Validating mental well-being items of the Scottish Health Behaviour in School-aged Children (HBSC) Survey

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Executive summary

- The aim of this project was to test the face validity, construct validity (convergent and divergent) and reliability of five items in the Scottish HBSC survey to assess their suitability for measuring mental well-being of young people.

- Three items related to perceived happiness, confidence and feelings of helplessness have been used in four Scottish HBSC surveys (which have taken place every four years since 1994). Feeling left out has been included since 1998. Trend data suggests an improvement over time in these indicators of mental well-being. A measure of life satisfaction, an adapted form of the Cantril ladder (Cantril, 1965) and used within the 2002 and 2006 surveys has not been validated extensively; therefore we also included this item within the study.

- Three methods were employed in the study. First, a survey was administered to P7 pupils. At the same time, the 'think aloud technique' was used with one pupil per class. Finally, focus groups were carried out with 11 and 13-year-olds in P7 (last year of primary school) and S2 (second year of secondary school).

- The survey sample was selected on the basis of previous participation in the HBSC study, locality (urban/rural) and socio-economic status (area deprivation). All participating schools were located on the east coast of Scotland.

- Face validity of the first four mental well-being items was assessed through focus groups with young people in P7 and S2; two of the year groups surveyed with the HBSC instrument. Focus groups involved a number of activities designed to prompt explanations and aid our understanding of the ways in which children and young people interpret our questions.

- Reliability (or stability over time) was assessed using survey data collected from P7 pupils twice with an intervening period of four weeks.

- Construct validity was assessed through comparison of data from the Scottish HBSC items with established measures widely accepted within different academic disciplines: the Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997; 2001) and the Student Life Satisfaction Scale (SLSS, Huebner, 1991).

- The happiness question showed moderate test-retest reliability while the left out and life satisfaction questions showed high test-retest reliability. Conversely, the confidence and helpless questions showed lower test-retest reliability. This may reflect a difference between measures of 'trait' (relatively stable characteristics) and 'state' (which are subject to change). A far higher percentage of scores that were initially positive remained stable after the 4 week interval, suggesting that the more positive you score on these mental well-being questions, the more stable your responses.

- Happiness, confidence and life satisfaction were positively correlated with one another and negatively correlated with helplessness and feeling left out. Fairly low correlations were found between the happiness/confidence measures and the SDQ total difficulties

scale and associated sub-scales. However, there was a stronger relationship between the left out measure and the two SDQ sub-scales measuring peer problems and emotional symptoms. This link is logical and was further confirmed by pupil explanations in the focus groups. There was also a higher correlation between helpless and the total difficulties scale than those with happiness and confidence, explained by a higher correlation with peer problems.

- The Cantril ladder measure of life satisfaction had very good test-retest reliability and was compared with an established measure; the SLSS. However, the SLSS did not prove to be as reliable with our sample.

- Analysis of test-retest reliability suggests that caution needs to be exercised in relation to the re-coding of data (in our case, into binary variables). Happiness, feeling left out and life satisfaction, show moderate reliability in the binary form, while confidence and helplessness show lower reliability.

- Analysis of the focus group data suggests that three of the four mental well-being items performed reasonably well as measures of distinct aspects of mental well-being in young people aged 11 and 13. Strong similarities in interpretations were apparent across age groups. Helpless was far more complex and potentially problematic due to multiple interpretations and lack of familiarity with the word/concept. Due to its lower reliability and problems with face validity, it is recommended that this measure be used with caution.

- Measures of mental well-being for national use with young people are currently being developed and once constructed will provide a means of monitoring and evaluating the mental health of the Scottish population. In this respect, the HBSC study is a potentially useful resource to draw on. The validation work discussed within this report also provides a more comprehensive methodological understanding of the questions we ask young people.

- Although the items included in HBSC are single-item measures, which are often viewed as less robust than multiple-item measures of subjective well-being, the life satisfaction literature has shown single-item global measures to be reliable and perhaps even preferable, given that they leave the evaluation of importance to the person who is being evaluated.

- Alternatively, future work might usefully focus on how to combine such items into a scale to make best possible use of the measures under examination in this study. The resulting scale should result in a more reliable robust instrument in the measurement of mental well-being of young people.

1. Introduction

1.1 Background

The mental well-being of young people is affected by experiences of school and learning (Inchley, Todd, Currie, Levin, Smith & Currie, 2007), friendships and peer relations (Settertobulte & Gaspar de Matos, 2004) and family life and relationships (Levin, Todd, Inchley, Currie, Smith & Currie, 2007). Adolescence can also bring emotional problems as a result of biological and psychological changes associated with puberty (Kaltiala-Heino, Marttunen, Rantanen & Rimpela, 2003; Mendle, Turkheimer & Emery, 2007). These often occur in conjunction with external changes such as school transitions and alterations within peer and friendship networks or family structure and relationships. Parental separation and re-partnering often result in further upheavals in the home environment such as parent-child conflict, economic hardship and family disorganisation. Good emotional and physical health enables young people to deal with these challenges and eases the transition through adolescence (Petersen, Leffert, Graham, Alwin & Ding, 1997). Promoting young people's health can therefore have long-term benefits for individuals and society.

Previous research has shown that emotional and mental health problems in childhood and adolescence are predictors of risk behaviours such as smoking (Dierker, Vesel, Sledjeski, Costello & Perinne, 2007), drinking (Verdurmen, Monshouwer, van Dorsselaer, Ter Bogt & Vollebergh, 2005), eating disorders (Beato-Fernandez, Rodriguez-Cano, Belmonte-Llario & Martinez-Delgado, 2004) and violence (Craig & Harel, 2004). Mental well-being and behavioural problems during childhood and adolescence may also persist into adulthood (Aalto-Setala, Marttunen, Tuulio-Henriksson, Poikolainen & Lonnqvist, 2002; Roza, Hofstra, van der Ende & Verhulst, 2003). Early intervention to promote mental well-being and prevent mental health problems among adolescents is therefore beneficial in the long, as well as short, term.

The Scottish Government's National Programme for Improving Mental Health and Well-Being (Scottish Executive, 2003) focuses on the following: promotion and prevention; supporting those experiencing problems; reducing inequalities, and eliminating the stigma associated with mental ill health. One of its six priority areas is children and young people. Work is underway within Scotland to establish indicators of mental well-being for use with young people as currently there are few nationally or internationally recommended measures (Parkinson, 2009). However, a recent review commissioned by NHS Health Scotland as part of the indicators work, highlights factors that children and young people feel are important to their mental health (Shucksmith, Spratt, Philip & McNaughton, 2009).

Within HBSC, there are several indicators of young people's mental well-being. These include happiness, life satisfaction, self-confidence, feelings of helplessness and feeling left out. Life satisfaction data were collected by HBSC internationally in the 2002 and 2006 surveys. The items confidence, happiness and helplessness have been collected by HBSC Scotland since 1994 and feeling left out has been collected since 1998. However, although findings relating to these items have been presented in briefing papers, journal articles and HBSC national and international reports, they have not, to date, been thoroughly validated. This project therefore makes a methodological contribution to both HBSC and mental well-being research by systematically addressing the validity of the items.

1.2 Aims & objectives

The project aimed to:

- assess the validity of five items in the HBSC Scotland survey designed to measure aspects of mental well-being,
- explore how different methods can be utilised in the validation process, and
- privilege children's interpretations and explanations in assessing the validity of our measures.

Objectives in respect of validation:

- to establish the face validity of four mental well-being items through discussion with children and young people,
- to investigate the reliability of the items (the degree to which responses remain stable over time), and
- to assess the performance of these four items and the life satisfaction measure against other validated scales designed to assess similar concepts (convergent validity) and those that represent the opposite (divergent validity).

1.3 The questions to be validated

The five items that were the focus of this validation study are presented below.

HAPPINESS:

In general, how do you feel about your life at the moment?

○ I feel very happy
○ I feel quite happy
○ I don't feel very happy
○ I'm not happy at all

CONFIDENCE:

How often do you feel confident in yourself?

○ Never
○ Hardly ever
○ Sometimes
○ Often
○ Always

FEELING LEFT OUT:

How often do you feel left out of things?

○ Never
○ Hardly ever
○ Sometimes
○ Often
○ Always

FEELING HELPLESS:

How often do you feel helpless?

- ○ Never
- ○ Hardly ever
- ○ Sometimes
- ○ Often
- ○ Always

LIFE SATISFACTION:

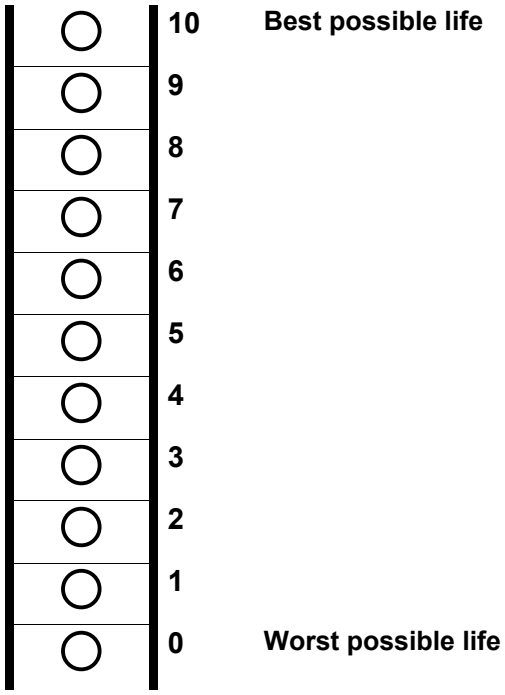
Please read the next question carefully

Here is a picture of a ladder.

The top of the ladder '**10**' is the best possible life for you and the bottom '**0**' is the worst possible life for you.

In general, where on the ladder do you feel you stand at the moment?

Tick the circle next to the number that best describes where you stand.



1.4 Key aspects of validation

Reliability

Reliability demonstrates the degree to which the items are free from random error. Using test-retest reliability, we are able to assess whether the items show appropriate levels of stability over time. This technique involves the same people completing the same questionnaires at different points in time.

Validity

Validity establishes whether the items measure what they are intended to measure. Face (or content) validity assesses whether the items are suitable for the overall concept being measured and requires the involvement of the population of interest. Construct validity is established when there are logical relationships between the items and other established measures or factors known to affect the concept being measured (e.g., age or sex) (Lohr, Aaronson, Alonso, Burnam, Patrick, Perrin & Roberts, 1996). It is assessed through correlations between the items under review and other scales measuring either similar concepts (convergent validity) or different concepts (divergent validity) and through examining differences in item scores between different groups.

Susceptibility to bias

This aspect of validation assesses whether the items are prone to response bias or to people tailoring their responses to present themselves in a more (or less) favourable way. While this can be assessed formally through special scales designed to measure response bias, it is also possible to examine this qualitatively. We have adopted this approach to understanding gender differences in responding (see Section 3.4).

2. Methodology

2.1 The sample

The survey was undertaken with 12 P7 classes corresponding to the youngest age group surveyed within the HBSC international study (11-year-olds). These children were attending 9 schools (5 urban and 4 rural from a range of socio-economic backgrounds), all of whom had participated in a previous national HBSC survey. The think aloud technique was used with one pupil per class visited while the remainder of the class completed the survey. This was administered twice with a 4-week intervening period in order to assess test-retest reliability. The number of pupils completing each survey across each school is presented in Table 2.1a. A total of 296 pupils completed Survey 1, while Survey 2 was completed by 281 pupils. For each of the five items of interest, between 270 and 280 responses were obtained on both surveys.

Table 2.1a: The survey sample

School	Girls		Boys	
	Survey 1	Survey 2	Survey 1	Survey 2
1	22	21	23	21
2	29	27	31	29
3	9	8	15	13
4	25	24	23	23
5	11	11	17	16
6	6	6	8	8
7	15	15	11	10
8	15	15	20	20
9	9	8	7	6
Total	**141**	**135**	**155**	**146**

Single sex focus groups were undertaken with children and young people in P7 and S2 (13-year-olds) to extend our understanding of young people's conceptions of mental well-being as well as any age-related changes. A total of 13 groups were held with P7 pupils in three schools and 7 with those in S2. The focus groups in the primary schools were an add-on to the survey and thus took place in a sub-sample of the survey schools, whereas all of the S2 focus groups were undertaken in one secondary school. The number of groups and pupils within each age group is presented in Table 2.1b. 20 focus groups were undertaken with 77 pupils in total.

Table 2.1b: The focus group sample

Age group	Girls		Boys		Total	
	N groups	N pupils	N groups	N pupils	N groups	N pupils
11-year-olds	6	24	7	27	13	51
13-year-olds	4	14	3	12	7	26
Total	**10**	**38**	**10**	**39**	**20**	**77**

2.2 Stages in the research process

The project was approved by the Ethics Committee at the Moray House School of Education (University of Edinburgh) and the Directors of Education in the relevant education authorities. Subsequently, sampled schools were approached and the details of procedures and timescales were negotiated with Head Teachers and P7 class

teachers. Prior to visiting the schools, pupil information sheets and letters/consent forms for parents were issued with the Project Coordinator's contact details for queries and fieldwork was carried out between March and June 2008. Within each school, one researcher administered the survey to a whole P7 class. Children were encouraged to ask questions and highlight any questions/wording they did not understand. Each query was recorded by the researcher, who also gauged children's immediate reactions to questions by asking those who queried the meaning of a question to have a guess (i.e., 'what do you think it means? What pops into your head when you read that question?'. This process took approximately 20 minutes.

At the same time as the survey was being administered, another researcher worked with one volunteer from the class who was asked to talk through their answers to the four mental well-being questions (using the 'think aloud technique'). Their explanations were recorded using a digital recorder and were transcribed in full.

Finally, following administration of the survey, focus groups were held (with four pupils per group in most cases) to assess, in more depth, children's perceptions of our questions and their definitions of the concepts encapsulated in our measures. One aspect of mental well-being (i.e., one of the four items) was covered in each group and a range of activities was employed to prompt explanations from the children. A sample of S2 pupils was also recruited to check for age differences.

2.3 The survey and 'think aloud' technique

A copy of the survey used is included in Appendix 1. This included background questions relating to the pupil's age, gender and year group; the five mental well-being items used in HBSC (happiness, confidence, left out, helpless and life satisfaction), and the scales with which we were to compare our items. The Student Life Satisfaction Scale (SLSS, Huebner, 1991) and the Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997; 2001) were chosen due to their widespread use and acceptability by researchers working in different academic fields.

Huebner (1994) reports a coefficient alpha of 0.82 for the SLSS, test-retest reliability across a one-to-two week period as 0.74 and expected correlations with parental estimates of children's life satisfaction and teacher perceptions of classroom behaviour problems. It is comprised of seven items with a six-point response scale ranging from 'strongly disagree' to 'strongly agree'.

The SDQ is described as a 'behavioural screening questionnaire about 3 to 16-year-olds' (www.sdqinfo.com/b1.html). The self-report version (designed for 11-16-year-olds) includes 25 items and uses a three-point response scale ('not true', 'somewhat true' and 'certainly true'). There are four sub-scales (each with five items) that combine to assess 'difficulties': emotional symptoms; conduct problems, hyperactivity/ inattention and peer relationship problems. A further sub-scale assesses prosocial behaviour (also with five items). Goodman (2001) reports satisfactory reliability of the SDQ with a coefficient alpha of 0.73 and test-retest reliability after 4 to 6 months of 0.62.

All questions involved children choosing from one of the responses by ticking the box that represented them best. Two surveys were distributed, which differed in one respect. In one questionnaire, children were asked to provide an explanation for their answers to two of the mental-wellbeing questions (happiness and feeling left out); the second questionnaire provided response boxes for the two other questions (confidence and helplessness).

The pupils that volunteered to talk through their answers completed the same questionnaire, but were asked to tell the researcher what they were thinking when

they answered each of the four well-being questions. Pupils were always asked 'so why did you pick that answer?' and 'how would you describe what that means?' (i.e., happy, confident, left out or helpless). Where necessary, prompts were used, such as 'why did you choose sometimes confident and not always confident?' or 'can you think of a time when you felt like that?'

2.4 The focus groups

Two members of the research team facilitated the focus groups; one acting as moderator while the other was responsible for a sub-set of the questions and for taking notes on the process. All focus groups with P7 pupils lasted 30 minutes, whilst those with S2 pupils lasted approximately 45 minutes. At the start of the S2 focus groups, participants were given the HBSC items to answer privately (as they had not taken part in the main survey).

In order to facilitate participation, enable all pupils to take part and protect participants' privacy, a range of 'activity sheets' was designed. Each pupil was encouraged to respond to our questions on the sheets without recourse to others in the group. This was subsequently discussed by those who wanted to talk about their answers. A brainstorming activity was introduced to keep momentum going and reach those pupils who were less comfortable with written activities. Finally, vignettes were used to prompt discussion. Below, there is a brief description of each section of the focus group. These are presented in the sequence used within each group.

Identifying 'confidence/happiness'

Pupils were asked to first identify someone they thought was a 'happy' or (in a separate group) 'confident' person. This could be a family member, a friend, a teacher or someone famous. When they had decided, they were asked to explain why they thought that person was happy or confident (i.e., how did they know?). This technique was not used for helpless and left out due to ethical concerns.

Constituents of confidence, happiness, left out, helpless (vignettes)

Two vignettes were presented to children in each group as a prompt to examine constituents of the four aspects of mental well-being. These vignettes centred on a person of the same sex feeling happy or confident (or the opposite), helpless or left out in particular situations (at school, at home, on the way home, with a group of people the same age). Pupils were asked to think about the reasons why the person might be feeling that way.

Word association

This task was usually undertaken as a brainstorming activity but pupils could write down their answers if they wished. They were asked to write down or shout out any words of feelings they think of when they hear the words 'happy', 'confident', left out' or 'helpless'.

Gender differences

In this section, we asked each group to decide whether they thought boys or girls in general answered the questionnaire item more favourably and then explain why. The researcher drew on HBSC data from the previous 2006 survey to then inform the pupils of our results and gauge their responses.

Definition

Having covered a number of different ways of looking at the concept of interest, pupils were then asked to provide their own definition (like a dictionary) of the word.

Contributory factors

Once pupils were comfortable with the researchers and nearing the end of the groups, we asked them to think about the kind of things that made them (or people their age) feel happy, confident, left out or helpless.

Associated behaviours

Similarly, we then asked how people usually behave if they're feeling happy, confident, left out or helpless and what they might do if they found themselves in that situation or wanted to prevent feeling that way.

Opposites

This task operated in a similar way to the earlier word association activity. This time, pupils were asked to think about words or feelings that represented the opposite of the concept discussed in the group.

3. Analysis of data

3.1 Data entry

Data were entered by an Administrative Assistant at the Child and Adolescent Health Research Unit. The entire dataset was subsequently checked by the research team and any corrections made. The focus groups and 'think aloud' interviews were transcribed by an Administrator (experienced in transcription) within the Moray House School of Education at The University of Edinburgh and then checked by the research team.

3.2 Assessing reliability

Test-retest reliability was assessed through examination of Pearson correlations between Time 1 (Survey 1 responses) and Time 2 (Survey 2 responses) for each scale or single item measure. Acceptable test-retest reliability is dependent on the test carried out. Generally, 0.6 is used as a level of acceptability with more than 0.8 representing good reliability. However, this is dependent on the measure under examination and the length of time between occasions when measurements are taken. The longer the interval between measurements, the smaller the reliability measure is likely to be. Furthermore, single-item measures have lower reliability values than multiple-item measures (Diener & Lucas, 2000; Schimmack & Oishi, 2005) and measures of "trait" are likely to have lower test-retest validity scores than intelligence and other cognitive abilities. Canivez and Watkins (1998), for example, reported reliability of greater than 0.85 for intelligence among schoolchildren aged 9-12 years, while Roberts and DelVecchio (2000) found reliability of personality traits for the same age group to fall below 0.5. This might explain why test-retest correlations are often cited as acceptable when they fall as low as 0.4 (Andrews & Withey, 1976; Kammann & Flett, 1983; Watson, 2004). Research has also shown that reliability correlations for personality increase with age (Roberts & DelVecchio, 2000), so we might expect test-retest reliability in the current study to drop below the preferred level of 0.6 for some measures.

3.3 Assessing validity

To assess how well our items measure aspects of mental well-being, Pearson correlations were calculated between our items and the SLSS and subscales of the SDQ. The face validity of the items was assessed through examination of children's queries whilst completing the survey; categorisation of the children's responses to the open-ended questions on the survey, and through a detailed analysis of the focus group and think aloud data.

Tables were drawn up for the survey responses with categories derived from commonalities in children's reasons for either feeling happy/unhappy, confident/not very confident, etc. The number of responses within each category was then calculated to distinguish common and unusual reasons. An adapted version of the Framework method (Ritchie & Lewis, 2003) was used to support the analytic process, particularly in relation to the focus group material. This method involved creating a grid within Excel, with each row (reading horizontally) corresponding to each focus group and each column (reading vertically) including a summary of the children's responses in relation to each constituent activity as discussed in Section 2.4. This structure then allows cross-case and cross-variable (or activity in this case) comparisons; summaries of which were created in another Excel sheet (see Appendix 2 for excerpts from both Excel sheets).

3.4 Presentation of data in Results section

Within the Results section, each item (happy, confident, feeling left out, feeling helpless and life satisfaction) is discussed in turn and the quantitative data are considered first. Comparisons are drawn between Survey 1 and 2 responses and between our sample and the much larger sample involved in the 2006 national HBSC survey in Scotland. Gender differences are also highlighted before correlational data from the comparison of each HBSC item with the established measures (the SDQ and the SLSS). We also examine the data in binary form, to represent high versus low levels of well-being, often preferred in analysis and interpretation of results. A binary measure ''has the advantage of not relying on differences in reported intensity'' (Diener & Biswas-Diener, 2002 pp. 124).

Results from the qualitative data (face validity) are then presented. Results from the open-ended survey questions are presented in graph form, prior to discussion of the data emerging from each activity within the focus groups. Finally, susceptibility to bias is considered in relation to the children's views on potential gender differences in relation to each item.

4. RESULTS

4.1 Happiness

Table 4.1a presents data on the percentage of children choosing particular responses to the question relating to happiness in Survey 1 and 2.

Table 4.1a: Responses to the happiness question:
'In general, how do you feel about your life at the moment?'

Degree of happiness	Survey 1 (N=294)	Survey 2 (N=294)
Very happy*	*49.0%*	*54.1%*
Quite happy	*45.2%*	*41.5%*
Don't feel very happy	*4.8%*	*3.7%*
Not happy at all	*1.0%*	*.7%*

* Gender difference at Survey 1

The girls in our sample were more likely than boys to report feeling very happy at the time of Survey 1 (56% versus 43% respectively, p=.028) but there was no difference at the time of Survey 2 (59% versus 49% respectively, p=.109). Comparison of our data with those from the last national HBSC survey suggest that there were more boys in our sample that were not as happy, or were less likely to admit to feeling very happy, than would be the case in the general population of boys in Scotland (see Table 4.1b).

Table 4.1b: Comparison of our sample's responses in Survey 1 with the findings from the national 2006 HBSC survey (happiness measure)

Scale	Girls		Boys	
	Our sample (N=140)	HBSC 2006* (N=888)	Our sample (N=154)	HBSC 2006* (N=812)
Very happy	55.7%	58.6%	42.9%	61.1%
Quite happy	38.6%	33.2%	51.3%	34.0%
Don't feel very happy	5.0%	6.5%	4.5%	3.7%
Not happy at all	0.7%	1.7%	1.3%	1.2%

*11-year-olds (Currie, Levin & Todd, 2008)

Test-retest reliability (survey)

The happiness question showed moderate test-retest reliability (r=0.57, p<.001) with the correlation increasing when the items were recoded into a binary variable, 'very happy' against all other responses (r=0.59). Table 4.1c shows the percentage agreement between Survey 1 and 2 for each response category. Overall, 73% of the pupils chose the same response at both time points, but 84% of those who reported feeling 'very happy' in Survey 1, opted for the same response in Survey 2. This suggests that the more positive you score on this question, the more stable your responses may be.

Table 4.1c: Comparison of responses to the measure of happiness at Survey 1 & 2

How do you feel about your life at the moment?		Survey 2								
		Total N*	Very happy		Quite happy		Don't feel very happy		Not happy at all	
			N	%	N	%	N	%	N	%
Survey 1	Very happy	*136*	*114*	*83.8*	*21*	*15.4*	*1*	*.7*	*0*	*.0*
	Quite happy	*126*	*34*	*27.0*	*84*	*66.7*	*7*	*5.6*	*1*	*.8*
	Don't feel very happy	*14*	*1*	*7.1*	*10*	*71.4*	*3*	*21.4*	*0*	*.0*
	Not happy at all	*2*	*1*	*50.0*	*0*	*.0*	*0*	*.0*	*1*	*50.0*

*Total N of cases with responses on Survey 1 and Survey 2 = 278

Construct validity (convergent/divergent)

Correlations between the five mental well-being items included in the HBSC study in Scotland are displayed in Table 4.1d. These were all significant at the 1% level and were in the expected direction. Happiness, confidence and life satisfaction were all positively related to one another and negatively related to feeling left out and helplessness. Happiness was most strongly associated with life satisfaction as measured by the Cantril Ladder (positive relationship) and feeling left out (negative relationship). In spite of this, the correlation with the Student Life Satisfaction Survey (SLSS) measure was very low (.19, $p<.01$). However, there appeared to be problems with the validity of this measure with our sample (see Section 4.5). Fairly low correlations were also found between the happiness measure and the SDQ Total Difficulties Scale and the various sub-scales (Table 4.1e).

Table 4.1d: Correlations between the five items included in the HBSC survey (Survey 1)

Item	Happiness	Confidence	Feeling left out	Helplessness	Life satisfaction
Happiness	1	.250	-.389	-.321	.588
Confidence	.250	1	-.344	-.255	.310
Feeling left out	-.389	-.344	1	.323	-.507
Helplessness	-.321	-.255	.323	1	-.413
Life satisfaction	.588	.310	-.507	-.413	1

Table 4.1e: Correlations between the happiness measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	*292*	*.285*	*p <.001*
Emotional Symptoms	*292*	*-.344*	*p <.001*
Conduct Problems	*291*	*-.230*	*p <.001*
Hyperactivity Scale	*292*	*-.244*	*p <.001*
Peer Problems Scale	*292*	*-.299*	*p <.001*
Total Difficulties	*291*	*-.395*	*p <.001*

When used as a binary measure 'very happy' against all other responses, correlations were lower for all except the Prosocial sub-scale (Table 4.1f). The correlation between Total Difficulties (SDQ) and happiness in Survey 2 was -.43 (N=292).

Table 4.1f: Correlations between the binary happiness measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	*291*	*.288*	*p <.001*
Emotional Symptoms	*292*	*-.323*	*p <.001*
Conduct Problems	*291*	*-.203*	*p <.001*
Hyperactivity Scale	*292*	*-.221*	*p <.001*
Peer Problems Scale	*292*	*-.198*	*p <.001*
Total Difficulties	*291*	*-.336*	*p <.001*

Face validity (children's understanding of 'happy')

Survey responses

There were only two queries on this question during the administration of the survey; one pupil asked if it meant how happy are you at school and the other asked if they were supposed to respond in terms of how they were feeling at the moment. Figure 4.1a and 4.1b present data on the categories generated from examination of the open-ended responses. 226 reasons were derived from the explanations given by 170 cases. The most common reasons given for feeling happy related to positive relationships either with friends or parents/family at home. 42% of the explanations included reference to these relationships. Although the absence of these positive relations was highlighted in the explanations children gave for not feeling happy (i.e., problems with peers and lack of support at home), specific negative or stressful events were most commonly referred to (in 28% of the reasons given for not feeling happy).

Figure 4.1a: Reasons for feeling happy (% of responses where child used explanation)

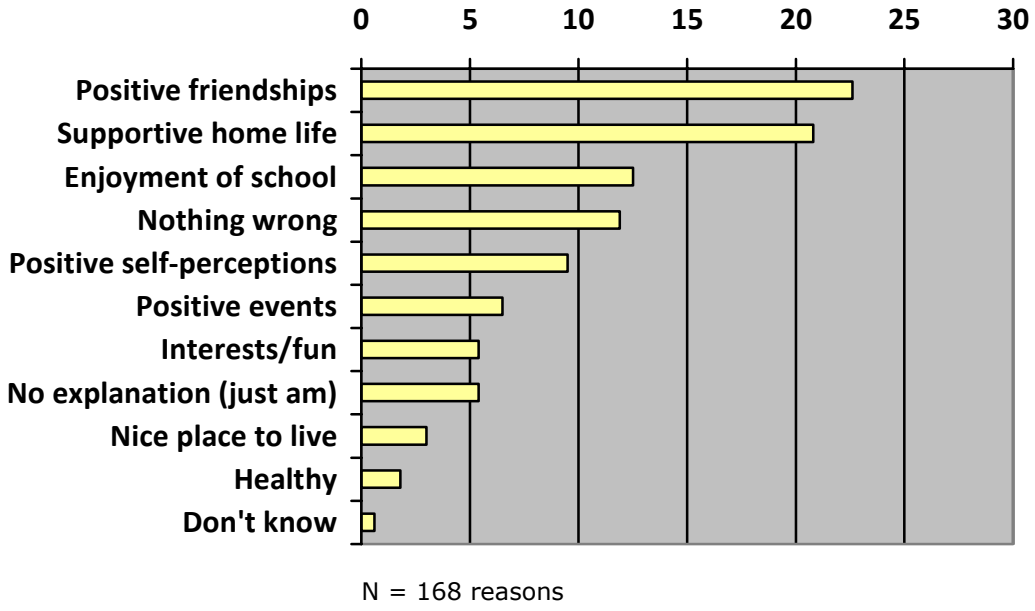
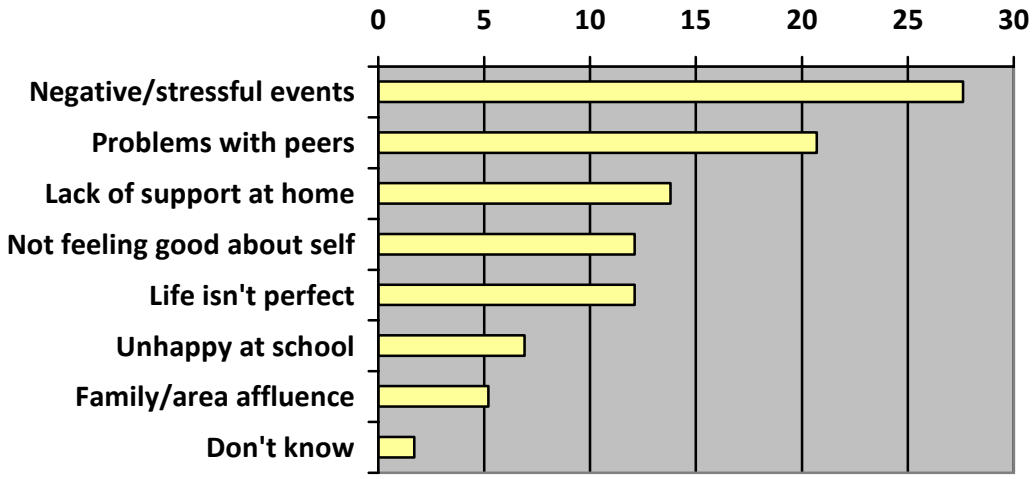


Figure 4.1b: Reasons for not feeling happy (% of responses where child used explanation)



N = 58 reasons

Together, over 40% of the responses highlighted positive friendships and a supportive family life as important in determining happiness, supporting the positive correlation between happiness and the Prosocial Scale of the SDQ. Equally, the negative correlations with the SDQ scales assessing 'difficulties' (i.e., particularly emotional symptoms and peer problems) are supported by the data above in relation to some of the factors that children say make them feel unhappy (e.g., problems with peers, not feeling good about self).

Focus group/think aloud data

Identifying 'happiness'

Children most often referred to family members or friends and explained their happiness in terms of them always smiling or laughing, being fun or funny or always in a good mood. One group of S2 girls explained that their choice of 'happy' person had lots of support or love from others. Two boys chose David Beckham and described his happiness in terms of things he has: money; talent, a wife and kids.

Constituents of happiness

In response to the vignette where children had to explain why the person was feeling happy in different circumstances, references were made to being with family or good friends, enjoying a subject or it being the last day of school (school context), sunny weather, seeing new born baby, being in a good mood, or something positive happening that day (won football match, got a job, won the lottery, good news). Reasons provided for the person in the vignette who was not feeling happy included having had an argument with or fallen out with someone, being bullied, a family member being ill, someone having died, being dumped and getting expelled.

Word association/contributory factors

The most common words children chose to convey happiness or list things that made them happy were: smile, laughter, joy, fun, playing, specific foods, parties, people, animals, sun and friends. Indeed, when asked what made them happy personally, the most popular responses were: friends; hobbies (mostly boys); family; being included; winning something; summer holidays; something good happening in the family, and parties/birthdays. When asked how they keep happy, children referred to not worrying or thinking too much, not thinking about things that make you angry,

keeping yourself entertained, sleeping if unhappy, thinking about things that make you laugh, not doing things that upset you, buying yourself something, getting a boyfriend, eating chocolate, watching TV or listening to music.

Definition

Definitions included words that they had used within the word association task (e.g., cheerful, joyful, good mood, laughing and smiling). However, children also used expressions such as 'feeling good about yourself', 'feeling alive', 'when someone or something feels good', 'someone who has a good life' and 'warm glow inside'.

Associated behaviours

Behaviours associated with feeling happy were described most often as 'going hyper', smiling and laughing, dancing and cheering/singing. Other behaviours included being more likely to do things (doing more than usual), bursting with energy, running about, being talkative, having bright eyes, jumping up and down and not being bothered about making a fool of yourself.

Opposites

Most commonly, children referred to feeling down/sad/upset/miserable as being the opposite of happy. Three groups described the opposite as being related to anger or depression and less commonly individuals referred to being worried/scared, disappointed or stressed, not being confident, feeling lonely, impatient or being hurt.

Susceptibility to bias (gender differences)

To assess participants' views, thereby highlighting bias, the groups were asked who they thought was more likely to report being happier, boys or girls. Interestingly, in spite of the girls in our sample being more likely than boys to report feeling very happy in the survey, there was majority agreement from both sexes that boys were more likely to report being happier. Boys described this tendency in terms of girls' fall-outs being permanent (compared with boys who fall out for a day and make up), girls not having guts and being bothered if they drop something or fall, or girls having more to do than boys (getting up earlier to do their hair). Some girls explained how boys *'play'* more and *'don't think about things'*. They felt that boys *'shrug things off, whereas girls have more feelings'* and are more sensitive. Boys, they explained, are less serious and more physical. Significantly, some girls felt that boys did not answer this question honestly, *'they just tick anything and want to look good'*. Boys were scared, these girls explained, to say that they are not happy and it is not as acceptable for them to talk about their feelings, whereas girls are allowed (alluding to societal norms). They explained how boys are supposed to be 'protectors' and not show any sign of weakness.

Box 4.1 provides a summary of the focus group data relating to happiness. The moderate reliability of the measure, its strong relationship with life satisfaction and the face validity data suggest that this measure is functioning well. Happiness was also described by children as both a 'trait' (people who are always in a good mood) and a 'state' (linked to particular events in life), explaining why test-retest reliability was not higher.

Box 4.1: Main and sub-themes relating to 'happiness'

(1) Meaning of happiness (from think aloud, survey and focus group definitions)

(1.1) Happy as an emotion
- (1.1)1. Cheerful, joyful, good mood
- (1.1)2. Excited
- (1.1)3. Laughter, smiling

(1.2) Feeling good about yourself
- (1.2)1. Warm glow, wonder within self, feeling alive
- (1.2)2. Feeling of success

(1.3) Feeling good/positive about life
- (1.3)1. Enjoyment
- (1.3)2. Being carefree/not worrying
- (1.3)3. Being satisfied/having everything you want

(2) Contributing factors (from Word Association/constituents/contributory factors in the focus groups)

(2.1) Self-perceptions
- (2.1)1. Being good at something
- (2.1)2. Being 'sorted'

(2.2) Companionship
- (2.2)1. Being with friends/girlfriends
- (2.2)2. Being with/having family
- (2.2)3. Being with other people who are happy
- (2.2)4. Being included

(2.3) Particular events/times
- (2.3)1. Holidays, birthdays, parties, moving, getting a job, Christmas, Summer, surprises
- (2.3)2. Having a good day/being in good mood
- (2.3)3. Last day of school/last period
- (2.3)4. Getting your own way

(2.4) Hobbies/activities (Football, bikes, watching TV, pool, shooting range, mini moto, playing, eating, sleeping)

(2.5) Getting things (Presents, money, new clothes, winning something)

(2.6) Environment
- (2.6)1. Sunny weather/summer/heat
- (2.6)2. Healthy surroundings, roads, trees, waters

(3) Associations

(3.1) General associations
- (3.1)1. Friendliness
- (3.1)2. Fun
- (3.1)3. Sharing
- (3.1)4. Colour (yellow)
- (3.1)5. Animals
- (3.1)6. Celebrities

(3.2) Similar feelings
- (3.2)1. Cheerful, joyful, ecstatic, elated
- (3.2)2. Excited
- (3.2)3. Wonder
- (3.2)4. Feeling good inside
- (3.2)5. Expressions (Smile, laughter)

(3.3) Opposites

When you don't smile, feel down/sad/upset/unhappy/miserable, droopy, worried/scared, disappointed about something, not confident, failing a subject in school, tired, anger/rage/annoyed, depression, stress, when things are boring, unsociable, dull (like dark cloud has passed over you), lonely, moody/narky, impatient, you have been hurt/people bullying you

4.2 Confidence

Table 4.2a presents data on the percentage of children choosing particular responses to the question relating to confidence in Survey 1 and 2.

Table 4.2a: Responses to the confidence question
'How often do you feel confident in yourself?'

Frequency of feeling confident	Survey 1 (N=294)	Survey 2 (N=294)
Always	*12.9%*	*23.1%*
Often	*52.4%*	*52.0%*
Sometimes	*26.9%*	*20.7%*
Hardly ever	*6.1%*	*3.7%*
Never	*1.7%*	*.3%*

*No gender differences

There were no gender differences at the time of Survey 1 or 2. Comparison of our data with those from the last national HBSC survey suggest that there were more boys and girls in our sample that were not as confident, or were less likely to admit to always feeling confident, than would be the case in the general population of 11-year-olds in Scotland (see Table 4.2b).

Table 4.2b: Comparison of our sample's responses in Survey 1 with the findings from the national 2006 HBSC survey (confidence measure)

Scale	**Girls**		**Boys**	
	Our sample (N=140)	HBSC 2006* (N=891)	Our sample (N=154)	HBSC 2006* (N=812)
Always	10.7%	23.9%	14.9%	32.9%
Often	51.4%	37.8%	53.2%	39.9%
Sometimes	30.0%	23.0%	24.0%	16.6%
Hardly ever	7.1%	9.8%	5.2%	6.0%
Never	0.7%	5.5%	2.6%	4.6%

*11-year-olds (Currie, Levin & Todd, 2008)

Test-retest reliability

The confidence question showed lower test-retest reliability then happiness (r=0.47, p<.001) and the correlation decreased when the items were recoded into a binary variable, 'always confident' against all other responses (r=0.44, p<.001). Table 4.2c shows the percentage agreement between Survey 1 and 2 for each response category.

Table 4.2c: Comparison of responses to the measure of confidence at Survey 1 & 2

How often do you feel confident in yourself?		Survey 2										
		Total N*	Always		Often		Sometimes		Hardly ever		Never	
			N	%	N	%	N	%	N	%	N	%
Survey 1	Always	*37*	*26*	*70.3*	*9*	*24.3*	*2*	*5.4*	*0*	*.0*	*0*	*.0*
	Often	*145*	*29*	*20.0*	*96*	*66.2*	*19*	*13.1*	*1*	*.7*	*0*	*.0*
	Sometimes	*74*	*6*	*8.1*	*34*	*45.9*	*30*	*40.5*	*4*	*5.4*	*0*	*.0*
	Hardly ever	*17*	*1*	*5.9*	*4*	*23.5*	*6*	*35.3*	*6*	*35.3*	*0*	*.0*
	Never	*5*	*2*	*40.0*	*2*	*40.0*	*0*	*.0*	*0*	*.0*	*1*	*20.0*

*Total N of cases with responses on Survey 1 and Survey 2 = 278

Overall, 57% of the pupils chose the same response at both time points, but 70% of those who reported feeling 'always confident' in Survey 1, opted for the same response in Survey 2. 66% also chose 'often' at both time points, again suggesting that responses are likely to be more stable if they are positive to begin with.

Construct validity (convergent/divergent)

As noted previously, confidence was positively correlated with happiness and life satisfaction (although these were fairly low) and negatively correlated with feeling left out and helplessness (see Table 4.1d). Fairly low correlations were also found between the confidence measure and the SDQ Total Difficulties Scale and the various sub-scales (Table 4.2d). When used as a binary measure 'always confident' against all other responses, correlations were lower for most sub-scales (Table 4.2e).

Table 4.2d: Correlations between the confidence measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	*292*	*.182*	*p =.002*
Emotional Symptoms	*292*	*-.371*	*p <.001*
Conduct Problems	*291*	*-.123*	*p <.001*
Hyperactivity Scale	*292*	*-.199*	*p <.001*
Peer Problems Scale	*292*	*-.211*	*p <.001*
Total Difficulties	*291*	*-.327*	*p <.001*

Table 4.2e: Correlations between the binary confidence measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	*292*	*.183*	*p =.002*
Emotional Symptoms	*292*	*-.165*	*p <.001*
Conduct Problems	*291*	*-.064*	*p <.001*
Hyperactivity Scale	*292*	*-.199*	*p <.001*
Peer Problems Scale	*292*	*-.107*	*p <.001*
Total Difficulties	*291*	*-.151*	*p <.001*

The correlation between Total Difficulties (SDQ) and confidence in Survey 2 was -.31 (N=292).

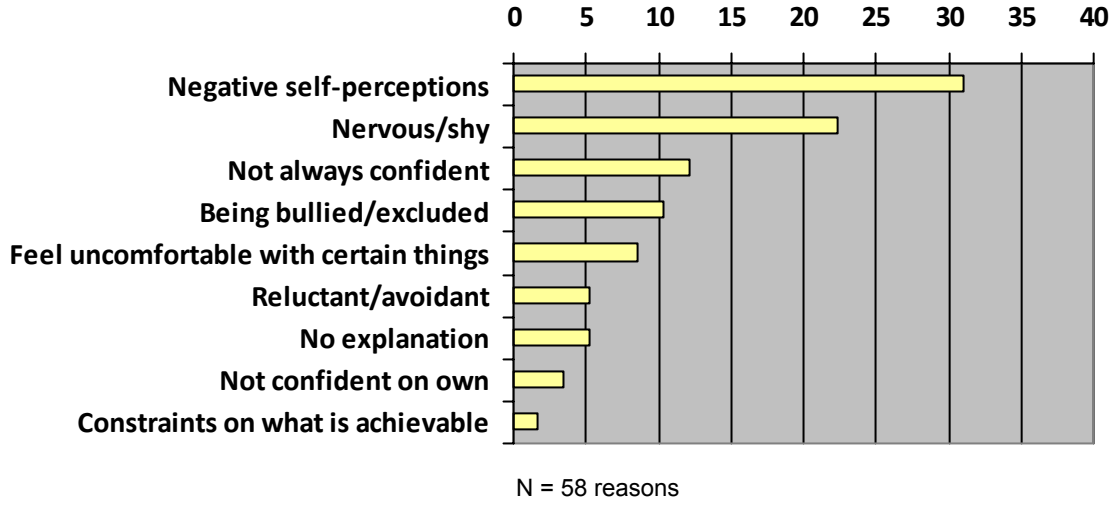
Face validity (children's understanding of 'confident')

Survey responses

There were only two queries on this question during the administration of the survey, both children asking what 'confident' meant. Figure 4.2a and 4.2b present data on the categories generated from examination of the open-ended responses. 156 reasons were derived from the explanations given by 135 cases. The most common reasons given for feeling confident related to the individual's perception that they tried hard to feel this way or that they were competent at particular things. A greater proportion of responses to the survey question (compared with happiness) gave no particular explanation for their response, just a reference to being confident. Support from others was mentioned in 11% of the responses and social influence is implied in the references to not being shy. However, in the main, confidence appeared to be viewed as something inherently individual/psychological (i.e., more 'trait' than 'state'). This is confirmed in the reasons children gave for not feeling confident, where the majority of the explanations related to negative self-perceptions or being nervous/shy (evident in 53% of the reasons given for not feeling confident).

Figure 4.2a: Reasons for feeling confident (% of responses where child used explanation)

Figure 4.2b: Reasons for not feeling confident (% of responses where child used explanation)



Focus group/think aloud data

Identifying 'confidence'

Children tended to choose family members or friends as people they thought were confident. Interestingly, boys tended to choose males (dad, granddad, brother, male friend/cousin) and girls females (aunt, sister, female friend/cousin). These people were described most often as *'up for anything'* (phrase used six times), although frequent references were also made to them saying how they feel, putting themselves forward, and not being scared to talk to people and ask for help. One P7 girl chose Johnny Depp (filmstars were deemed to be confident, he had done embarrassing things and had positive reviews), while one S2 boy chose Ronaldo (footballer) because he was never scared to try something different and do things that no one else does, he is not shy and doesn't hide away. Superman was also mentioned in one of the boys' groups. Some of the choices and explanations suggest that confident may sometimes be confused with achieving.

Constituents of confidence

In response to the vignette, where children had to explain why the person was feeling confident in different circumstances, most often reference was made to being happy with family life. Other comments related to being happy with life in general, being praised, having no hassles, never being in trouble, doing well at school and being good at something. One group of girls referred to the person having lots of friends, going somewhere after school or there being something good on TV, suggesting parallels with happiness and perhaps a lack of understanding of confidence. Within this same group, there was also some confusion between feeling confident in yourself and confident that something might happen (e.g., getting more pocket money). This should not pose any problems within the survey, where the wording is clear ('how often do you feel confident in yourself?'). Reasons provided for the person in the vignette who was not feeling very confident tended to evolve mainly around being bullied/abused (lack of attention at home, mum and dad putting them down, people *'slagging them off'*). References were also made to them not having a good time at home, feeling sad, struggling with school work, having a big test forthcoming or difficult homework to be in the next day.

Word association/contributory factors

The most common words children chose to convey confidence or list things that made them feel confident were: happy/smiley; unafraid; excitement, feeling good about yourself and brave. Other words/phrases used less frequently included *'big ego'*, stressfree, content, boldness, amazement, willing to do things, proud, positive, motivated, strong, able to stand up in front of a big crowd and XFactor. When asked what made them feel confident personally, the most popular responses were: someone saying good things about you/encouragement, previous success/winning something and doing a talk/speech in front of the class (only boys). To keep feeling confident, they explained, you could hope for the best, believe in yourself and recognise that everyone needs help.

Definition

Interestingly, there was broad agreement that confident meant *'a form of strongness'*, being able to either go through things that others find scary and *'taking whatever life throws at you'* or standing up for yourself/speaking out. Most groups referred to being able to get up in front of people and speak out. While confidence was usually described as wholly positive, there were some definitions that included references to having a big ego. Moreover, when asked if being confident was always a good thing, there was general consensus that although confidence is good, you could have too

much and appear big-headed, *'up yourself'*, a *'show off'*, cocky or arrogant and not see anything wrong with you. Others mentioned the possibility that confidence might backfire on you. You might take on something you think you can do but then not be able to and therefore embarrass yourself.

Associated behaviours

Behaviours associated with being confident were described most often as people saying *'this is easy'*, being the first to volunteer to do something, engaging more (in conversations, activities, saying how you feel) and *'jumping about'*. Two of the boys' groups tended to focus on the negative, drawing attention to a *'swagger'* and *'bragging'*.

Opposites

Most commonly, children referred to being shy/nervous, hiding yourself, keeping things to yourself and not thinking you can do something as the opposite of confident. In this sense, it appears that confidence is associated with being open and somehow larger than life, with less recognition of being quietly confident. There were references to being worried, scared, unsure, no self-belief, not wanting to try new things and being sad or unhappy.

Susceptibility to bias (gender differences)

There were no gender differences in our sample's responses to the question on confidence. However, to highlight possible bias within the general population reporting, each group was asked who, in general, they thought was more likely to report being more confident, boys or girls. There was majority agreement from both sexes (as with happiness) that boys were more likely to report being more confident. Only one of the girls thought girls were more confident as they had more people around them to talk to and two boys thought that boys and girls did not differ. The rest of the boys explained that boys shouted more, got more involved in activities, were more active, louder and would talk to anyone. Girls, they explained, were unwilling to volunteer in class (as they got embarrassed, particularly in front of boys) and less likely to get involved. Girls similarly described boys as not being afraid of anything, being more hyper and more willing to do things. Girls felt that their sex was more likely to keep things to themselves and tended to have more fears.

Box 4.2 provides a summary of the focus group data relating to confidence. Together the data suggest that this measure is functioning reasonably well, although there are potential inconsistencies between the reliability and validity data. Test-retest reliability was relatively low suggesting that confidence may be more 'state' than 'trait'. Yet children's descriptions suggest the opposite. Further work is required in order to understand why the reliability of the measure was not higher.

Box 4.2: Main and sub-themes relating to 'confidence'

(1) Meaning of confidence (from think aloud, survey and focus group definitions)

(1.1) Confident as an attitude/approach to life
- (1.1)1. Up for anything
- (1.1)2. Not fearful/nervous
- (1.1)3. Being proud of yourself
- (1.1)4. Helping yourself and others to get on
- (1.1)5. Being prepared for something/thinking positively
- (1.1)6. Standing up for yourself
- (1.1)7. Not being put off by thoughts of what others might think
- (1.1)8. Willing to try things

(1.2) Competence
- (1.2)1. Being able to respond to people
- (1.2)2. You know you can do something/being sure of yourself
- (1.2)3. Form of strength
- (1.2)4. Being able to speak out/get up in front of people

(1.3) Feeling positive about life
- (1.3)1. Happy/content
- (1.3)2. Not being scared/fearful
- (1.3)3. Being satisfied/having everything you want

(1.4) Having a big ego (sometimes negative)

(2) Contributing factors (from Word Association/constituents/contributory factors in the focus groups)

(2.1) Support
- (2.1)1. From friends and family (give you a 'boost', praise you, having a laugh)
- (2.1)2. Knowing that others love and care about you
- (2.1)3. Having lots of friends

(2.2) Personal attributes
- (2.2)1. Positive attitude - see (1.1)
- (2.2)2. Big ego
- (2.2)3. Being a 'performer' (enjoying performing)

(2.3) Prior success/expectations
- (2.3)1. Doing well at school
- (2.3)2. Familiarity with something
- (2.3)3. Winning competition
- (2.3)4. Friend succeeding at something

(3) Associations

(3.1) General associations
- (3.1)1. Happy/smiley
- (3.1)2. Friends/family
- (3.1)3. Brave/boldness/strong
- (3.1)4. Willing to do things
- (3.1)5. Positive/motivated
- (3.1)6. Being able to stand up in front of a big crowd/X Factor
- (3.1)7. School/lessons/going to high school

(3.2) Similar feelings
- (3.2)1. Happy
- (3.2)2. Unafraid/not scared
- (3.2)3. Proud
- (3.2)4. Excited/jumping about/amazement
- (3.2)5. Content
- (3.2)6. Feeling good about yourself

(3.3) Opposites
Worried, unconfident, scared, unsure, not thinking you can do something, getting put down by someone, shy/keep things to self/hide yourself, doesn't believe in self, don't want to do things they did before, not wanting to try new things, sad/unhappy/upset, embarrassed, nervous, not being able to stand up in front of a big crowd

4.3 Left out

Table 4.3a presents data on the percentage of children choosing particular responses to the question relating to feeling left out in Survey 1 and 2.

Table 4.3a: Responses to the left out question
'How often do you feel left out?'

Frequency of feeling left out	Survey 1 (N=295)	Survey 2 (N=294)
Never	*13.2%*	*17.7%*
Hardly ever	*40.3%*	*45.6%*
Sometimes	*34.9%*	*30.6%*
Often	*9.8%*	*6.1%*
Always	*1.7%*	*.0%*

*No gender differences

There were no gender differences at the time of Survey 1 or 2. Comparison of our data with those from the last national HBSC survey suggests that fewer of the boys and girls in our sample never feel left out than is the case in the general population of 11-year-olds in Scotland (see Table 4.3b).

Table 4.3b: Comparison of our sample's responses in Survey 1 with the findings from the national 2006 HBSC survey (left out measure)

Scale	Girls		Boys	
	Our sample (N=141)	HBSC 2006* (N=890)	Our sample (N=154)	HBSC 2006* (N=812)
Never	10.6%	22.6%	15.6%	32.9%
Hardly ever	40.4%	41.7%	40.3%	39.4%
Sometimes	36.2%	25.5%	33.8%	20.6%
Often	11.3%	8.2%	8.4%	6.2%
Always	1.4%	2.0%	1.9%	1.0%

*11-year-olds (Currie, Levin & Todd, 2008)

Test-retest reliability

The left out question showed high test-retest reliability (r=0.72, p<.001). However, the correlation decreased when the items were recoded into a binary variable, 'never feel left out' against all other responses (r=0.57, p<.001). Table 4.3c shows the percentage agreement between Survey 1 and 2 for each response category.

Table 4.3c: Comparison of responses to the measure of feeling left out at Survey 1 and 2

How often do you feel left out of things?		Survey 2										
		Total N*	Never		Hardly ever		Sometimes		Often		Always	
			N	%	N	%	N	%	N	%	N	%
Survey 1	Never	*37*	*28*	*75.7*	*8*	*21.6*	*1*	*2.7*	*0*	*.0*	*0*	*.0*
	Hardly ever	*112*	*21*	*18.8*	*79*	*70.5*	*12*	*10.7*	*0*	*.0*	*0*	*.0*
	Sometimes	*98*	*3*	*3.1*	*35*	*35.7*	*56*	*57.1*	*4*	*4.1*	*0*	*.0*
	Often	*28*	*0*	*.0*	*2*	*7.1*	*15*	*53.6*	*11*	*39.3*	*0*	*.0*
	Always	*5*	*0*	*.0*	*1*	*20.0*	*1*	*20.0*	*3*	*60.0*	*0*	*.0*

*Total N of cases with responses on Survey 1 and Survey 2 = 280

Overall, 62% of the pupils chose the same response at both time points, but 76% of those who chose 'never feel left out' and 71% of those choosing 'hardly ever' in Survey 1, also reported feeling the same in Survey 2.

Construct validity (convergent/divergent)

Feeling left out was positively correlated with helplessness and negatively correlated with happiness, confidence and life satisfaction in particular (see Table 4.1d). Fairly low correlations were found between the left out measure and the Prosocial, Hyperactivity and Conduct Scales of the SDQ. However, unlike the happiness and confidence items, there were higher correlations between left out and the two SDQ sub-scales measuring peer problems and emotional symptoms. This increases the correlation between left out and Total Difficulties to .56 (Table 4.3d). When used as a binary measure 'never left out' against all other responses, correlations were substantially lower for most sub-scales (Table 4.3e).

Table 4.3d: Correlations between the left out measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	*293*	*-.147*	*p =.012*
Emotional Symptoms	*293*	*.469*	*p <.001*
Conduct Problems	*292*	*.341*	*p <.001*
Hyperactivity Scale	*293*	*.280*	*p <.001*
Peer Problems Scale	*293*	*.500*	*p <.001*
Total Difficulties	*292*	*.560*	*p <.001*

Table 4.3e: Correlations between the binary left out measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	*293*	*-.147*	*p =.012*
Emotional Symptoms	*293*	*.159*	*p <.001*
Conduct Problems	*292*	*.093*	*p <.001*
Hyperactivity Scale	*293*	*.093*	*p <.001*
Peer Problems Scale	*293*	*.257*	*p <.001*
Total Difficulties	*292*	*.210*	*p <.001*

The correlation between Total Difficulties (SDQ) and left out in Survey 2 was .52 (N=292).

Face validity (children's understanding of 'left out')

Survey responses

There were no queries on this question during the administration of the survey. Figure 4.3a and 4.3b present data on the categories generated from examination of the open-ended responses. 145 reasons were derived from the explanations given by 135 cases. The most common reasons given for feeling left out related to disruptions in friendships (usually fall outs), not being picked (either by peers/in games or teachers within class) and generally feeling on the outside of groups due to lack of shared interests or experiences. Feeling left out appeared to be an emotion felt most often in the context of peers rather than family/home life, although children's position

in the family (being the youngest, etc.) was referred to within 7% of the explanations. 10% of the responses referred to very specific events and were categorised as 'other'. The main reason given for not feeling left out (used in 40% of the explanations) was having good friends; people you could rely on or who would stick up for you.

Figure 4.3a: Reasons for feeling left out (% of responses where child used explanation)

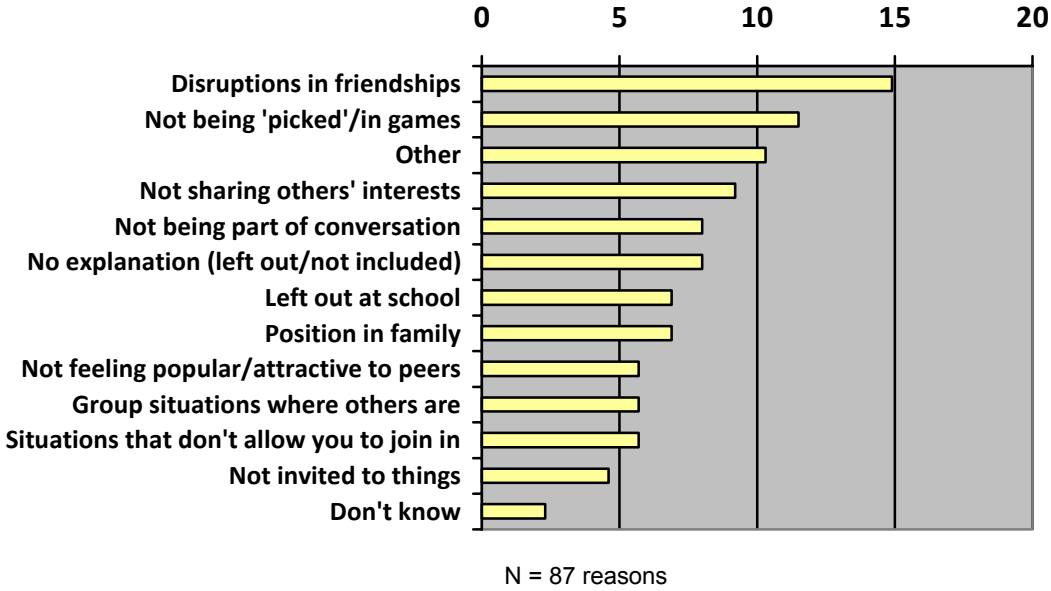
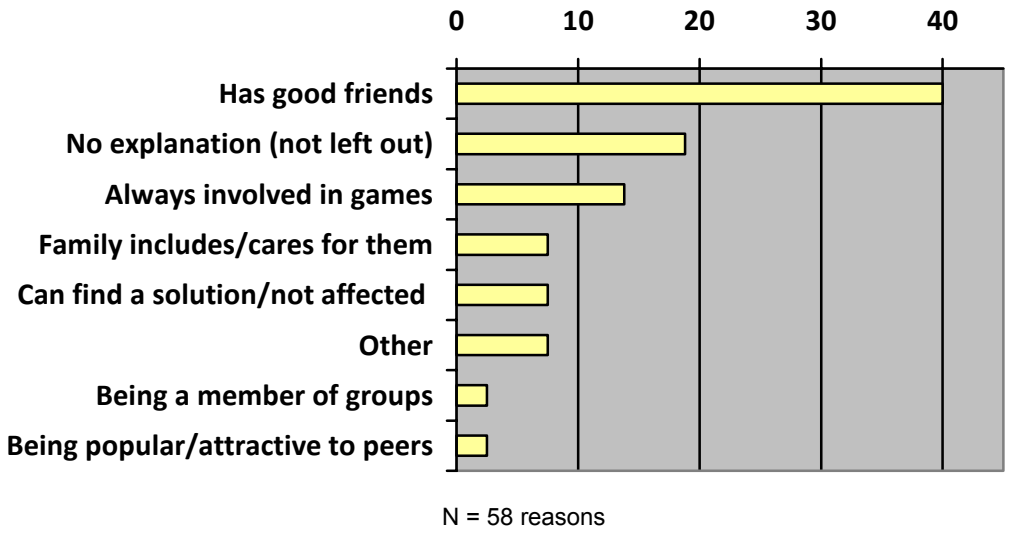


Figure 4.3b: Reasons for not feeling left out (% of responses where child used explanation)



Focus group/think aloud data

Constituents of feeling left out

In response to the vignette where children had to explain why the person was feeling left out in different circumstances, most often references were made to lack of attention at home (in the home context vignette) due to (baby) brothers or sisters getting more attention or more *'stuff'*, parents being tired or stressed, having no siblings to play with, being in the house alone and parents not caring for them properly. Within other contexts, children talked about friends leaving the person out or the person missing out on time with friends (as a result of being grounded, not

being allowed to go to the place involved, living far away or friends taking different subjects from them). In relation to being left out by friends, children mentioned being left out of sports (often perceived to be the result of being *'no good'*), not being included in conversations, people keeping secrets or friends unintentionally ignoring or making fun of them. There was recognition that being left out could be a perception rather than reality. For example, friends may actually be joking but the person takes it seriously, the person doesn't want to join in but then feels left out when they don't or they are in a bad mood so friends act differently with them. Moreover, not sharing common interests (smoking and going somewhere together were given as examples) could make you feel left out.

Word association/contributory factors

The most common words children chose to convey feeling left out or list things that made them feel left out were: sad/upset/unhappy; lonely/alone, and unwanted/neglected. Other responses included angry, frustrated, loner, worried, jealousy, bullied, different. Some children referred to particular sports/games where people were likely to feel left out (football, tig and basketball). When asked what made people their age feel left out, the most popular responses were related to not being permitted to do certain things (e.g., not permitted to play football due to age/religion/ competence, or parents not allowing them to go out with friends). The non-intentional nature of leaving people out was acknowledged as well as the subtle ways this can be enacted (i.e., making others jealous). To tackle or prevent feeling left out, they explained, you could do other things, tell the person who is leaving you out, try to be more involved, give it time or tell someone close that they trust.

Definition

There was broad agreement that left out meant the following: no one plays with you; not included; feeling sad; not joining in; being rejected; on your own; people don't want to be seen with you; when you don't get invited to things; feeling unwanted or lonely or you don't have many friends. These definitions also highlight (like other activities within the focus groups) the actions of people who leave others out (i.e., the reality of being left out), as well as the feeling of being left out (which may be reality or simply a person's perception of events). Interestingly, one boy defined left out as *'when you are overlooked'*, which appears to capture the personal feeling and perhaps the often unintentional or more subtle ways in which people can be left out.

Associated behaviours

Behaviours associated with being left out were described most often in terms of appearing somehow *'outside'* the group (walking behind, out of the conversation or not joining in a laugh), being on your own, or references were made to emotional expressions (sad face, looking away). Less frequently, children referred to running off crying, getting into a fight, being moody or not doing anything about being bullied by others.

Opposites

Most commonly, children referred to being happy, playing with others/joining in, getting picked/being invited to things, being popular, feeling like you're part of something and always having lots of friends.

Susceptibility to bias (gender differences)

Again, there were no gender differences apparent in our sample's responses to the question on feeling left out. However, to highlight possible bias in the responses of the general population, each group was asked who, in general, they thought was more

likely to report feeling left out, boys or girls. The four girls for whom we have data relating to this activity all agreed that girls were more likely to report feeling left out, as boys tend to always be in a big group, whereas girls spend time in smaller groups where fall-outs are more common. Four boys were in agreement, suggesting that girls were more likely to fall out and tease each other and perhaps felt left out because they couldn't play football! Within one of these groups, the boys felt that they didn't argue or get annoyed if they were left out, whereas girls would be upset and fight. One boy felt there was no gender difference in the tendency to feel left out and one said he didn't know if there was a difference. Overwhelmingly though (as six boys nominated boys), boys felt that there was more pressure on them than on girls, particularly if they didn't like sports or football teams. Interestingly, one boys' group thought that girls tended to have bigger friendship groups and are therefore never on their own.

Box 4.3 provides a summary of the focus group data relating to feeling 'left out'. Importantly, the reasons children provided for feeling (or not feeling) left out support the relatively high correlations found between the left out measure and the two SDQ sub-scales measuring peer problems and emotional symptom. Together with the reliability data, these findings suggest that this measure is effective and meaningful.

Box 4.3: Main and sub-themes relating to 'left out'

(1) Meaning of left out (from think aloud, survey and focus group definitions)

(1.1) Exclusion (intentional vs. unintentional)
- (1.1)1. Not being invited somewhere
- (1.1)2. Being left on own
- (1.1)3. Not being permitted to join in (age, religion, popularity, competence)
- (1.1)4. Being ignored/overlooked
- (1.1)5. Being bullied/picked on
- (1.1)6. Being picked last (games/sports)

(1.2) Lack of involvement/participation
- (1.2)1. Not joining in
- (1.2)2. Not being part of the group
- (1.2)3. Being new

(1.2) Absence of friends/support
- (1.2)1. Not having anyone to play with
- (1.2)2. People not listening to you
- (1.2)3. People not wanting to be with you/avoiding or rejecting you/keeping secrets

(1.3) Comparison with others
- (1.3)1. Feeling like everyone is treated better than you
- (1.3)2. Feeling unwanted/lonely
- (1.3)3. Not being able to do something everyone else can

(2) Contributing factors (from Word Association/constituents in the focus groups)

(2.1) Absence of support/attention/friends

(2.2) Family context
- (2.2)1. Lack of attention at home (siblings get more attention, parents tired/stressed, not caring for children properly)
- (2.2)2. Living far from friends/being grounded/not allowed to places where friends go
- (2.2)3. No siblings
- (2.2)4. Spending time at home alone

(2.3) Peer/school context
- (2.3)1. Competitive games where competence important (football, basketball, tig)
- (2.3)2. Not being popular and therefore excluded/not picked/teased
- (2.3)3. Disruptions in friendships (fall outs)
- (2.3)4. Friend is off school/friends take different subjects
- (2.3)5. Not doing the same things as friends (smoking)
- (2.3)6. Feeling less affluent than peers
- (2.3)7. Feeling less competent than peers

(2.4) Individual/psychological factors
- (2.4)1. Being a loner/outsider
- (2.4)2. Being grumpy/having a bad day
- (2.4)3. Not having confidence to join in

(3) Associations

(3.1) Similar feelings and associations
- (3.1)1. Sad/unhappy/upset
- (3.1)2. Angry/frustrated/irritated
- (3.1)3. A nobody/like nothing
- (3.1)4. Unwanted/lonely/stranded/different
- (3.1)5. Worried (about not having friends)
- (3.1)6. Unfair
- (3.1)7. Jealousy

(3.2) Opposites
Happy, playing with others, joining in/mixing with others, getting picked first, being invited to places, being popular, feeling like you're part of something, always having lots of friends, never alone, being able to join in, unlonely, wanted, not being bullied

4.4 Helplessness

Table 4.4a presents data on the percentage of children choosing particular responses to the question relating to feeling helpless in Survey 1 and 2.

Table 4.4a Responses to the helpless question
'How often do you feel helpless?'

How often do you feel helpless?	Survey 1 (N=289)	Survey 2 (N=291)
Never	24.2%	27.8%
Hardly ever	49.5%	51.2%
Sometimes	20.8%	17.2%
Often	5.2%	3.8%
Always	0.3%	.0%

*No gender differences

There were no gender differences at the time of Survey 1 or 2. Comparison of our data with those from the last national HBSC survey suggests that fewer boys and girls in our sample never feel helpless, than would be found in the national population of 11-year-olds. More boys in our sample appear to feel helpless 'sometimes', compared with the national sample (see Table 4.4b).

Table 4.4b: Comparison of our sample's responses in Survey 1 with the findings from the national 2006 HBSC survey (helpless measure)

Scale	**Girls**		**Boys**	
	Our sample (N=135)	HBSC 2006* (N=887)	Our sample (N=154)	HBSC 2006* (N=810)
Never	25.9%	38.1%	22.7%	41.7%
Hardly ever	51.1%	34.4%	48.1%	34.9%
Sometimes	17.8%	18.7%	23.4%	16.4%
Often	5.2%	6.4%	5.2%	4.9%
Always	.0%	2.4%	0.6%	2.0%

*11-year-olds (Currie, Levin & Todd, 2008)

Test-retest reliability

The helpless question showed fairly low test-retest reliability ($r=0.52$, $p<.001$) (similar to the confidence measure) and the correlation decreased when the items were recoded into a binary variable, 'never feel helpless' against all other responses ($r=0.45$, $p<.001$). Table 4.4c shows the percentage agreement between Survey 1 and 2 for each response category. Overall, 60% of the pupils chose the same response at both time points, with 65% of those reporting that they 'never' felt left out and 70% choosing 'hardly ever' in both Survey 1 and 2.

Table 4.4c: Comparison of responses to the measure of feeling helpless at Survey 1 & 2

How often do you feel helpless?		Survey 2										
		Total N*	Never		Hardly ever		Sometimes		Often		Always	
			N	%	N	%	N	%	N	%	N	%
Survey 1	Never	62	40	64.5	18	29.0	4	6.5	0	.0	0	.0
	Hardly ever	135	27	20.0	95	70.4	11	8.1	2	1.5	0	.0
	Sometimes	58	6	10.3	25	43.1	22	37.9	5	8.6	0	.0
	Often	14	2	14.3	2	14.3	6	42.9	4	28.6	0	.0
	Always	1	0	.0	0	.0	1	100.0	0	.0	0	.0

*Total N of cases with responses on Survey 1 and Survey 2 = 270

Construct validity (convergent/divergent)

Helplessness was positively correlated with feeling left out and negatively correlated with happiness, confidence and life satisfaction (see Table 4.1d). Low correlations were found between the helpless measure and most of the SDQ sub-scales. However, there was a higher correlation between helpless and the Total Difficulties Scale than those with happiness and confidence. This is perhaps explained by the slightly higher correlation with peer problems (Table 4.4d).

Table 4.4d: Correlations between the helpless measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	287	-.190	p =.001
Emotional Symptoms	287	.330	p <.001
Conduct Problems	286	.232	p <.001
Hyperactivity Scale	287	.256	p <.001
Peer Problems Scale	287	.315	p <.001
Total Difficulties	286	.402	p <.001

Table 4.4e: Correlations between the binary helpless measure and SDQ scales (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	287	-.174	p =.001
Emotional Symptoms	287	.166	p <.001
Conduct Problems	286	.120	p <.001
Hyperactivity Scale	287	.172	p <.001
Peer Problems Scale	287	.167	p <.001
Total Difficulties	286	.220	p <.001

When used as a binary measure 'never feel helpless' against all other responses, correlations with all scales were substantially lower (Table 4.4e). The correlation between Total Difficulties and helpless in Survey 2 was .39 (N=289).

Face validity (children's understanding of 'helpless')

Survey responses

This question prompted the most queries during administration of the survey (14 of 38 queries in total); children asking 'what does helpless mean?'. When encouraged to reflect on what it meant, these children explained that it was about helping people,

not being interested in things, whether or not to help, how many times you need help or that you do not get help. In addition, of the 11 pupils who talked us through their questionnaire (the 'think aloud' technique), four immediately asked the researcher what helpless meant. This is important data, as the children's queries reflect an immediate response to the item, whereas discussions within focus groups can prompt greater reflection on meaning. Children are unlikely to process information this way when completing a survey, perhaps particularly with the HBSC survey as it covers a broad range of topics compared with other short, focused surveys.

Figure 4.4a and 4.4b present data on the categories generated from examination of the open-ended responses. 268 reasons were derived from the explanations given by 148 cases; a far larger number of responses than was the case for happiness, confidence and feeling left out. The most common reasons given for feeling helpless related to poor perceived competence and not knowing what to do in particular situations (usually to help other people). 5% of the explanations related to the child's perception that they did not help others. In other words, helpless to them meant the opposite of 'helpful'; which was provided in 12% of the explanations for not feeling helpless (see Figure 4.4b). This conception was even more evident within the focus groups, where an initial sense of confusion about its meaning gave way to greater shared understanding as discussion progressed. The main reasons given for not feeling helpless related to the availability of support and the presence of an optimistic outlook (supplied in 50% of the explanations).

Figure 4.4a: Reasons for feeling helpless (% of responses where child used explanation)

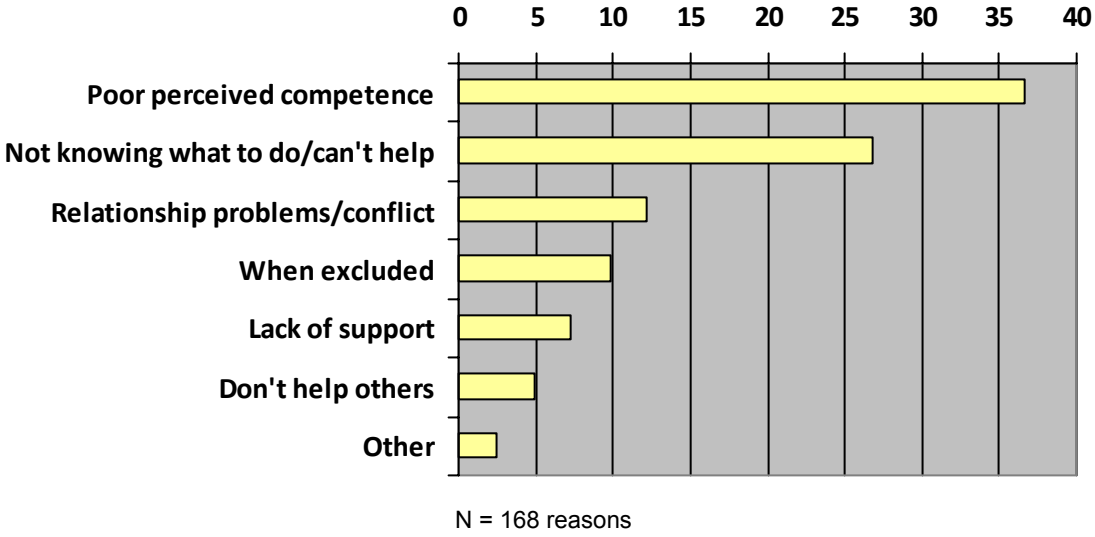
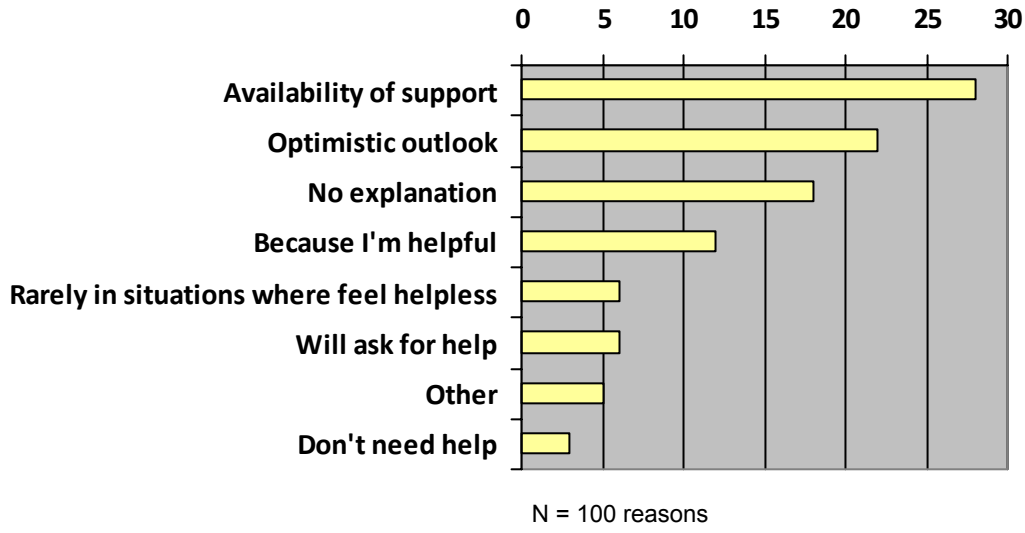


Figure 4.4b: Reasons for not feeling helpless (% of responses where child used explanation)



Focus group/think aloud data

Constituents of feeling helpless

In response to the vignette where children had to explain why the person was feeling helpless in different circumstances, the majority of children attributed this to either problems with parents or problems with peers. With regard to the former, a number of situations were raised about parents being on drugs, absent (in the case of orphans), not being approachable where problems are concerned, fighting, upsetting them, not listening, splitting up or being controlling. As far as peers were concerned, there were two main issues identified that contributed to feeling helpless. The first related to group behaviour or peer pressure, where engagement in vandalism, smoking and drinking were mentioned, as well as the effects of '*hanging around with people who don't do the right things'*. The behaviour of others could also lead to blame by association and examples were given by older pupils of situations that had started out as a laugh and then 'gone wrong'. Individuals wanted to stop others but felt unable to do so. The second issue highlighted in relation to peers was bullying, where people were described as being helpless in situations where others had left them out of something, threatened them, teased them due to their clothes (calling them a 'tramp') or being left to take the blame.

Most often, children talked about helpless in terms of situations where they want to help (others) but are not permitted to do so or feel unable to intervene. Some of the examples given were very day-to-day situations (e.g., wanting to help with a new baby in the household or wanting to stop an argument), whereas others (often in the older age group) were more extreme (e.g., wanting to help dad when he chased vandals or mum when she collapsed). Lack of knowledge about what to do, as well as fear were evident in their descriptions. Interestingly, one girl managed to encapsulate this perspective when she said *'whenever I feel helpless, it's not about me'.*

A significant minority of children made reference to not being able to get help or needing help themselves and recognised that helpless might be the result of other negative emotions, such as feeling upset or small in relation to peers (having less money and latest trends were highlighted), not feeling as good as other people (again mentioned in relation to affluence). As these examples demonstrate, social comparisons appear to play an important role here.

Word association/contributory factors

There was a huge list of words/phrases generated for this task (many more than for the other mental well-being concepts). The most common words children chose to convey feeling helpless or list things that made them feel helpless were lonely/isolated, left out and sad. Indeed, being left out appeared to be the main precursor to feeling helpless. The following were also raised within two groups: being 'different'; not fair; bullied; neglected/not listened to; angry; upset; can't help; don't know what to do; confused; scared, can't do anything and in trouble. Within two groups, it was felt that people who are disabled might feel helpless. Interestingly, one group of S2 girls generated a long list of things that made them feel helpless (Africa, Pakistan, Iraq, terrorists, twin towers, tsunamis, earthquakes). They also gave examples of people/animals they felt could be described as helpless: Lenny (from Of Mice and Men), tramps and turtles (when they are on their back). Younger pupils did not think of helpless in these ways.

Boys also tended to be harsher than girls in their interpretations of helplessness, aligning it with being 'weak', 'thick', 'unpopular', 'useless' or 'waste of space'. When asked what they thought made people feel helpless, responses were very individual. No two groups described the same factors, although responses could be divided into psychological and situational/social factors. The former included being shy, letting others have control, scared to have an opinion, not feeling loved. Within the latter, references were made to not being able to help friends/family in trouble, parents not listening, being bullied in some way and when things are the opposite to what you want.

Definition

There was a wide range of definitions of helpless, although three groups made reference to it meaning 'neglected/lonely' and not being able to do anything and 'stop what's happening'. Helpless was defined in the following ways in two groups: not being able to stand up for yourself or be courageous; scared/shy; you feel left out and need someone to talk to, you can't find a solution/don't know what to do, and when someone needs help and either has no one to go to or no one helps out. Other individual definitions included: you're not important, if no one believes you, not being able to contribute, you need help but don't want to tell anyone, you find things more difficult than others, a feeling – a bit like sad, no confidence, falling down, weak, when you're confused and when you're unable to help yourself.

Associated behaviours

Behaviours associated with feeling helpless that were described most commonly by the children could be termed 'avoidance' behaviours, which appear to reflect a common understanding of the term that was not as evident in other activities. They talked about people staying quiet or in the background, not acting their normal selves, walking away (from a problem), crying and taking out anger on others. Less frequently, children referred to the way people talk (get offended easily, don't want to explain what is wrong), sitting on their own, looking at the ground, no courage and not as joyful. Some children referred to specific examples of people they would like to help but don't feel they can (old men with walking sticks and people who are getting bullied). Others referred to appearance, suggesting that those who were feeling helpless would look depressed, scruffy and not care about the way they look.

Opposites

Most commonly, children referred to being confident, popular, happy and 'unhelpless/ dishelpless', highlighting an uncertainty about its meaning and a range of interpretations that were apparent within most of the other activities. Other

words/phrases used by individuals were: strong, special/talented, free to have your say, being able to walk away (peer pressure), standing up for yourself, able to do things, allowed to help, helpful, helpable and everything going right.

Susceptibility to bias (gender differences)

There were no gender differences in children's responses to the helpless question on the survey and a fairly even split when they were asked who they thought was more likely to report feeling this way. The girls that felt boys were more likely to feel helpless found it difficult to articulate the reasons why, while boys who felt this way suggested that there was more bullying and fighting, as well as a greater tendency to get 'slagged' about their clothes than girls. Similarly, girls who identified their own gender as more likely to feel helpless argued that they have more problems in life and don't want to fight back. The boys who picked girls suggested that they ask for help and get upset more rather than address the issue head on like boys (who 'get it out in a fight'). However, there was also recognition from some boys that *'they don't admit to it'* (feeling helpless), don't share their feelings as much and 'put on a brave face'. Girls tended to view the tendency of boys generally to report 'never' feeling helpless in a harsher light: 'they think they're big and tough', 'they want to act cool', 'they don't want others to know but feel helpless inside', 'they want to look bigger and better than others'.

Box 4.4 provides a summary of the focus group data relating to feeling 'helpless'. The results from all of the methods employed suggest that this was the most complex concept of the four mental well-being items discussed and potentially problematic. The queries during the survey and think aloud technique, together with the relatively poor reliability of the measure, suggest that it should be used with caution (and perhaps with an explanation or definition). Within the focus groups, there was a significantly wider range of responses, definitions and associations in comparison with the other three items, suggesting that children's interpretations of this question vary considerably. In particular, a significant minority of children appeared to interpret helpless as the opposite of helpful or did not understand the term at all. It was only after discussion with peers that they began to reinterpret the question.

In spite of these complications, this measure seems to tap into very important issues for children and young people that may thus far remain neglected in surveys assessing their health and well-being. Therefore, it seems appropriate to find a better term (or terms) than 'helpless'. With this in mind, further examination of the focus group data is warranted to illuminate (a) areas of concern for young people and (b) their emotional experiences.

Box 4.4: Main and sub-themes relating to 'helpless'

(1) Meaning of helpless (from think aloud, survey and focus group definitions)

(1.1) Needing help
- (1.1)1. You need help/someone to talk to (due to 1.4)
- (1.1)2. You never need help

(1.4) Not helping others
- (1.4)1. You don't help others (opposite of helpful - links to being 'useless' & responsibility)
- (1.4)2. You can't help others/don't know how (v. common w.r.t. family and friends)

(1.3) Not receiving help
- (1.3)1. Other people don't help you/don't listen or believe you
- (1.3)2. You can't ask for help/don't want people to know/don't know how to ask
- (1.3)3. There is no one around to help

(1.4) Being 'stuck': can't help yourself
- (1.4)1. You can't escape from a situation (strong links to peer pressure 2.31)
- (1.4)2. You don't know what to do (to help others, solve a problem)/can't do anything
- (1.4)3. You don't know how to do something/you can't do something, not able to contribute
- (1.4)4. You can't stand up for yourself/not courageous (male response – links to wimps)

(1.5) Self-perceptions/attitudes
- (1.5)1. You find things more difficult than others
- (1.5)2. You're not important, you don't matter, you feel useless (links to 1.2)
- (1.5)3. You can't be bothered to do something (opposite to 'active'?, links to 1.21)

(2) Contributing factors (from Word Association/constituents in the focus groups)

(2.1) Absence of support
- (2.1)1. Absence of people to go to/talk to (only child, no friends)
- (2.1)2. People don't listen (friends)
- (2.1)3. Neglected/unloved

(2.2) Family context
- (2.2)1. Parents: drug use/absence/can't talk to them/fighting/splitting up/controlling/no escape
- (2.2)2. New baby in household: attention/not allowed to help
- (2.2)3. Being abused

(2.3) Peer context
- (2.3)1. Pressure: vandalism/behaviour of older peers (smoking/drinking)/people who don't do 'the right things'/being 'forced' to do something & take blame/conflict between wanting to join/fit in but not wanting consequences)
- (2.3)2. Being/feeling left out
- (2.3)3. Being bullied: threatened if don't go along with group/teased due to clothes 'tramp'/people putting you down

(2.4) In trouble
- (2.4)1. Blame by association with peers
- (2.4)2. With police

(2.5) Cognitive factors (decision-making/problem solving, perceived competence)
- (2.5)1. Can't think, 'frozen', can't decide what to do
- (2.5)2. Don't know what to do
- (2.5)3. Can't do anything to change a situation
- (2.5)4. Getting something wrong
- (2.5)5. Feeling small or not as good/clever as others

(3) Associations

(3.1) Similar feelings
- (3.1)1. Sad
- (3.1)2. Angry
- (3.1)3. Upset/might cry
- (3.1)4. Scared
- (3.1)5. Confused
- (3.1)6. Lonely/isolated

(3.2) Vulnerable groups
- (3.2)1. People who are disabled
- (3.2)2. Being 'different'
- (3.2)3. Being shy

(3.3) Opposites

Happy life, confident, strong, special/talented, helpful, helpable, popular/friends to listen & who you can trust, free to have say, not nervous/allowed to join in, being able to walk away, standing up for yourself, able to do things, enjoy yourself, allowed to help, being able to help yourself, going to parents to fix problems, everything can be helped/stopped, everything going right

4.5 Life satisfaction

Table 4.5a presents data on the percentage of children choosing particular responses to the question relating to life satisfaction in Survey 1 and 2. Whilst there was no significant difference between Survey 1 and 2, the percentage of children choosing 9 or 10 increased, which can perhaps be explained, in part, by the impending end of term. This was listed in the focus groups as one of the things that made them feel happiest.

Table 4.5a: Responses to the life satisfaction question (Cantril ladder)

Rating of satisfaction with life at present	Survey 1 (N=293)	Survey 2 (N=291)
0 Worst possible life	*.3%*	*.0%*
1	*.7%*	*.3%*
2	*.3%*	*.3%*
3	*1.4%*	*1.4%*
4	*3.4%*	*2.7%*
5	*5.5%*	*3.8%*
6	*9.2%*	*4.8%*
7	*17.1%*	*13.4%*
8	*21.2%*	*20.9%*
9	*22.9%*	*28.8%*
10 Best possible life	*18.1%*	*23.6%*

*No gender differences

There was no gender difference at the time of Survey 1 or Survey 2 when responses were recoded into a binary variable 'high life satisfaction' against 'low life satisfaction'. Children with scores of 6 or higher were classified as having high life satisfaction. Scores of 5 or lower were categorised as low life satisfaction. Comparison of our data with those from the last national HBSC survey suggests few significant differences between our sample and the national population of 11-year-olds (see Table 4.5b).

Table 4.5b: Comparison of our sample's responses in Survey 1 with the findings from the national 2006 HBSC survey (life satisfaction measure)

Scale	**Girls**		**Boys**	
	Our sample (N=135)	HBSC 2006* (N=889)	Our sample (N=154)	HBSC 2006* (N=814)
0 Worst possible life	.0%	.4%	.7%	.5%
1	.7%	.4%	.7%	.2%
2	.0%	.9%	.7%	.9%
3	2.9%	1.6%	0%	1.4%
4	5.0%	3.0%	2.0%	2.5%
5	3.6%	7.5%	7.2%	7.1%
6	10.7%	7.0%	7.8%	6.9%
7	15.0%	12.8%	19.0%	18.2%
8	20.0%	21.4%	22.2%	20.1%
9	24.3%	22.8%	21.6%	18.8%
10 Best possible life	17.9%	22.0%	18.3%	23.5%

*11-year-olds (Currie, Levin & Todd, 2008)

Test-retest reliability

The Cantril ladder shows very good test-retest reliability (r=0.70, p<.001), although the correlation decreases when the items are recoded into a binary measure reflecting high and low life satisfaction (r=0.52, p<.001). Table 4.5c shows the percentage agreement between Survey 1 and 2 for each response category. Overall, 43% of children chose the same response category at both time points, but 51% and 82% chose 9 and 10 respectively, in line with the findings relating to the other items. Table 4.5d shows the percentage agreement when the categories are recoded into a binary variable.

Table 4.5c: Comparison of responses to the measure of feeling helpless at Survey 1 and 2 (percentage choosing same response at each time point)

Life satisfaction		Survey 2											
		Total N*	0	1	2	3	4	5	6	7	8	9	10
Survey 1	0	1	.0	.0	.0	.0	.0	.0	.0	.0	100	.0	.0
	1	1	.0	.0	.0	100	.0	.0	.0	.0	.0	.0	.0
	2	1	.0	.0	.0	.0	100	.0	.0	.0	.0	.0	.0
	3	4	.0	.0	.0	.0	25.0	.0	25.0	25.0	25.0	.0	.0
	4	10	.0	10.0	.0	.0	20.0	20.0	10.0	20.0	20.0	.0	.0
	5	15	.0	.0	.0	.0	20.0	33.3	6.7	13.3	20.0	.0	6.7
	6	27	.0	.0	.0	7.4	.0	3.7	18.5	25.9	29.6	11.1	3.7
	7	46	.0	.0	2.2	2.2	2.2	4.3	4.3	32.6	32.6	19.6	.0
	8	59	.0	.0	.0	.0	.0	1.7	1.7	10.2	30.5	47.5	8.5
	9	61	.0	.0	.0	.0	.0	.0	.0	6.6	9.8	50.8	32.8
	10	50	.0	.0	.0	.0	.0	.0	.0	2.0	.0	16.0	82.0

*Total N of cases with responses on Survey 1 and Survey 2 = 275

Table 4.5d: Comparison of responses to the measure of life satisfaction at Survey 1 and 2
(based on binary recode 'high' versus 'low' life satisfaction

Life satisfaction (LS)		Survey 2				
		Total N	High LS		Low LS	
			N	%	N	%
Survey 1	High LS*	243	234	96.3%	9	3.7%
	Low LS*	32	16	50.0%	16	50.0%
	Total	275				

* High life satisfaction = >5; Low life satisfaction = <6

Construct validity (convergent/divergent)

The Cantril ladder measure of life satisfaction was compared with an established measure; the Student Life Satisfaction Scale (SLSS). Comparison revealed a Pearson correlation of .21 (p<.01) between the Cantril and SLSS measures on Survey 1 and .27 (p<.01) on Survey 2. The correlation between the SLSS and the Cantril measure when recoded into a binary measure reflecting high and low life satisfaction was even lower (Survey 1, r=.17, p<.01; Survey 2, r=.15, p<.01).

On first glance, these findings appear to raise concerns about the measure used in the HBSC study; however, the Cantril ladder actually showed considerably higher test-retest reliability in this study than the SLSS which had relatively low reliability (r=.54, p<.01). In addition, there were a number of queries regarding two of the questions on the SLSS during survey administration, suggesting that children may have interpreted the wording in a different way than was intended. As the SLSS was

developed in the US, it is possible that cultural differences might explain the poor performance in our study. In particular, children felt it was unfair (and perhaps a little arrogant) to compare their lives favourably with those of others. Several participants expressed concern about not knowing how other people feel about their lives. In other words, even if someone's life does not seem that positive to you, how do you know they feel the same and what gives you the right to judge?

4.6 Assessing validity and reliability of the SDQ

The SDQ Total Difficulties Scale (combining all items except those in the Prosocial Sub-scale) obtained a Cronbach's alpha coefficient of .74 (Survey 1), suggesting that, together, the four sub-scales form a reliable scale. However, it should be noted that the coefficients for each of the sub-scales are fairly low. The Cronbach's alpha for the individual sub-scales are presented in Table 4.6a.

Table 4.6a: Scale reliability coefficients for the subscales of the SDQ (Survey 1)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Cronbach's alpha
Prosocial Scale	*285*	*.51*
Emotional Symptoms	*279*	*.64*
Conduct Problems	*278*	*.60*
Hyperactivity Scale	*282*	*.52*
Peer Problems Scale	*283*	*.49*

The SDQ also proved reliable over time for most of the sub-scales, as the Pearson correlations between Survey 1 and Survey 2 demonstrate (see Table 4.6b). The Peer Problems and Prosocial sub-scales do not perform quite as well as the others.

Table 4.6b: Test-retest reliability coefficients for the SDQ subscales (Correlations between Survey 1 & 2)

Scale from the Strengths & Difficulties Questionnaire (SDQ)	N of valid cases	Pearson's R	Significance
Prosocial Scale	*279*	*.61*	*p <.01*
Emotional Symptoms	*278*	*.76*	*p <.01*
Conduct Problems	*277*	*.74*	*p <.01*
Hyperactivity Scale	*279*	*.74*	*p <.01*
Peer Problems Scale	*278*	*.57*	*p <.01*
Total Difficulties Score	*277*	*.80*	*p <.01*

4.7 Comparing our sample against national norms using the SDQ

Table 4.7a allows a comparison of our sample scores with population averages in UK 11-year-old children. Our sample scored slightly higher overall (as reflected in the Total Difficulties Score). This appears to be due to higher scores on the Hyperactivity Scale. These differences were not expected to significantly influence the analyses performed in this study.

Table 4.7a: Comparison of SDQ scores in our sample against British norms [Mean & (s. d.)]

Scale	Girls		Boys	
	Our sample (N=140)	British norms* (N=2093)	Our sample (N=153)	British norms* (N=2135)
Prosocial Scale	8.5 (1.4)	8.5 (1.4)	7.8 (1.6)	7.5 (1.7)
Emotional Symptoms	3.1 (2.2)	3.0 (2.1)	2.5 (2.0)	2.6 (1.9)
Conduct Problems	2.0 (1.7)	2.0 (1.6)	2.2 (1.8)	2.4 (1.7)
Hyperactivity Scale	4.6 (1.8)	3.6 (2.2)	5.1 (2.0)	3.9 (2.2)
Peer Problems Scale	1.6 (1.6)	1.4 (1.4)	1.8 (1.9)	1.6 (1.4)
Total Difficulties Score	11.3 (5.0)	10.0 (5.3)	11.5 (5.7)	10.5 (5.1)

*11-year-olds. Reported by Meltzer, Gatward, Goodman & Ford (2000)/ http://www.sdqinfo.com/b8.html

5. Summary & discussion

5.1 Summary of findings

- The happiness question showed moderate test-retest reliability while the left out and life satisfaction questions showed high test-retest reliability. Conversely, the confidence and helpless questions showed lower test-retest reliability. This may reflect a difference between measures of 'trait' (relatively stable characteristics) and 'state' (which are subject to change). However, this suggests that happiness, feeling left out and life satisfaction may be more trait-like and confidence and helpless more a temporary state, when the opposite might be expected based on children's explanations. Confidence, in particular, was described in terms of an attitude/approach towards life, competence and personal attributes.

- Happiness, confidence and life satisfaction were positively correlated with one another and negatively correlated with helplessness and feeling left out.

- Fairly low correlations were found between the happiness/confidence measures and the SDQ Total Difficulties Scale and associated sub-scales. However, there was a stronger relationship between the left out measure and the two SDQ sub-scales measuring peer problems and emotional symptoms. This link is logical and was further confirmed by pupil explanations in the focus groups. There was also a higher correlation between helpless and the Total Difficulties Scale than those with happiness and confidence, explained by a higher correlation with peer problems.

- The Cantril ladder measure of life satisfaction had very good test-retest reliability and was compared with an established measure; the SLSS. However, the SLSS did not prove to be as reliable with our sample. This may be due to cultural differences in children's interpretations of, and reactions to, the questions.

- Analysis of test-retest reliability suggests that caution needs to be exercised in relation to the re-coding of data (in our case, into binary variables). Happiness, feeling left out and life satisfaction, show moderate reliability in the binary form, while confidence and helplessness show lower reliability.

- Although overall, between 43 and 73% of the pupils chose the same response at both time points, a far higher percentage of scores that were initially positive remained stable after the 4-week interval. This suggests that the more positive you score on these mental well-being questions, the more stable your responses; a finding that is in line with previous research (Steptoe, Wardle & Marmot, 2005).

- Analysis of the focus group data suggests that three of the four mental well-being items investigated for the first time performed reasonably well as measures of distinct aspects of mental well-being in young people aged 11 and 13. Strong similarities in interpretations were apparent across age groups.

- The two positively worded questions (happiness and confidence) were often described in relational terms, although confidence tended to be viewed more often as an attitude or approach to life that might be bolstered by other people. Happiness was directly linked to positive relationships with friends or parents/family at home. While these were cited as the main reasons for feeling happy, the most common reasons given for feeling confident related to the individual's perception that they tried hard to feel this way or that they were competent at particular things. Similarly, whereas specific negative or stressful events and problems with peers led to unhappiness, the majority of the explanations given for not feeling confident alluded to negative self-perceptions and being nervous or shy. There was

greater clarity and agreement in relation to interpretations of happiness and the possibility that confidence was equated with achieving. However, in the majority of cases, children viewed confidence similarly, as a form of strength or willingness to participate.

- Different responses were obtained for the two negatively worded questions (left out and helpless). Interpretations of feeling left out were the most consistent in comparison with all other items, and, like happiness, was viewed in relational terms. The most common reasons given for feeling left out related to disruptions in friendships (usually fall outs), not being picked (either by peers/in games or teachers within class) and generally feeling on the outside of groups due to lack of shared interests or experiences. The main reason given for not feeling left out was having good friends; people you could rely on or who would stick up for you, confirming the notion that it is an emotion felt most often in the context of peers. There was recognition that being left out could be a perception rather than reality and that not sharing common interests could make you feel left out. Helpless, on the other hand, was a far more complex concept and potentially problematic due to multiple interpretations and lack of familiarity with the word/concept. Within the older age group, interpretations were similar and often connected to peer pressure or world events that they felt were out of their control. This differed from conceptions in the younger group who often referred initially to not helping (or being able to help) others in their immediate family and peer context.

- Gender stereotypes were often evident in children's explanations of the reasons behind different responses given by boys and girls within the general population. There was majority agreement from both sexes that boys were more likely to report being happier and more confident than girls (girls were viewed as being more sensitive and vulnerable, particularly to fall outs, compared with boys' tendency to be less serious and more physical). However, while more girls thought that their sex was more likely to feel left out, the majority of boys felt the opposite; each gender seeing their own vulnerabilities. There was also a fairly even split in terms of both boys' and girls' choice of who was more likely to report feeling helpless. Their explanations always related to problems with peers. Interestingly, there was recognition that boys may not always be honest about the way they feel due to concerns about masculine identity and loss of 'face'.

5.2 Discussion

Measures of mental well-being for national use with young people are currently being reviewed and developed within Scotland (Parkinson, 2009). This process involves identifying both existing measures and gaps in our knowledge base. Once a set of indicators is constructed and validated, this will facilitate the monitoring and evaluation of the Scottish population. However, the Scottish Government's National Programme for Improving Mental Health and Well-Being has been in place since 2003, and a range of national and local-level initiatives has been introduced. With no measures developed prior to the introduction of these governmental policies, there is very little baseline data on mental well-being. The HBSC study having collected data on happiness, helplessness and confidence since 1990 and feeling left out since 1998 is therefore a potentially useful resource. These measures had not been validated, hence the rationale for the current study; to examine the validity of these measures quantitatively and qualitatively among a group of 11-year-olds living on the east coast of Scotland.

Methodologists generally recommend multi-item measures of subjective well-being. These are believed to be more robust as they measure several dimensions of a construct (Gliem & Gliem, 2003; Diener & Larsen, 1984). However, in the life satisfaction literature, single- and multi-item scales have been compared, with the former reputed to have acceptable temporal reliability, ie responses remain consistent

over time (Pavot & Diener, 1993) and correlate well with multi-item scales (Sousa & Lyubomirsky, 2001). From a pragmatic perspective, single-item measures are quicker and easier to use, resulting in a lower proportion of missing data thereby increasing the power of analysis and reducing bias. This may be a particular issue for young people, who may become bored or distracted when completing long multi-item surveys. Furthermore, within Applied Psychology, the preference for multi-item variables has recently been challenged, with single-item measures recommended for measuring concrete or homogeneously defined constructs, such as anxiety, depression and self-consciousness (Rossiter, 2002; Smith, McCarthy & Zapolski, 2009). Among adults, single-item measures of psychological constructs such as job satisfaction (Nagy, 2002), college teaching effectiveness (Wanous & Hudy, 2001) and subjective cognitive effort (Yeo & Neal, 2008) have shown similar psychometric properties as multi-item measures. Multi-item measures are generally preferred where a complex or ambiguous construct is being measured, where there is variation in interpretation of the characteristic, or there is between-person variation in the ability to answer the question.

While reliability and convergent validity is generally higher for multi-item variables, Rossiter (2002) stress the greater importance of face validity or 'meaning' of an indicator. In this study, measures of happiness, confidence and feeling left out were found to have high face validity (i.e., the children had a similar understanding of the constructs, evidenced by the language used to describe and give examples as well as define opposite feelings. The main difference observed in children's accounts was in the domains to which these feelings were applied (e.g., while some children gave examples of happiness in relation to friends, others did so in relation to family and others to their school experience). Multi-item indicators often use a number of domains when measuring subjective well-being. However, one of the benefits of using single-item measures is that they allow the individual to weight domains of their life according to their own values, rather than the researcher applying weights in a standard fashion across the population (Pavot & Diener, 1993). Accordingly, from a normative perspective, single-item measures may be preferable as they leave the evaluation of relative importance to the person answering the question.

The current study found measures of life satisfaction using the Cantril Ladder, happiness and feeling left out to have acceptable reliability and to be valid for use with 11-year-old children in Scotland. Furthermore, the Cantril Ladder was a more reliable measure than the multi-item Student Satisfaction with Life Scale (SLSS), often used with young people. The HBSC measures correlated most highly with the 'Emotional Symptoms' Scale of the SDQ and feeling left out also correlated highly with the 'Peer Problems' Scale. The measure of confidence, though valid to some degree in terms of construct and face validity, had relatively low reliability. Helplessness had particularly poor face validity and it is recommended that this measure be used with caution. Indeed, the data from the participants in our study are worthy of more detailed examination with respect to areas of concern for young people as well as their emotional experiences. This may help us to identify appropriate questions that tap into aspects of mental well-being that have thus far been neglected.

As there are few widely accepted instruments assessing mental well-being in children and young people, the measures of life satisfaction, happiness, confidence and feeling left out included within the HBSC study will certainly provide some background data for the evaluation of the National Programme for Improving Mental Health and Well-Being. The findings from the face validity work also concur with those from a recent review on children and young people's views concerning the factors that influence their mental health (Shucksmith et al., 2009). Future work within the HBSC study might usefully focus on how to extend these items to incorporate more aspects of mental health that children deem important and how to combine items to make the best possible use of existing measures. The resulting scale should result in a reliable robust instrument in the measurement of mental well-being of young people.

Appendix 1: the pupil survey

Health Behaviour in School-aged Children (HBSC)

Questions on well-being Survey 1a

A WORLD HEALTH ORGANIZATION CROSS-NATIONAL STUDY

Hello!

validation study	ID

Survey 1a: Questions on well-being

Please answer the questions below by either ticking the circle that is right for you or writing your thoughts in the spaces provided. Try to be as honest as you can and give us as much information as possible. Only the research team will see your answers and your name will not be recorded on the survey. If you do not want to answer a question, please mark an X next to the question. It would help us if you could also tell us why you do not want to answer it.

Please ask us if you have any questions or you don't understand something by putting your hand up. We will get to you as soon as we can.

❶ **Are you a boy or a girl?**

○ Boy
○ Girl

❷ **What year are you in?**

○ Primary 7
○ Secondary 2

❸ **How old are you?**

❹ **In general, how do you feel about your life at the moment?**

○ I feel very happy
○ I feel quite happy
○ I don't feel very happy
○ I'm not happy at all

Please tell us (explain) why you chose that answer for Question 4…

❺ **How often do you feel left out of things?**

- ○ Never
- ○ Hardly ever
- ○ Sometimes
- ○ Often
- ○ Always

Please tell us (explain) why you chose that answer for Question 5…

❻ **How often do you feel confident in yourself?**

- ○ Never
- ○ Hardly ever
- ○ Sometimes
- ○ Often
- ○ Always

❼ **How often do you feel helpless?**

- ○ Never
- ○ Hardly ever
- ○ Sometimes
- ○ Often
- ○ Always

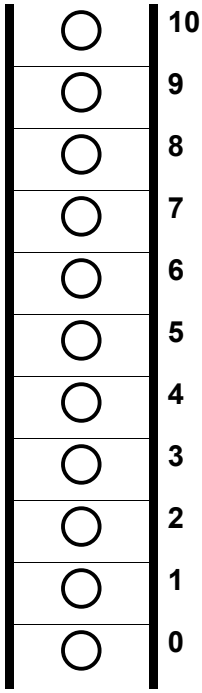
❽ **Please read the next question carefully**

Here is a picture of a ladder.

The top of the ladder '**10**' is the best possible life for you and the bottom '**0**' is the worst possible life for you.

In general, where on the ladder do you feel you stand at the moment?

Tick the circle next to the number that best describes where you stand.



○	10	**Best possible life**
○	9	
○	8	
○	7	
○	6	
○	5	
○	4	
○	3	
○	2	
○	1	
○	0	**Worst possible life**

❾ We would like to know what thoughts about life you have had during the past several weeks. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with your overall life. Tick one circle for each line to indicate the extent to which you agree or disagree with each statement.

	1 **Strongly disagree**	2 **Moderately disagree**	3 **Mildly disagree**	4 **Mildly agree**	5 **Moderately agree**	6 **Strongly Agree**
My life is going well	○	○	○	○	○	○
My life is just right	○	○	○	○	○	○
I would like to change many things in my life	○	○	○	○	○	○
I wish I had a different kind of life	○	○	○	○	○	○
I have a good life	○	○	○	○	○	○
I have what I want in life	○	○	○	○	○	○
My life is better than most kids	○	○	○	○	○	○

⓾ For each item below, please tick one of the circles for Not True, Somewhat True or Certainly True. It would help us if you answered all the items as best you can even if you are not absolutely certain or the item seems daft! Please give your answers on the basis of how things have been for you over the last six months.

	1 **Not True**	2 **Somewhat True**	3 **Certainly True**
I try to be nice to other people. I care about their feelings	○	○	○
I am restless, I cannot stay still for long	○	○	○
I get a lot of headaches, stomach-aches or sickness	○	○	○
I usually share with others (food, games, pens, etc)	○	○	○
I get very angry and often lose my temper	○	○	○
I am usually on my own. I generally play alone or keep to myself	○	○	○
I usually do as I am told	○	○	○
I worry a lot	○	○	○
I am helpful if someone is hurt, upset or feeling ill	○	○	○
I am constantly fidgeting or squirming	○	○	○
I have one good friend or more	○	○	○
I fight a lot. I can make other people do what I want	○	○	○
I am often unhappy, down-hearted or tearful	○	○	○
Other people my age generally like me	○	○	○
I am easily distracted, I find it difficult to concentrate	○	○	○
I am nervous in new situations. I easily lose confidence	○	○	○
I am kind to younger children	○	○	○
I am often accused of lying or cheating	○	○	○
Other children or young people pick on me or bully me	○	○	○

	1 **Not True**	2 **Somewhat True**	3 **Certainly True**
I often volunteer to help others (parents, teachers, children)	○	○	○
I think before I do things	○	○	○
I take things that are not mine from home, school or elsewhere	○	○	○
I get on better with adults than with people my own age	○	○	○
I have many fears. I am easily scared	○	○	○
I finish the work I'm doing. My attention is good	○	○	○

Please check that you have answered all the questions. If you have made a mistake, put a line through and make sure your new answer is clear. If you have anything else to tell us about these questions or how you felt when you were answering them, please write this down in the box below.

Anything else you would like to tell us?

PLEASE LET US KNOW THAT YOU HAVE FINISHED BY PUTTING YOUR HAND UP

Thank you for helping us!
We will be back to visit in four weeks time and look forward to seeing you.

Janine, Katy and Winfried

Appendix 2: Analysis of focus group material (example excerpts)

Excerpt from Chart 2a: Children's understanding of 'happiness' (focus group data - detailed)			
2.1-2.9 = Focus group data (from different exercises)			
	2.1	**2.2**	**2.3**
T, S, G, N	**Identifying 'happiness'**	**Constituents of happiness (vignette)**	**Word association**
T8, S5, Female, 4	My mum's happy because she always smiles and she always laughs (4). INDIVIDUAL SHEETS: mum she is always cheerful and in a good mood (1). R (sister) she always smiles. she has also always been happy (2). L, my mum and me's friend. She has just had a baby so she has a bigger family (3). A (mum) because she always smiles and laughs (4).	RESPONSES TO LEAH VIGNETTE (SCHOOL): She might like the subject that's coming up (3)...Maybe something good happened before the lesson started (2)....Maybe she feels good because she's with her friends in the classroom (4).RESPONSES TO CHLOE VIGNETTE (PEERS): 1 She might have had an argument with her mum or something (1)...She might have like had something happen to them in class that she wasn't happy about (3)	Smile (2?). Laughter (4). Feel good inside (3?)...Joyful (4). Friendliness (3?). Cheerful (1?). What sort of things make you happy? The sun (?). summer (?)..Friends (?). My mum (4). A healthy environment (3). What would you describe that as a healthy environment? A place that everyone's feeling good and they're not feeling down or anything (3). No one would be left out (4).
T18, S6, Male, 4	I don't know, my little brother is because, he's mental but he hurts himself all the time (2). '1', because he's always laughing and being funny. But he's not weird (2). INDIVIDUAL SHEETS: M (friend), he is happy because he is fun (1). J (friend) I think he is happy because he is always laughing and being funny but he isn't weird (2). M (friend). He is funny (3). J (friend) He is never in a mood and never complains about anything and he is funny (4).	RESPONSES TO SIMON VIGNETTE (FAMILY): Because he's got a family (1). They might be all getting together. They might all work away and they might be coming back for a big reunion (2). RESPONSES TO CALLUM VIGNETTE: Why do you think Callum feels unhappy? He could be getting bullied (1). Something maybe happened at his house, like his mum and dad might be ill, or they might always be arguing (2). His teacher could abuse him (1). He might have fallen out with his friend (3). Someone in his family might have died or something (2)... He might just be annoyed at someone (2).	INDIVIDUAL SHEETS: Joy, wonder, funtime, enjoyment, smile, family, friends, football (1). Smiles, joy, playing, friends, big, family, food, elated, important, sun, colour (2). Joy, sharing, friends, smiles (3). Joy, fun, football, smiling, party, celebrate, family (4).

T = Transcript number, S = School ID, G = Gender, N = number of pupils in focus group

Numbers in brackets refer to each child within a focus group

Excerpt from Chart 2: Happiness summary

Identification

T8 girls:
Mum: always smiles and laughs
Mum: cheerful, always in good mood
Sister: smiles, always been happy
Friend of family: just had baby
T18 boys:
Friend: is fun
Friend: always laughing and being funny
Friend: funny
Friend: never in bad mood, never complains about anything and is funny
T24 boys:
Friend: always shouts and goes 'arghh'
Friend: because he told me and is missing German
Friend: always has fun
Friend: he's weird
T29 boys:
David Beckham: has money, talent, wife and kids
Sister: smiles all the time, always has a laugh
David Beckham: happily married, has children, good at his sport

Identification (2)

T28 girls:
Peer: always hyper, makes everybody laugh, nearly always laughing, never she her upset, talks a lot, loud*
NO T - 2 girls:
Mum: lots of love around her, S: lots of kind friends, Dad: loved by mum, Uncle: lots of kids he loves
Best mate (male): always smiles and in good mood

*Girls discussed this a lot before writing about their peer, didn't know anyone who was always happy. One girl said 'maybe one of our primary school teachers'

Constituents

Happy because:
T8 girls:
Likes/good at subject (+T29 boys)
Something good happened before lesson
With friends in class
T18 boys:
Has/with family (+T29 boys/T28 girls)
Family all getting together/reunion
T24 boys:
Probably sick/bored (i.e., how could he like school!?)
Sunny
Last day of school/last period (+T29 boys)
Birthday
Next day is going on holiday
Seeing mum and dad (if split up)
Seeing new born baby (+T28 girls)
About to go and smash windows
With people his own age and totally 'sorted'
With 'nutcases', 'lunatics'
T29 boys:
In good mood/having a good day

Constituents (2)

Watching something on TV
He's done something good that day
Won football match
T28 girls:
Got everything she wants
Just got a job
Won the lottery
Moving to Australia
Got good news
Unhappy because:
T8 girls:
Might had had argument with mum
Something bad happened in class
T18 boys:
Getting bullied (+T28 girls)
Something bad happened at home (mum/dad ill/arguing)
Teacher might abuse him
Fallen out with friend (+T28 girls)
Someone died (+T28 girls)
Annoyed at someone
T28 girls:
Got dumped
Getting expelled
Million reasons why unhappy

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