

# PATHS<sup>®</sup> Programme for Schools (NI Version) User Guide (v1), January 2019

PATHS<sup>®</sup> Programme for Schools (UK Version) User Guide (version 1) was prepared in 2018 by the Children’s Research Network as part of the Prevention and Early Intervention Research Initiative (2016-2018).

<http://www.childrensresearchnetwork.org>

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## 1. Introduction to the User Guide

This User Guide provides an overview of the PATHS® (Promoting Alternative Thinking Strategies) Programme for Schools (NI Version) and its evaluation by the Institute for Effective Education (IEE) at University of York and Johns Hopkins University, Baltimore specifically the objectives and methodology of the evaluation and the resulting structure of the archived data. The User Guide should be used as a reference tool, and users of the archived data should refer to the report *Evaluation of the Together 4 All Programme for Schools* (Ross et al., 2011) for more detailed information on the research and results. This User Guide was prepared by the Children’s Research Network as part of the Prevention and Early Intervention Research Initiative (2016-2018) and accompanies the deposition of the experimental (quantitative) component of PATHS® study in the Irish Social Science Data Archive in January 2019.

More information on Barnardo’s PATHS® Programme, Northern Ireland:

[http://www.barnardos.org.uk/what\\_we\\_do/northernireland.htm](http://www.barnardos.org.uk/what_we_do/northernireland.htm)

[http://www.barnardos.org.uk/barnardos-pathsbriefingpaper\\_web.pdf](http://www.barnardos.org.uk/barnardos-pathsbriefingpaper_web.pdf)

More information on Together 4 All – Integrated Children’s Services:

<https://www.atlanticphilanthropies.org/grants/together-4-all-integrated-childrens-services>

More information on the Prevention and Early Intervention Research Initiative:

<http://www.childrensresearchnetwork.org>

<http://www.childrensresearchnetwork.org/knowledge/collection/prevention-and-early-intervention>

## 2. Background of study

2.1. Programme aims: Promoting Alternative THinking Strategies (PATHS, [www.pathseducation.com](http://www.pathseducation.com)) is a universal, classroom-based curriculum that teaches social and emotional learning to primary school children. It involves helping children to recognise emotions and values, make constructive choices about personal and social behaviour, and show understanding and empathy for others. The programme also teaches children how to label their feelings and apply self-control strategies, hopefully leading to improvements in classroom behaviour, resilience and verbal fluency. Developed originally in the USA, the NI version has been rolled out in schools across Northern Ireland to children’s improve the social and emotional skills.

Following six months of planning and research an adapted version of PATHS® was implemented into local primary schools in two areas of Northern Ireland by the umbrella organisation Together4All (T4A). Following a merger of T4A and Barnardo's in 2011 the PATHS® programme was extended across Northern Ireland<sup>1</sup>.

**2.2. Funding:** The initial implementation of the PATHS® programme into local primary schools in two areas of Northern Ireland was managed by T4A with support from Atlantic Philanthropies. Following this, T4A merged with Barnardo's (see section 2.1 above) and after the merger Barnardo's received funding from the Big Lottery and the Atlantic Philanthropies which enabled them to extend PATHS® to 52 primary schools across Northern Ireland as well schools in England, Wales and Scotland. The evaluation of the PATHS® Curriculum by the University of York and Johns Hopkins University was funded by the Atlantic Philanthropies (Northern Ireland). The archiving of the RCT data from this evaluation in the public data archives in 2018 was funded by the Atlantic Philanthropies via the Prevention and Early Intervention Research Initiative at the Children's Research Network of Ireland and Northern Ireland.

**2.3. Evaluator:** The baseline evaluation of PATHS® (NI version) was conducted by Queen's University Belfast. Following this, all further data collection and analysis was conducted by the Institute for Effective Education (IEE) at University of York and Johns Hopkins University, Baltimore. The Principal Investigators were Steven M. Ross, senior research scientist and professor at the Center for Research and Reform in Education at Johns Hopkins University; Mary K. Sheard, research fellow in the Institute for Effective Education at the University of York and; Robert E. Slavin, professor in the Institute for Effective Education at the University of York and Director of the Center for Research and Reform in Education at Johns Hopkins School of Education.

### 3. Programme delivery

**3.1. Target population:** The original dissemination of the PATHS® Curriculum (NI version) by T4A involved 12 primary schools in the Craigavon area of Northern Ireland. The schools served mostly working class pupils. Based on figures provided by the Department of Education (Northern Ireland) -

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<sup>1</sup> After the merger in 2011 PATHS® became part of Barnardo's portfolio of evidence-based programmes, which includes the 'Ready to Learn' programme, the data from which was also archived in the Irish Social Science Data Archives in 2018 by the PEI Research Initiative.

Statistics & Research Branch, the majority of schools served fairly substantive at-risk populations (over one-fourth of enrollees). 'At-risk students' are defined as students living in communities traditionally divided and fractured by social, religious, cultural intolerance, and sectarianism. The risk is not developing the social-emotional competencies necessary for good emotional health and positive relationships that are often necessary for personal and academic achievement. The archived data relates to the evaluation of the PATHS® Curriculum (NI version) at these 12 primary schools in the Craigavon area.

**3.2. Programme design:** PATHS® (NI version) is a specific school intervention programme with a prescribed curriculum, which has been adapted to the culture of Northern Ireland by translating written material to UK English and using culturally appropriate children's literature and themes. The programme was developed in response to the findings of an epidemiology study by Dartington Social Research Unit in 2007 which identified above average incidents of domestic violence and aggression and above average levels of child anger and conduct disorder. Based on the PATHS® model, the programme seemingly offered the best fit of several SEL programming options with students' needs, and had strong evidence supporting its effectiveness. Overall it took two years to fully adapt the PATHS® programme for the NI context and Specialist Social and Emotional Learning Coaches were appointed to adapt the programme and support schools with its delivery. This included advising on areas such as curriculum integration and extension.

It was agreed to undertake a randomized control trial evaluation in which the 12 schools were randomly allocated into either the intervention or the control group. Teachers in the intervention schools received two days of training in the PATHS® curriculum from certified trainers. Coaches were assigned to provide technical assistance and support to teachers during curriculum implementation. The average teacher received a consultation visit once per month. Because all Northern Ireland primary schools were required by the Department of Education to address social-emotional learning (SEL), the comparison schools implemented the statutory Personal Development and Mutual Understanding (PDMU) programme, which was a less structured and intensive programme than PATHS®, and focused on accepting others and getting along. None of the demographic variables was found to differ statistically significantly between the schools implementing PATHS® and those in comparison schools.

*Intervention group (6 schools)*

- ✓ Implemented the PATHS® programme (NI version)
- ✓ Teachers received two days of training in the PATHS® curriculum from certified trainers
- ✓ Coaches assigned to provide technical assistance and support to teachers

*Control group (6 schools)*

- ✓ Implemented the statutory Personal Development and Mutual Understanding programme
- ✓ Implemented the PATHS programme (NI version) two years after the RCT commenced

In the archived dataset, member from the intervention and control groups can be distinguished using the variable 'Treatment'.

PATHS® (NI version) was delivered using Teacher-led, age-appropriate lessons that dealt with recognising emotions, expressing feelings, coping with negative feelings such as anger, and reacting to social problem-solving situations. The programme emphasised the use of strategies to actively engage students, enabling them to express their opinions, have their voice heard, and identify and resolve social problems by using suggestion boxes, discussions, written comments, and school councils. An additional core element was added to PATHS (NI version) which focused on 'mutual respect and understanding' (MRU), and dealt with accepting people who are different and becoming part of a local and global community. The MRU units of work focused on encouraging children to speak and behave respectfully toward each other and managing conflict using positive coping strategies. Central to these aims is the ability and willingness to recognise how other people feel when they are happy, sad, angry, and lonely.

**3.3. Recruitment and sampling:** The PATHS (NI version) programme and evaluation were conducted with 12 primary schools in the Craigavon area of Northern Ireland. In 2007 Atlantic Philanthropies chose three areas across the island of Ireland to pilot their initiative to improve the lives of children and young people, and one of these areas was the Lurgan/Brownlow area of County Armagh Northern Ireland. Atlantic commissioned Dartington Social Research Unit to identify issues that specifically affected the lives of children and young people in the Lurgan/Brownlow area, and the results of a large-scale epidemiology survey identified a particular problem with social and emotional learning. A review of international best-practice identified PATHS® in the US as the most appropriate existing programme to address these issues and challenges for children aged 5-11.

**3.4. Dates of programme delivery:** PATHS® (NI version) was delivered in the six intervention schools between 2008 and 2011, and in the six control schools from 2010.

## 4. Programme evaluation

4.1. **Evaluation design:** The purposes of the evaluation was to assess the implementation progress and impacts of the PATHS® Curriculum (called T4A) in primary schools in and around Craigavon in Northern Ireland. The study employed a randomised experimental design in which six schools were selected to implement the T4A PATHS programme and six to serve as comparisons (see section 3.2 above). A longitudinal design was employed in which pupils would be followed on a variety of social-emotional learning (SEL) measures for three years.

4.2. **Respondents:** The study involved 798 pupils in classes Primary 1/Primary 2 and 913 pupils in Primary 5/Primary 6 classes. This evaluation focused on children in 4 class groups over three years:

- Primary 1 (aged four to five years)
- Primary 2 (aged five to six years)
- Primary 5 (aged eight to nine years)
- Primary 6 (nine to ten years)

By Sweep 2 the children had advanced on to the next school grade (i.e. from P1 to P2) and by Sweep 5 they had moved on by two school grades. Children that were in P6 at the start of data collection had advanced to middle school by Sweep 5 and therefore did not participate in this sweep. This is illustrated in Table 1.

**Table 1: Longitudinal design of study**

| Data collection wave | YEAR 1         |                | YEAR 2         |                | YEAR 3         |
|----------------------|----------------|----------------|----------------|----------------|----------------|
|                      | Sweep 1        | Sweep 2        | Sweep 3        | Sweep 4        | Sweep 5        |
| Date                 | Sept '08       | May-June '08   | Nov '09        | May-June '10   | April '11      |
| School class         | Primary 1 (P1) | Primary 2 (P2) | Primary 3 (P3) | Primary 1 (P1) | Primary 2 (P2) |
|                      | Primary 2 (P2) | Primary 3 (P3) | Primary 4 (P4) | Primary 2 (P2) | Primary 3 (P3) |

|  |                |                |                  |                |                |
|--|----------------|----------------|------------------|----------------|----------------|
|  | Primary 5 (P5) | Primary 6 (P6) | Primary 7 (P7)   | Primary 5 (P5) | Primary 6 (P6) |
|  | Primary 6 (P6) | Primary 7 (P7) | N/A <sup>2</sup> | Primary 6 (P6) | Primary 7 (P7) |

**Adapted from Ross et al., 2011, Figure 1. Summary of longitudinal participation of pupil in primary-grade classes**

4.3. **Data sources:** There were multiple data sources for the overall evaluation as follows:

1. Pupil Assessments: Individually administered assessments of children’s skills at recognizing emotions and dealing with social conflict using two measures: the Assessment of Children’s Emotions Scale (ACES; Domitrovich et al., 2007; Shultz et al., 2001) and the Challenging Situations Task (CST; Denham, Bouril, & Belouad, 1994)<sup>3</sup>. Data from the Pupil Assessments which were completed at Sweeps 1, 4 and 5 are available in the archived data collection.
2. Teacher Ratings of Pupil Behaviour (TRB): These were completed by teachers in both the intervention and control groups, and include questions from the Strengths and Difficulties Questionnaire (Goodman, 1996) and the PATHS Evaluation Kit Student Evaluation (PATHS; Kusche and Greenberg, 2012). Data from the Teacher Ratings of Pupil Behaviour which were completed at Sweeps 1, 2, 4 and 5 are available in the archived data collection.
3. Observations of teachers’ classroom behaviour and of children’s classroom and play activity behaviour, piloted at S2 and completed at S3, S4 and S5. These observations are not included in the archived collection to preserve respondent confidentiality.
4. Interviews with different participant and stakeholder groups. These interviews are not included in the archived collection to preserve respondent confidentiality.

4.4. **Field work:** Baseline data were obtained by Queens’ University, Belfast during Sweep 1 in the Autumn Term 2008. Following this, data were collected by the Institute for Effective Education (IEE), University of York/Johns Hopkins University at the following time points:

- Sweep 2 in the Summer Term 2009;
- Sweep 3 in the Autumn Term 2009;
- Sweep 4 in the Summer Term 2010; and,

<sup>2</sup> Those originally in P6 at Sweep 1 had advanced to middle school by Sweep 5 and therefore did not participate in this sweep.

<sup>3</sup> A full list of standardised measures is available in Appendix C.

- Sweep 5 in the Summer Term 2011.

Table 2 below details the type of data collected at each sweep. At the beginning of the academic term Year 3 (autumn 2010) and prior to the Sweep 5 data collection, the six comparison schools initiated the implementation of T4A and therefore became Cohort 2 of this intervention.

**Table 2: Date of field work by type of data collected**

|                         | Teacher Ratings of Pupils (archived) | Pupil Assessments (archived) | Interviews and Teacher Questionnaire | Observations | Implementation Assessment |
|-------------------------|--------------------------------------|------------------------------|--------------------------------------|--------------|---------------------------|
| Sweep 1<br>Sept '08     | √                                    | √                            |                                      |              |                           |
| Sweep 2<br>May-June '08 | √                                    |                              | √                                    | Pilot        | Pilot                     |
| Sweep 3<br>Nov '09      |                                      |                              |                                      | √            | √                         |
| Sweep 4<br>May-June '10 | √                                    | √                            | √                                    | √            | √                         |
| Sweep 5<br>April '11    | √                                    | √                            | √                                    | √            | √                         |

*Adapted from Ross et al., 2011, Table 1. Schedule for Data Collection*

#### 4.4. Sample size over time:

A longitudinal design was employed in which all pupils in P1, P2, P5 and P6 in the 12 schools were followed on a variety of SEL measures for three years. The number of pupil participants varies depending on the particular measure employed. The sample size for the TRPB scale has been provided in Table 3 as an impression of the total number of participating pupils over time. The table displays the number of pupils who were rated by their teachers on social development behaviours at Sweep 2 and at Sweep 5. As can be seen in the table, there was very little sample attrition from Sweeps 1 and 2 in 2008 to Sweep 5 in 2011. For example, of the original P1 (n=356) and P2 (n=317) samples, 89% and 93% respectively, participated in Sweep 5 as P3 (n=319) and P4 pupils (n=294). Of the original P5 sample (n=381), 93% participated in Sweep 5 as P7 pupils (n=367).

**Table 3: Comparison of sample size over time: Teacher Ratings of Pupil Behaviour sample at S2 and S5**

| Data collection phase      |                    | Number of children in sample |     |     |     |             |
|----------------------------|--------------------|------------------------------|-----|-----|-----|-------------|
| Sweep 2<br>May-June<br>'08 | School year        | P1                           | P2  | P5  | P6  | TOTAL       |
|                            | Intervention group | 150                          | 133 | 165 | 202 | 650         |
|                            | Comparison group   | 206                          | 184 | 216 | 174 | 780         |
|                            | TOTAL              | 356                          | 317 | 381 | 376 | <b>1430</b> |
| Sweep 5<br>April '11       | School class       | P3                           | P4  | P7  | N/A | TOTAL       |
|                            | Intervention group | 131                          | 123 | 161 | N/A | 415         |
|                            | Comparison group   | 188                          | 171 | 206 | N/A | 565         |
|                            | TOTAL              | 319                          | 294 | 367 | N/A | <b>980</b>  |

*Adapted from Ross et al., 2011, Table 3. Sample sizes for analyses of teacher ratings*

## 5. The archived PATHS® Programme for Schools (NI Version) collection

### 5.1. Contents

Data from the quantitative assessment of the PATHS evaluation are included in the archived collection, namely the Assessment of Children's Emotions Scale (ACES) and the Challenging Situations Task (CST) for P1 and P2 classes at three data collection sweeps (S1, S4 and S5); and the Teacher Ratings of Pupil Behaviour (TRB) for P1, P2 and P5 at four data collection sweeps (S1, S2, S4 and S5).

#### **1. Assessment of Children's Emotions Scale (ACES-P1-P2-data)**

Field-worker completed assessment of receptive and expressive knowledge of emotions. Items from this instrument are marked in the archived file with the acronym ACES.

#### **2. Challenging Situations Task (CST-P1-P2-data)**

Field-worker completed assessment of behavioural responses to common social problems. Items from this instrument are marked in the archived file with the acronym CST.

#### **3. Teacher Assessment of Pupil Social Behaviour at Primary 1 and 2 (TRB-P1-P2-data)**

Teacher completed assessment using a revised version of the Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997) that is appropriate for younger elementary-age children, to assess teachers' perceptions of pupil's social behaviours. Items from this instrument are marked in the archived file with the acronym SDQ. Minor adaptations were made in the original version of the SDQ to (a) make the language and phrasing appropriate for the N. Ireland culture, and (b) shorten the length of the survey by eliminating overlapping and non-essential items. Teachers also completed questions from the Social and Emotional Competence subscale of the Kindergarten and the Elementary PATHS student survey. Items from these instruments are marked in the archived file with the acronym PATHSK and PATHSE respectively.

#### **4. Teacher Assessment of Pupil Social Behaviour at Primary 5 and 6 (TRB-P5-P6-data)**

Teacher completed assessment using revised versions of Strengths and Difficulties Questionnaire (SDQ, Goodman, 1997), appropriate for older elementary-age children, to assess teachers' perceptions of pupil's social behaviours. Items from this instrument are marked in the archived file with the acronym SDQ. Minor adaptations were made in the original version of the SDQ to (a) make the language and phrasing appropriate for the N. Ireland culture, and (b) shorten the length of the survey by eliminating overlapping and non-essential items. Teachers also completed questions from the Social and Emotional Competence subscale of the Kindergarten and the Elementary PATHS student survey. Items from these instruments are marked in the archived file with the acronym PATHSK and PATHSE respectively.

## 5.2. Sample size in the archived files

**Table 4: Number of cases in archived file by school year**

| School year       |                   | Number of cases in archived files |         |       |
|-------------------|-------------------|-----------------------------------|---------|-------|
| School year at S1 | School year at S5 | Intervention                      | Control | TOTAL |
| Primary 1         | Primary 3         | 155                               | 221     | 376   |
| Primary 2         | Primary 4         | 147                               | 217     | 364   |
| Primary 5         | Primary 7         | 171                               | 233     | 404   |

A breakdown of sample size per measure is given in Tables 5 to 7 below.

**Table 5: Sample size for Assessment of Children's Emotions Scale (ACES) in archived file**

| Sweep | School year of sample | Number of cases x condition | Total cases per sweep |
|-------|-----------------------|-----------------------------|-----------------------|
| S1    | P1                    | Control: 211                | 692<br>48 missing     |
|       |                       | Intervention: 138           |                       |
|       | P2                    | Control: 210                |                       |
|       |                       | Intervention: 133           |                       |
| S4    | P2                    | Control: 184                | 632<br>108 missing    |
|       |                       | Intervention: 136           |                       |
|       | P3                    | Control: 186                |                       |
|       |                       | Intervention: 126           |                       |
| S5    | P3                    | Control: 185                | 612<br>128 missing    |
|       |                       | Intervention: 133           |                       |
|       | P4                    | Control: 170                |                       |
|       |                       | Intervention: 124           |                       |

**Table 6: Sample size for Teacher Ratings of Pupil Behaviour (TRB) P1 and P2 in archived file\***

| Sweep | School year of sample | Number of cases x condition | Total cases per sweep  |
|-------|-----------------------|-----------------------------|------------------------|
| S1    | P1                    | Control: 221*               | 725 cases<br>4 missing |
|       |                       | Intervention: 154           |                        |
|       | P2                    | Control: 204                |                        |
|       |                       | Intervention: 146           |                        |
| S2    | P1                    | Control: 206                | 674 cases              |
|       |                       | Intervention: 151           |                        |

|    |    |                   |                          |
|----|----|-------------------|--------------------------|
|    | P2 | Control: 184      | 55 missing               |
|    |    | Intervention: 133 |                          |
| S4 | P3 | Control: 194      | 645 cases<br>84 missing  |
|    |    | Intervention: 140 |                          |
|    | P4 | Control: 181      |                          |
|    |    | Intervention: 130 |                          |
| S5 | P3 | Control: 189      | 623 cases<br>106 missing |
|    |    | Intervention: 136 |                          |
|    | P4 | Control: 173      |                          |
|    |    | Intervention: 125 |                          |

\*numbers are indicative only, missing cases were calculated from response to the survey item: 'PATHSK Q20 Understands at Sweep 1'

**Table 7: Sample size for Teacher Ratings of Pupil Behaviour (TRB) P5 and P6 in archived file**

| Sweep | School year of sample | Number of cases x condition | Total cases per sweep   |
|-------|-----------------------|-----------------------------|-------------------------|
| S1    | P5                    | Control: 225*               | 394 cases<br>10 missing |
|       |                       | Intervention: 169           |                         |
| S2    | P5                    | Control: 220                | 386 cases<br>18 missing |
|       |                       | Intervention: 166           |                         |
| S4    | P6                    | Control: 213                | 374 cases<br>30 missing |
|       |                       | Intervention: 161           |                         |
| S5    | P7                    | Control: 207                | 368 cases<br>35 missing |
|       |                       | Intervention: 162           |                         |

\*numbers are indicative only, missing cases were calculated from response to the survey item 'PATHSK Q24 Listens at Sweeps 1,2,4 and 5.'

### 5.3. Structure of archived collection

The data are split into four folders:

- **ACES-P1-P2** contains the data and codebook from the Assessment of Children's Emotions Scale from both the PATHS intervention and control groups in P1 and P2 at data collection sweeps S1, S4 and S5.
- **CST-P1-P2** contains the data and codebook from the Challenging Situations Task from both the PATHS intervention and control groups at data collection sweeps S1, S4 and S5.

- **TRB-P1-P2** contains the data and codebook from the Teacher Assessment of Pupil Social Behaviour from both the PATHS intervention and control groups at data collection sweeps S1, S4 and S5.
- **TRB-P5** contains the data and codebook from the Teacher Assessment of Pupil Social Behaviour from both the PATHS intervention and control groups at data collection sweeps S1, S4 and S5.

The folder components are outlined in more detail in Table 2 below.

**Table 8: Contents of each cohort folder**

| Folder name | Contents  |
|-------------|---|
| Data        | The archived data file containing the results of the RCT study in the tabular format .sav for SPSS and other statistical analysis platforms. This data has been processed (cleaned and anonymised) for secondary analysis.  |
| Codebook    | The codebook lists all variables in the archived dataset with some basic frequencies. Variables are listed chronologically as they appear in the archived data file. The codebook appendix provides an index of all variables per data file, to give users a quick overview of contents. The codebooks were created during the archiving process.   |
| Survey      | No survey documentation has been archived as the instruments (ACES, CST, SDQ and PATHS) are proprietary measures. New users should access the instruments if they wish to inspect the item questions from these instruments. Full citations and access information is provided in Appendix B. The number sequencing for question items follows the same format as the proprietary measure – i.e. SDQ Q4 in the archived file is question 4 of the Strengths and Difficulties measure as it appears online here: <a href="http://www.sdqinfo.com/">http://www.sdqinfo.com/</a> |

#### 5.4. Variable naming convention:

Variable naming in the PATHS collection follows the preferred format of the wider PEI Research Initiative. Data were prepared in SPSS Statistical Software. Punctuation (mostly apostrophes, commas and quotation marks) was removed from variable labels to prevent formatting errors from occurring when data is used across different software platforms. Labels are limited to 60 character and users should therefore refer to the survey question for the exact wording of the survey question. Users

should refer to the codebooks in the archived collection for specific information on individual variables.

1. Variables that were created during data entry and analysis are clearly named and labelled to indicate their content.

*Example a:*

| Variable name | Variable label                                 |
|---------------|--|
| Treatment     | <i>Member of intervention or control group</i> |

2. Variables that were created or altered during anonymisation are clearly named and labelled to indicate their content.

*Example b:*

| Variable name | Variable label                              |
|---------------|---|
| YOB           | <i>Student's year of birth (anonymised)</i> |

3. Scale variables, including individual scale items, domain scores and total scores are named with the scale acronym which is capitalised for ease of reference. These acronyms are consistent across all waves to facilitate the user to track specific measures across waves. Where permission has been granted to reproduce the scale contents in the archive, items are labelled to include an indication of the survey question. The below example illustrates the first item from the Strengths and Difficulties Questionnaire, which is available at

<http://www.sdqinfo.com/>

*Example c:*

| Variable name    | Variable label                               |
|------------------|--|
| <i>SDQ_Q1_S1</i> | <i>SDQ Question 1 Considerate at Sweep 1</i> |

4. Proprietary measures are typically restricted from sharing by copyright. For such measures individual items are labelled with the scale title and sequence number. The below example illustrates the first item from the Parenting Stress Scale which cannot be shared via the archive due to copyright restrictions.

*Example d:*

| Variable name    | Variable label                                    |
|------------------|---|
| <i>ACES_1_S1</i> | <i>ACES Trial 1 Correct Response 5 at Sweep 1</i> |

**5.5. Missing cases in the archived file:** All cases are included in the data file for each wave, so that individual wave files can be merged together if required. However, data was not collected for every

case at each data collection point and consequently there are a small number of missing cases in each data file.

**5.6. Missing data:** While participants were encouraged to answer all questions during the interview, there were some instances where a participant either could not provide a response to a question or did not wish to provide a response. Imputed values are not included in the archived dataset so that new users can manage missing data in a manner that best suits their research design. Non-response codes for categorical variables are indicated as shown in Table 5.

**Table 9: Non-response codes for categorical variables**

| Value code      | Value label                  |
|-----------------|------------------------------|
| 99 / 999 / 9999 | Missing (undefined)          |
| 97 / 997        | Not applicable<br>Don't know |

## 6. Recommended data citation

Users are required to provide a full citation for the data in any new outputs from the archived dataset. The data citation should contain at the very minimum the components shown in Table 6. Please refer to the in-house style of publisher for the format of this citation.

**Table 10: Components of recommended data citation**

|  |  |
|--|--|
| Identifier                             | Use DOI <i>[if not available use archive reference or serial number]</i>   |
| Creators                               | Barnardos NI; S.M. Ross; M.K. Sheard; R. Slavin; L. Elliott; A. Cheung; P. Hanley; L. Tracey                               |
| Title                                  | PATHS® Programme for Schools (NI Version) collection 2008 - 2011   |
| Publisher<br>[distributor]             | Irish Social Science Data Archive  |
| Publication year<br>of data collection | 2019   |
| Resource type                          | Collection   |
| Version                                | Optional <i>[include the version you are using where multiple versions of archived data collection have been released]</i> |

Example citation for the PATHS data collection:

Barnardos NI; Ross, S.M.; Sheard, M.K.; Slavin, R.; Elliott, L.; Cheung, A.; Hanley, P. and Tracey, L. (2019) PATHS® Programme for Schools (NI Version) collection 2008 – 2011. [dataset]. Version 1. Dublin: Irish Social Science Data Archive [distributor]. SN: XXXXX.

## 7. References

Ross, S. M.; Sheard, M. K.; Slavin, R.; Elliott, L.; Cheung, A.; Hanley, P. and Tracey L. (July, 2011). *Evaluation of the Together 4 All Programme for Schools Final Report*. York, UK: IEE, University of York.

Domitrovich, C. E., Cortes, R., & Greenberg, M. T. (2007). Improving young children's social and emotional competence: A randomised trial of the preschool PATHS curriculum. *Journal of Primary Prevention*, 28, 67-91.

Denham, S. A.; Bouril, B.; Belouad, F. (1994). Preschoolers' affect and cognition about challenging peer situations. *Child Study Journal*, Vol. 24, pp. 1-21.

Goodman, R.; Ford, T.; Simmons, H.; Gatward, R. and Meltzer, H. (2000). Using the Strengths and Difficulties Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample, *British Journal of Psychiatry*, Vol. 177, pp. 534-39.

## Appendix A: Publications

Ross, S. M.; Sheard, M. K.; Slavin, R.; Elliott, L.; Cheung, A.; Hanley, P. and Tracey L. (July 2011).

*Evaluation of the Together 4 All Programme for Schools Final Report*. York, UK: IEE, University of York.

Ross, S.; Sheard, M. K.; Cheung, A.; Elliott, L. and Slavin, R. (2011). Promoting primary pupils' social-emotional learning and pro-social behaviour: longitudinal evaluation of the Together 4 All Programme in Northern Ireland. *Effective Education*, Vol. 3, No. 2, pp. 61-81.

DOI: 10.1080/19415532.2012.665773

Ross, S. M.; Sheard, M. K.; Slavin, R. and Cheung, A. (2011). *Evaluation of T4A: Sweep 4 results*. York, UK: IEE, University of York.

Ross, S. M.; Sheard, M. K.; Cheung, A.; Slavin, R. E.; Tracey, L. and Elliott, L. (2011). *Promoting students' social-emotional learning and pro-social behavior: Longitudinal evaluation of the Together 4 All program in Northern Ireland*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

## Appendix B: Citations for standardised measures

**Table 11: Archived standardised measures - full title and citation**

| Instrument acronym | Full title of instrument  | Instrument citation  |
|--------------------|---|--|
| ACES               | Assessment of Children's Emotions Scales  | Domitrovich, C. E.; Cortes, R. and Greenberg, M. T. (2007). Improving young children's social and emotional competence: A randomised trial of the preschool PATHS curriculum. <i>Journal of Primary Prevention</i> , Vol. 28, pp. 67-91.                                       |
| CST                | Challenging Situations Task   | Denham, S. A.; Bouril, B.; Belouad, F. (1994). Preschoolers' affect and cognition about challenging peer situations. <i>Child Study Journal</i> , Vol. 24, pp. 1-21.   |
| PATHSK             | Teacher Social Competence Rating Scale for Pre-Kindergarten/ Kindergarten PATHS Student Survey (social and emotional competence subscale) | Kusche, C. A. and Greenberg, M. T. (2012) PATHS Evaluation Kit (revised 6/2012). PA: EPISCenter, The Pennsylvania State University. Available at <a href="http://www.episcenter.psu.edu/ebp/altthinking/evaltools">http://www.episcenter.psu.edu/ebp/altthinking/evaltools</a> |
| PATHSE             | Teacher Social Competence Rating Scale for Elementary PATHS Student Survey (social and emotional competence subscale)                     | Kusche, C. A. and Greenberg, M. T. (2012) PATHS Evaluation Kit (revised 6/2012). PA: EPISCenter, The Pennsylvania State University. Available at <a href="http://www.episcenter.psu.edu/ebp/altthinking/evaltools">http://www.episcenter.psu.edu/ebp/altthinking/evaltools</a> |
| SDQ                | Strengths and Difficulties Questionnaire  | Goodman, R.; Ford, T.; Simmons, H.; Gatward, R. and Meltzer, H. (2000). Using the Strengths and Difficulties   |

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|--|--|---|
|  |  | <p>Questionnaire (SDQ) to screen for child psychiatric disorders in a community sample, <i>British Journal of Psychiatry</i>, Vol. 177, pp. 534-39.</p> <p>For scale visit: <a href="http://www.sdqinfo.com/">http://www.sdqinfo.com/</a></p> <p>Or contact: <a href="mailto:youthinmind@gmail.com">youthinmind@gmail.com</a></p> |
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