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


TOTPERC    total perceived score                                           91
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


TOTPREF    total preferred score                                           92
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


TOT_DIFF   total difference score                                          93
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


QOL         qol score - only for comparison if all 25 questions answere    94
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


NUM_PERC   number of perceived questions with valid responses              95
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


NUM_PREF   number of preferred questions with valid responses              96
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


NUM_DIFF   number of difference questions able to be calculated            97
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2
           Write Format: F8.2


QOL_MAX    maximum qol score - alters with the number of questions answ    98
           Measurement Level: Scale
           Column Width: Unknown   Alignment: Right
           Print Format: F8.2              Write Format: F8.2
```

```
IF (age >= 6.0 &  age <=6.9999 ) ageband = 6 .
EXECUTE .

IF (age >= 7.0 &  age <=7.9999 ) ageband = 7 .
EXECUTE .

IF (age >= 8.0 &  age <=8.9999 ) ageband = 8 .
EXECUTE .

IF (age >= 9.0 &  age <=9.9999 ) ageband = 9 .
EXECUTE .

IF (age >= 10.0 &  age <=10.9999 ) ageband = 10 .
EXECUTE .

IF (age >= 11.0 &  age <=11.9999 ) ageband = 11 .
EXECUTE .

IF (age >= 12.0 &  age <=12.9999 ) ageband = 12 .
EXECUTE .

IF (age >= 13.0 &  age <=13.9999 ) ageband = 13 .
EXECUTE .

IF (age >= 14.0 ) ageband = 14 .
EXECUTE .


COUNT
  num_perc = perc1 perc2 perc3 perc4 perc5 perc6 perc7 perc8 perc9 perc10
  perc11 perc12 perc13 perc14 perc15 perc16 perc17 perc18 perc19 perc20 perc21
  perc22 perc23 perc24 perc25  (1)  perc1 perc2 perc3 perc4 perc5 perc6 perc7
  perc8 perc9 perc10 perc11 perc12 perc13 perc14 perc15 perc16 perc17 perc18
  perc19 perc20 perc21 perc22 perc23 perc24 perc25  (2)  perc1 perc2 perc3
  perc4 perc5 perc6 perc7 perc8 perc9 perc10 perc11 perc12 perc13 perc14
  perc15 perc16 perc17 perc18 perc19 perc20 perc21 perc22 perc23 perc24 perc25
   (3)  perc1 perc2 perc3 perc4 perc5 perc6 perc7 perc8 perc9 perc10 perc11
  perc12 perc13 perc14 perc15 perc16 perc17 perc18 perc19 perc20 perc21 perc22
  perc23 perc24 perc25  (4)  perc1 perc2 perc3 perc4 perc5 perc6 perc7 perc8
  perc9 perc10 perc11 perc12 perc13 perc14 perc15 perc16 perc17 perc18 perc19
  perc20 perc21 perc22 perc23 perc24 perc25  (5)  .
VARIABLE LABELS num_perc 'number of perceived questions with valid responses'
 .
EXECUTE .
COUNT
  num_pref = pref1 pref2 pref3 pref4 pref5 pref6 pref7 pref8 pref9 pref10
  pref11 pref12 pref13 pref14 pref15 pref16 pref17 pref18 pref19 pref20 pref21
  pref22 pref23 pref24 pref25  (1)  pref1 pref2 pref3 pref4 pref5 pref6 pref7
  pref8 pref9 pref10 pref11 pref12 pref13 pref14 pref15 pref16 pref17 pref18
  pref19 pref20 pref21 pref22 pref23 pref24 pref25  (2)  pref1 pref2 pref3
  pref4 pref5 pref6 pref7 pref8 pref9 pref10 pref11 pref12 pref13 pref14
  pref15 pref16 pref17 pref18 pref19 pref20 pref21 pref22 pref23 pref24 pref25
   (3)  pref1 pref2 pref3 pref4 pref5 pref6 pref7 pref8 pref9 pref10 pref11
  pref12 pref13 pref14 pref15 pref16 pref17 pref18 pref19 pref20 pref21 pref22
  pref23 pref24 pref25  (4)  pref1 pref2 pref3 pref4 pref5 pref6 pref7 pref8
  pref9 pref10 pref11 pref12 pref13 pref14 pref15 pref16 pref17 pref18 pref19
  pref20 pref21 pref22 pref23 pref24 pref25  (5)  .
VARIABLE LABELS num_pref 'number of preferred questions with valid responses'
 .
EXECUTE .
```

```
IF (perc1 >= 1 & perc1 <= 5 & pref1 >= 1 & pref1 <= 5) diff_1 = ABS(perc1
 -pref1) .
EXECUTE .

IF (perc2 >= 1 & perc2 <= 5 & pref2 >= 1 & pref2 <= 5) diff_2 = ABS(perc2
 -pref2) .
EXECUTE .

IF (perc3 >= 1 & perc3 <= 5 & pref3 >= 1 & pref3 <= 5) diff_3 = ABS(perc3
 -pref3) .
EXECUTE .

IF (perc4 >= 1 & perc4 <= 5 & pref4 >= 1 & pref4 <= 5) diff_4 = ABS(perc4
 -pref4) .
EXECUTE .

IF (perc5 >= 1 & perc5 <= 5 & pref5 >= 1 & pref5 <= 5) diff_5 = ABS(perc5
 -pref5) .
EXECUTE .

IF (perc6 >= 1 & perc6 <= 5 & pref6 >= 1 & pref6 <= 5) diff_6 = ABS(perc6
 -pref6) .
EXECUTE .

IF (perc7 >= 1 & perc7 <= 5 & pref7 >= 1 & pref7 <= 5) diff_7 = ABS(perc7
 -pref7) .
EXECUTE .

IF (perc8 >= 1 & perc8 <= 5 & pref8 >= 1 & pref8 <= 5) diff_8 = ABS(perc8
 -pref8) .
EXECUTE .

IF (perc9 >= 1 & perc9 <= 5 & pref9 >= 1 & pref9 <= 5) diff_9 = ABS(perc9
 -pref9) .
EXECUTE .

IF (perc10 >= 1 & perc10 <= 5 & pref10 >= 1 & pref10 <= 5) diff_10 = ABS(perc10
 -pref10) .
EXECUTE .

IF (perc11 >= 1 & perc11 <= 5 & pref11 >= 1 & pref11 <= 5) diff_11 = ABS(perc11
 -pref11) .
EXECUTE .

IF (perc12 >= 1 & perc12 <= 5 & pref12 >= 1 & pref12 <= 5) diff_12 = ABS(perc12
 -pref12) .
EXECUTE .

IF (perc13 >= 1 & perc13 <= 5 & pref13 >= 1 & pref13 <= 5) diff_13 = ABS(perc13
 -pref13) .
EXECUTE .

IF (perc14 >= 1 & perc14 <= 5 & pref14 >= 1 & pref14 <= 5) diff_14 = ABS(perc14
 -pref14) .
EXECUTE .

IF (perc15 >= 1 & perc15 <= 5 & pref15 >= 1 & pref15 <= 5) diff_15 = ABS(perc15
 -pref15) .
EXECUTE .
```

```
IF (perc16 >= 1 & perc16 <= 5 & pref16 >= 1 & pref16 <= 5) diff_16 = ABS(perc16
 -pref16) .
EXECUTE .

IF (perc17 >= 1 & perc17 <= 5 & pref17 >= 1 & pref17 <= 5) diff_17 = ABS(perc17
 -pref17) .
EXECUTE .

IF (perc18 >= 1 & perc18 <= 5 & pref18 >= 1 & pref18 <= 5) diff_18 = ABS(perc18
 -pref18) .
EXECUTE .

IF (perc19 >= 1 & perc19 <= 5 & pref19 >= 1 & pref19 <= 5) diff_19 = ABS(perc19
 -pref19) .
EXECUTE .

IF (perc20 >= 1 & perc20 <= 5 & pref20 >= 1 & pref20 <= 5) diff_20 = ABS(perc20
 -pref20) .
EXECUTE .

IF (perc21 >= 1 & perc21 <= 5 & pref21 >= 1 & pref21 <= 5) diff_21 = ABS(perc21
 -pref21) .
EXECUTE .

IF (perc22 >= 1 & perc22 <= 5 & pref22 >= 1 & pref22 <= 5) diff_22 = ABS(perc22
 -pref22) .
EXECUTE .

IF (perc23 >= 1 & perc23 <= 5 & pref23 >= 1 & pref23 <= 5) diff_23 = ABS(perc23
 -pref23) .
EXECUTE .

IF (perc24 >= 1 & perc24 <= 5 & pref24 >= 1 & pref24 <= 5) diff_24 = ABS(perc24
 -pref24) .
EXECUTE .

IF (perc25 >= 1 & perc25 <= 5 & pref25 >= 1 & pref25 <= 5) diff_25 = ABS(perc25
 -pref25) .
EXECUTE .

COMPUTE tot_diff =
SUM(diff_1,diff_2,diff_3,diff_4,diff_5,diff_6,diff_7,diff_8,diff_9

,diff_10,diff_11,diff_12,diff_13,diff_14,diff_15,diff_16,diff_17,diff_18,diff_19
 ,diff_20,diff_21,diff_22,diff_23,diff_24,diff_25) .
EXECUTE .

COUNT
  num_diff = diff_1 diff_2 diff_3 diff_4 diff_5 diff_6 diff_7 diff_8 diff_9
  diff_10 diff_11 diff_12 diff_13 diff_14 diff_15 diff_16 diff_17 diff_18
  diff_19 diff_20 diff_21 diff_22 diff_23 diff_24 diff_25  (0)  diff_1 diff_2
  diff_3 diff_4 diff_5 diff_6 diff_7 diff_8 diff_9 diff_10 diff_11 diff_12
  diff_13 diff_14 diff_15 diff_16 diff_17 diff_18 diff_19 diff_20 diff_21
  diff_22 diff_23 diff_24 diff_25  (1)  diff_1 diff_2 diff_3 diff_4 diff_5
  diff_6 diff_7 diff_8 diff_9 diff_10 diff_11 diff_12 diff_13 diff_14 diff_15
  diff_16 diff_17 diff_18 diff_19 diff_20 diff_21 diff_22 diff_23 diff_24
  diff_25  (2)  diff_1 diff_2 diff_3 diff_4 diff_5 diff_6 diff_7 diff_8 diff_9
  diff_10 diff_11 diff_12 diff_13 diff_14 diff_15 diff_16 diff_17 diff_18
  diff_19 diff_20 diff_21 diff_22 diff_23 diff_24 diff_25  (3)  diff_1 diff_2
  diff_3 diff_4 diff_5 diff_6 diff_7 diff_8 diff_9 diff_10 diff_11 diff_12
```

```
    diff_13 diff_14 diff_15 diff_16 diff_17 diff_18 diff_19 diff_20 diff_21
    diff_22 diff_23 diff_24 diff_25  (4)  .
EXECUTE .
VARIABLE LABELS num_diff 'number of difference questions able to be calculated'
   .

COMPUTE qol_max = (4*num_diff) .
EXECUTE .
VARIABLE LABELS qol_max 'maximum qol score - alters with the number of questions
answered'
   .

COMPUTE qol = (qol_max)-tot_diff.
EXECUTE .

VARIABLE LABELS qol ' qol score - only for comparison if all 25 questions
answered fully, ie num_diff=25'
   .


VARIABLE LABELS perc1 "perceived self q 1 [fun]".
VARIABLE LABELS perc2 "perceived self q 2 [happy/smiling]".
VARIABLE LABELS perc3 "perceived self q 3 [worry]".
VARIABLE LABELS perc4 "perceived self q 4 [time_friends]".
VARIABLE LABELS perc5 "perceived self q 5 [enough_friends]".
VARIABLE LABELS perc6 "perceived self q 6 [understood]".
VARIABLE LABELS perc7 "perceived self q 7 [picked on]".
VARIABLE LABELS perc8 "perceived self q 8 [help others]".
VARIABLE LABELS perc9 "perceived self q 9 [hurt others]".
VARIABLE LABELS perc10 "perceived self q 10 [upset]".
VARIABLE LABELS perc11 "perceived self q 11 [bored]".
VARIABLE LABELS perc12 "perceived self q 12 [go with problem]".
VARIABLE LABELS perc13 "perceived self q 13 [like parents]".
VARIABLE LABELS perc14 "perceived self q 14 [parents love them]".
VARIABLE LABELS perc15 "perceived self q 15 [told off_home]".
VARIABLE LABELS perc16 "perceived self q 16 [choose]".
VARIABLE LABELS perc17 "perceived self q 17 [happy with life] -NB general
satisfaction question" .
VARIABLE LABELS perc18 "perceived self q 18 [really ill] ".
VARIABLE LABELS perc19 "perceived self q 19 [ill stops them] ".
VARIABLE LABELS perc20 "perceived self q 20 [way look] ".
VARIABLE LABELS perc21 "perceived self q 21 [feel different] ".
VARIABLE LABELS perc22 "perceived self q 22 [try hard] ".
VARIABLE LABELS perc23 "perceived self q 23 [told off_teacher] ".
VARIABLE LABELS perc24 "perceived self q 24 [clever] ".
VARIABLE LABELS perc25 "perceived self q 25 [sport] ".

VARIABLE LABELS pref1 "preferred self q 1 [fun]".
VARIABLE LABELS pref2 "preferred self q 2 [happy/smiling]".
VARIABLE LABELS pref3 "preferred self q 3 [worry]".
VARIABLE LABELS pref4 "preferred self q 4 [time_friends]".
VARIABLE LABELS pref5 "preferred self q 5 [enough_friends]".
VARIABLE LABELS pref6 "preferred self q 6 [understood]".
VARIABLE LABELS pref7 "preferred self q 7 [picked on]".
VARIABLE LABELS pref8 "preferred self q 8 [help others]".
VARIABLE LABELS pref9 "preferred self q 9 [hurt others]".
VARIABLE LABELS pref10 "preferred self q 10 [upset]".
VARIABLE LABELS pref11 "preferred self q 11 [bored]".
VARIABLE LABELS pref12 "preferred self q 12 [go with problem]".
VARIABLE LABELS pref13 "preferred self q 13 [like parents]".
VARIABLE LABELS pref14 "preferred self q 14 [parents love them]".
```

VARIABLE LABELS pref15 "preferred self q 15 [told off_home]".
VARIABLE LABELS pref16 "preferred self q 16 [choose] ".
VARIABLE LABELS pref17 "preferred self q 17 [happy with life] -NB general
satisfaction question".
VARIABLE LABELS pref18 "preferred self q 18 [really ill] ".
VARIABLE LABELS pref19 "preferred self q 19 [ill stops them] ".
VARIABLE LABELS pref20 "preferred self q 20 [way look] ".
VARIABLE LABELS pref21 "preferred self q 21 [feel different] ".
VARIABLE LABELS pref22 "preferred self q 22 [try hard] ".
VARIABLE LABELS pref23 "preferred self q 23 [told off_teacher] ".
VARIABLE LABELS pref24 "preferred self q 24 [clever] ".
VARIABLE LABELS pref25 "preferred self q 25 [sport] ".

VARIABLE LABELS diff_1 "difference score q 1 [fun]".
VARIABLE LABELS diff_2 "difference score q 2 [happy/smiling]".
VARIABLE LABELS diff_3 "difference score q 3 [worry]".
VARIABLE LABELS diff_4 "difference score q 4 [time_friends]".
VARIABLE LABELS diff_5 "difference score q 5 [enough_friends]".
VARIABLE LABELS diff_6 "difference score q 6 [understood]".
VARIABLE LABELS diff_7 "difference score q 7 [picked on]".
VARIABLE LABELS diff_8 "difference score q 8 [help others]".
VARIABLE LABELS diff_9 "difference score q 9 [hurt others]".
VARIABLE LABELS diff_10 "difference score q 10 [upset]".
VARIABLE LABELS diff_11 "difference score q 11 [bored]".
VARIABLE LABELS diff_12 "difference score q 12 [go with problem]".
VARIABLE LABELS diff_13 "difference score q 13 [like parents]".
VARIABLE LABELS diff_14 "difference score q 14 [parents love them]".
VARIABLE LABELS diff_15 "difference score q 15 [told off_home]".
VARIABLE LABELS diff_16 "difference score q 16 [choose]".
VARIABLE LABELS diff_17 "difference score q 17 [happy with life] -NB general
satisfaction question".
VARIABLE LABELS diff_18 "difference score q 18 [really ill] ".
VARIABLE LABELS diff_19 "difference score q 19 [ill stops them] ".
VARIABLE LABELS diff_20 "difference score q 20 [way look] ".
VARIABLE LABELS diff_21 "difference score q 21 [feel different] ".
VARIABLE LABELS diff_22 "difference score q 22 [try hard] ".
VARIABLE LABELS diff_23 "difference score q 23 [told off_teacher] ".
VARIABLE LABELS diff_24 "difference score q 24 [clever] ".
VARIABLE LABELS diff_25 "difference score q 25 [sport] ".

VARIABLE LABELS date_of_ "date of testing".
VARIABLE LABELS code "individual child id code".
VARIABLE LABELS affluenc "affluence setting of the school".
VARIABLE LABELS rur_urb "rural - urban setting of the school".
VARIABLE LABELS yearno "school year no.".
VARIABLE LABELS totperc "total perceived score".
VARIABLE LABELS totpref "total preferred score".
VARIABLE LABELS tot_diff "total difference score".
VARIABLE LABELS qol "quality of life score".
VARIABLE LABELS ageband "age in whole years".
VARIABLE LABELS jarman "jarman score from indivdual children's postcodes".
VARIABLE LABELS e_distri "ennumeration district (from child's postcode)".
VARIABLE LABELS prim_sec "primary or secondary school".
VARIABLE LABELS subno "subject number [in that school in that class] first
digit".
VARIABLE LABELS subno2 "subject number [in that school in that class] second
digit".

VALUE LABELS sex

```
  1.00000000000000 "boy"
  2.00000000000000 "girl"
.


VALUE LABELS prim_sec
  1.00000000000000 "primary"
  2.00000000000000 "secondary"
.



VALUE LABELS rur_urb
  1.00000000000000 "rural"
  2.00000000000000 "urban"
.


VALUE LABELS affluenc
  1.00000000000000 "affluent"
  2.00000000000000 "non affluent"
.
```