

Development of an overarching measure of impact for Home-Start UK: a feasibility study

Technical Summary for researchers

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Voluntary and public-sector providers of family support are increasingly expected to provide quantifiable evidence of outcomes for service users at both national and local level. Yet the effort and costs of designing and carrying out evaluation studies to collect this information are substantial, and the results are often inconclusive. This report describes the results of an innovative methodological development project to develop evaluation methods, conducted in collaboration with Home-Start UK, a substantial voluntary organisation providing befriending and support to vulnerable families, local Home-Starts in Northern Ireland, Deborah Ghateⁱ, and the Centre for Effective Services (CES)ⁱⁱ. The project was conducted between 2010 and 2012, with fieldwork carried out in Northern Ireland during 2011. This summary is intended for researchers, and contains details of the results of the project and the methods used in it. Further fuller details on methods can be found in the full report, and a shorter summary of key findings for practitioners and policy makers is also available (see below).

Purpose of the project

The aim of the project was to explore the feasibility of developing and implementing an overarching measure of impact of Home-Start's work with vulnerable families. The objective was to identify and test a simple, quantifiable indicator that could be administered easily and at low cost to capture the core goals of Home-Start services. The intention was to develop a 'big picture' measure that would apply to the widest possible proportion of the diverse group of families who use Home-Start, which could be used for independent or self-evaluation and as an adjunct to more comprehensive and detailed methods of evaluation. This focus on developing and testing a methodologically and empirically robust global and overarching measure of *impact*, rather than on detailed *outcomes*, was a key element of the project.

Although the project was primarily intended to benefit Home-Start itself by developing a practical evaluation instrument for future use across the organisation, it was anticipated that if successful, the measure could also be used by other comparable community-based family support services. Additionally, if the specific measure developed was not itself

appropriate for use by other services, it was intended that the methodology developed to produce the measure could be replicated to develop a bespoke measure suited to different settings and other service goals. The report therefore details not only the results of the project, but the specific process methods used to generate them.

Background to the project

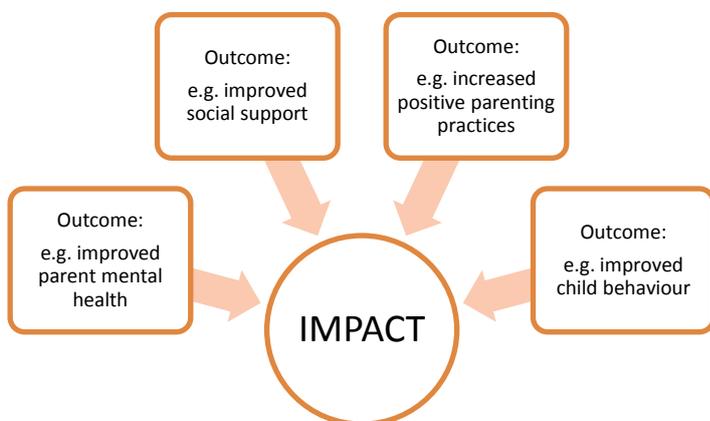
Home-Start UK is a substantial voluntary family support organisation. It has worked across the four nations of the UK since 1973 through self-governing local schemes (known as 'local Home-Starts'), providing volunteer support and befriending to families experiencing stress, who have children under five. In 2010-2011, local Home-Starts worked with around 17,000 volunteers and provided support to around 36,000 families with 77,000 young children. The dominant route by which families reach Home-Start is through referrals by health visiting, social work or other health and social care personnel, although a substantial proportion of parents refer themselves. The service in principle allows universal access (i.e. is not targeted on specific groups but open to all), and there are no fixed eligibility criteria that parents must satisfy in order to receive a service. The kinds of stresses experienced by parents vary widely, for example living with disabilities, living in poverty, or having inadequate social or family support.

Home-Start provides a non-programmatic service approach that is responsive, *user-led*, and tailored to individual parents' needs. Although the nature of the service provided to each family is underpinned by common principles of working with families, the precise help delivered by volunteers and the duration of this help is negotiated individually, highly personalised, and varies from one family to the next. This is an approach typical of many established family support providers across Europe, in contrast to more formal models of intervention that use programmed, *theory-led* delivery that aim to deliver a more standardised package of support to service users.

In the context of these key features, the project addressed a particularly pressing current issue for Home-Start and for other services. For voluntary and public-sector providers of family support there is increasing pressure to provide quantifiable evidence of outcomes for service users at both national and local level, as part of a general trend toward more evidence-based approaches to service provision and results-based accountabilities. However, evaluation design and execution is especially challenging for services that, like Home-Start, operate on an open-access basis serving a heterogeneous range of needs. It is also methodologically challenging to design robust outcome measures for approaches that are highly flexible and non-standardised, where identification of the core outcomes that are anticipated is complex and will vary from one family to the next. In addition, there is a well-observed, though under-explained phenomenon known to all seasoned family support researchers, policy makers and practitioners, which might best be described as a disconnection between different ways of assessing the benefits of services. Quantitative indicators sometimes show little or no change, even when qualitative methods find that the service is extremely helpful to parents. This can be observed in some of the mixed evaluation findings for Home-Start itself over the years, and in many other instances in the wider family support evaluation literature.

Recognising these challenges, our approach began by making a theoretical and practical distinction between *outcomes* and *impact*. We used *impact* to describe the ‘sum of the parts’ of multiple outcomes: that is, the overarching, ‘high-level’ effect of a service that may be targeting a number of subsidiary outcomes. We conceptualised *outcomes*, by contrast, as changes over time in specific areas of learning, behaviour or life circumstances (e.g. parents’ knowledge of child development, parents’ methods of discipline, children’s behaviour, mothers’ mental health, increased social support and so on). In the project, we aimed to develop and test a single measure of ultimate and overarching impact: in effect, the core ‘essence’ of what a service like Home-Start is trying to achieve.

Figure 1 A model for the relationship between outcomes and impact



Methods

The project had five key stages, which are described in more detail in the report and summarised in the box below:

Box 1 Methodology for the project

1. Literature review and consultation to identify the key aspect of the service to be measured (the overarching change that Home-Start hopes to achieve, which could best capture the overall impact of the service)
2. Literature review and consultation to develop the methodology, including exploring the advantages and disadvantages of simple as opposed to complex measurement approaches
3. Consultation and development of three alternative measures to be tested, involving adapting existing, widely used measures
4. Testing using a repeated measures design by 12 local Home-Starts in Northern Ireland, with a sample of 76 parents, and three waves of data collection over a total average follow-up period of 23 weeks
5. Data analysis of results, and feedback from Home-Start co-ordinators on the process of administration, to explore the way the three measures worked
6. A final stage of further reliability testing on one of the measures that proved most successful

Identifying an overarching construct capturing impact

Although there have been previous evaluations of Home-Start that have identified and measured the specific outcomes of the services for parents and children in various domains (e.g, mental health, child behaviour), no previous work had attempted to identify a single overarching indicator of impact. Therefore the study began with desk research and consultation with key stakeholders to identify the most appropriate overarching construct that could be developed into an overarching indicator: in other words the single most important aspect of parenting or family life that Home-Start might be seeking to change through its help, and that could be said to best capture the overall impact of the service.

To be valid, such a goal should be readily recognisable to the organisation's leadership, staff and volunteers as reflective of their intentions, and would need to be broad enough to apply to the widest possible group of parents who use the service. Such a change goal should also closely reflect the direct, on the ground support that Home-Start volunteers give to families. So, for example, overarching indicators associated with change for children (for example, improvement of child behaviour or wellbeing) were deemed unsuitable, because volunteers do not work directly with children but with parents, and any change at the child level associated with the support provided is mediated through parents. Indicators associated with change in parenting practices were also rejected (for example, disciplinary strategies), because although volunteers do give support to parents to change their practices, the specific practices concerned vary widely across all parents using Home-Start, making selection of a single suitably salient indicator impossible. Finally, to be practical, the change goal should be suited for development into a simple, brief quantitative measure, or already be developed in this way. Long or multi-part scales were therefore avoided.

The review and consultations with stakeholders pinpointed a group of related constructs that filled these criteria, mostly focused around the concept of parenting 'self-efficacy', and the plainer English construct of 'coping' with being a parent. Self-efficacy (sometimes called 'self-agency') in relation to parenting concerns the beliefs that a person has of his or her ability to organise and carry out the tasks of parenting. The empirical literature shows that higher self-efficacy is associated with more optimal parenting practices and better quality of parenting. It is also closely related to coping, which is the ability to manage situations, tasks and the wider role of being a parent in the face of stressful background circumstances. Consultations with Home-Start stakeholders also verified that enabling parents to manage stressful situations better, to feel more confident in their abilities as parents, and to take more enjoyment in parenting were key goals of the support offered. Measures of self-efficacy and coping and enjoyment of parenting were therefore sought for field testing.

Developing the measurement approach

Having identified a suitable group of constructs that might serve to capture impact, a short review of the methods literature was conducted, combined with seeking views directly from other researchers in the field, to identify existing quantitative measures with features that fulfilled our target criteria. These were that the measures should be: simple to understand and acceptable to Home-Start parents and volunteers (which generally meant, not strongly

'deficit' focused); brief and easy to administer at low-cost; suitable to be self-completed by parents; empirically tested and preferably 'normed' in larger or general population samples to give comparative data and the comfort of knowing the measures 'worked' in the field; and with robust psychometric features where known (i.e. with good content and face validity, good reliability/stability, and - critically - sufficient responsiveness to detect change in a small to medium-sized sample, since we anticipated attrition in the numbers of parents providing data over the course of the follow-up period).

In addition, the relative advantages and disadvantages of single as opposed to multiple-item measures were assessed, since our goal was to identify the shortest, simplest and least burdensome measure possible. Our review of the literature established that whilst multi-measure approaches remain the gold standard, and complex measures allow for more flexibility in analysis, there is much to recommend single item and short scales when used in evaluation research. In addition to manifest practical advantages, some evidence suggests that succinct and well-constructed single items may capture key information and discriminate between groups as effectively as longer and more complex measures. Our conclusion that there was no compelling evidence against the use of well-constructed single item measures in appropriate contexts, although whether short measures would prove sufficiently responsive to detect change over time remained a question for field testing.

Selecting and field-testing the measures

On the basis of the two reviews, three measures were identified. After consultation with Home-Start Co-ordinators these were agreed for testing, with adaptations where necessary:

- A. *The Parenting Self-Agency Measure (PSAM)*ⁱⁱⁱ - a five item scale measuring parenting self-efficacy, developed in the USA but previously used in the UK, with a five point scale response format. Two items were adapted with permission from the author to remove references to a 'target' child to more closely reflect Home-Start's approach (volunteers do not single out children for specific attention)
- B. *Enjoyment of Parenting* – a single item measure on a five point response scale, widely used by various authors and a feature of many longer scales
- C. *Parent Coping Scale (PCS)*^{iv}, a single item 'global coping scale' adapted from a measure developed for a national study of parenting in Britain and widely used since, with a four-point response scale expressed as statements. This was modified into a five point scale to improve the dispersion of responses to the measure, which had been observed in previous research to be abnormally distributed (proportions reporting the lower range scores were extremely low).

Correlation tests of the three measures were run to establish convergent and divergent construct validity (i.e, that all measures were addressing related constructs, but yet were not identical) and results were satisfactory.

The three measures were combined into a short questionnaire, reproduced in the Appendix to the main report, and twelve Local Home-Starts in Northern Ireland agreed to participate in field testing. Co-coordinators at each local Home-Start approached all parents starting

Home-Start services from October 2010 to April 2011, seeking their consent to participate in the pilot study. Of 88 parents approached, 76 agreed, a response rate of 86% at Baseline, with demographic characteristics representative of the wider population of Home-Start service users.

The short questionnaire was administered by Co-ordinators to parents in the form of a self-completed booklet, which parents were asked to complete and then return to the Co-ordinator in a sealed envelope identified only by a serial number. This process was repeated at three time points, each approximately 10 weeks apart: Baseline (Time One): during an 'initial assessment' meeting; at a 10-week review meeting (Time Two); and at a 20-week review meeting (Time Three). In practice, the average total follow-up period was 23 weeks, and attrition at each stage as parents left Home-Start, or were unavailable for other reasons reduced the numbers to 51 at Time Two (67% of Baseline sample) and 34 at Time Three (45% of Baseline). Although attrition was substantial, analysis showed that the characteristics of those parents remaining in the sample to Time Three were not different to those of the Baseline and that most of the attrition at both time points was attributable to ceasing to use the service, giving confidence that the sample of parents remaining at Time Three were not unrepresentative of the Baseline.

Results

Results were inspected for plausibility and patterning, and compared to normed data where available. Change over the three time points was analysed using the appropriate non-parametric differences of means tests, and results are shown in detail in the main report. All three measures were found to be acceptable to parents, and two of the measures (A and C) showed sufficient sensitivity to detect statistically significant change over time. *Enjoyment of Parenting* (Measure B) was found to be subject to large ceiling effects (i.e. that proportions at the top of the scale at Baseline were already so high there was little room for improvement), and this measure was judged inappropriate to measure change.

Measure A, the *Parenting Self Agency Measure*, showed modest change in a positive direction between all three time points, but the changes were statistically significant only between Baseline and Time Two. Measure C, the *Parent Coping Scale*, showed the greatest sensitivity to substantive change in a positive direction between all three time points, with strongly significant differences detected despite the diminishing sample size. Measure A showed some evidence of a social desirability response bias leading to overly positive reports by parents, compared to data obtained with the same measure from less 'stressed' samples; Measure C showed the reverse, with Home-Start parents reporting plausible levels of coping difficulties on this measure. However, social desirability response bias could also not be entirely ruled out for this measure, according to process feedback from Co-ordinators.

Table 1 summarises the results for the sample remaining in the study to the final follow-up.

Table 1. Summary results on the three measures at baseline, Time 2 and Time 3 for parents providing data at all three time points

Measure (Base at Time 3)	Time 1 (baseline) Mean score	Time 2 Mean score	Time 3 Mean Score	Significance
Parenting Self-Agency Measure (PSAM) (n=33)	19.2	19.5	20.4	n/s
Enjoyment of parenting (n=33)	4.4	4.5	4.6	n/s
Parent Coping Scale (PCS) (n= 34)	3.2	3.5	3.7	p<.001

Process feedback from Home-Start Co-ordinators

Qualitative feedback from Home-Start Co-ordinators on the process of administering the measures over time yielded many useful insights that are discussed in more detail in the main report. Although the Co-ordinators confirmed the overall validity of the constructs being measured, they also confirmed a suspicion of a social desirability response bias that had been raised during inspection of the results. They reported a degree of ‘faking good’ by parents, especially at the Baseline stage. This was possibly due to parents being unwilling to disclose the real extent of difficulties at this initial stage of relationship-building with Home-Start, or being anxious about the purpose of the data being collected, given that Co-ordinators themselves were themselves involved in the administration.

They also confirmed that the methods of administration must be very simple and streamlined so as not to delay and interrupt the flow of work for co-ordinators, and to minimise the burden on participating parents. It was also apparent that for some, the process of administering the measures interfered unhelpfully with the complex process of establishing trusting relationships between Home-Start and the parents who use the services.

Conclusions

This collaborative project was innovative in a number of ways. The approach was original firstly in its attempt to develop a measure of high-level impact rather than focusing on domain-specific outcomes; second, in the rigorous iterative approach we used to identify and validate an appropriate construct for impact, develop a suitable measure of that construct, assess the methodological implications of our plans, and field test alternative measures in collaboration with local Home-Starts; and thirdly in our use of feedback on the process from staff involved in the field testing who also deliver the services.

The project has satisfactorily demonstrated that it is possible to develop and use a simple, low-cost overarching measure of impact for an open-access, user-led and community-based family support service delivered by volunteers across the UK. We were able to develop and implement a measure that was compatible with the service's broad intentions, acceptable to parents and staff, and satisfactorily robust as a measure of change over time. Two of the three measures that were tested proved satisfactory in terms of validity and sensitivity to detect change over a follow-up period; one, the *Parent Coping Scale*, showed greatest sensitivity to change and holds particular promise as a simple, low-cost measure that could be used by Home-Start and potentially also by other community-based services with similar high-level goals; see Box 2 for a summary of the properties of this measure. The project also has much wider applicability, in having developed a workable methodology for the development of other measures, in the case of services that seek other, different kinds of overarching impact.

Box 2 Properties of the Parent Coping Scale

The *Parent Coping Scale* demonstrated the following practical properties:

- Prefaced by a permission-giving, normalising statement worded in plain and colloquial British English that recognises variations in the daily 'lived experience' of parenting
- High acceptability to parents
- High saliency: widely applicable to parents of both sexes and in diverse situations, focusing on the broad parenting role, rather than specific parenting practices or relationships with specific children
- Uses a simple five-point response scale, formulated as statements
- Extremely brief to administer, either self-completed or interviewer-administered
- Easy to analyse
- Precursor measure normed in large-scale population surveys, providing comparable data for use in family support research

It also showed the following psychometric properties:

- Good face and content validity
- Good construct validity
- Preliminary psychometric testing results indicate good stability and reliability
- High sensitivity to detect changes over time, in tests over a six month follow-up, even in a small sample
- Adequate dispersion, albeit with some qualitative evidence of social desirability response bias

The attempt to capture the broad, 'big picture' impact of a service may have more in common with qualitative research than other quantitative measurement approaches. In avoiding the pitfalls of trying to match fine-grained, domain-specific outcome measures to the diffuse objectives and fluid operations of many non-programmatic family support services, impact measurement, like qualitative enquiry, also relies on the synthesis of multiple contributory factors into overarching summative judgments. In this respect, well-constructed measures of impact may help towards the bridging of the disconnection that often emerges when qualitative and quantitative research are employed together to assess the results of family support services.

A limitation of the project is that the measures were not tested against a counterfactual. This means that we do not know how the three measures might have performed in a group of parents who were not receiving Home-Start's services. It is possible that these measures would pick up the same degrees of change (or lack of it) irrespective of whether parents were receiving a service, or irrespective of whether that service was Home-Start or something else. A single overarching measure of impact is also not a substitute for the more detailed and fine-grained evaluation of outcomes in specific domains of parent and child functioning. However, where time and resources are limited, or where services need to assess their own high-level performance on an on-going basis without access to external research support, this method may be an important complement to more comprehensive approaches to evaluation.

Specific recommendations

The results of the project led us to make the following recommendations, which incorporate some modifications to the process we trialled:

For future measurement of overarching, high level impact of Home-Start's services we recommend the use of the *Parent Coping Scale (PCS)*, which, of the three measures tested, appeared to achieve the best balance between practical, theoretical and scientific considerations. The *PCS* provides a global measure of 'coping with being a parent', a theoretically and empirically robust construct that is conceptually related to parenting self-efficacy and shown in empirical studies to be related to parenting practices, quality of parenting and a host of risk and protective factors for parenting and child development outcomes. Improving parents' sense of coping with parenting stress is recognised by Home-Start's stakeholders as a valid indicator of the intentions of the service, and 'coping' has a plain English meaning readily understandable to parents of all social and educational backgrounds. Future development of the measure should ideally test its behaviour in a comparison (non-service group).

Full details of the *Parent Coping Scale (PCS)*, results from additional testing completed after the study, and how to use it, are available on the web at:
http://www.cevi.org.uk/docs/Parent_Coping_Scale.pdf

Given the brevity and simplicity of the *PCS*, we also recommend that future use should explore the use of telephone rather than face-to-face administration methods. This would remove the need for local Co-ordinators or other Home-Start personnel to administer the measure, reducing both the burden on the service and the potential for social desirability response bias that arises when a person known to the respondent is associated with administration of the measure. Co-ordinators would still need to seek permission for ongoing telephone contact, but data could then be collected centrally, by an independent researcher or telephone research unit. This would allow for more accurate timing of follow-ups, and also allow collection of data from parents who have completely ceased to use the service. Longer follow-up periods could also be employed, increasing the size and utility of the data-set for monitoring the longer-term impact of the service. All of these factors, if

implemented, may yield new insights into the workings of the *PCS* and will contribute to the further refinement of the methods described in this study.

For further information, see:

Full Report:

Development of an overarching measure of impact for Home-Start UK: a feasibility study

Moran P and Ghate D (2013)

available on the web at:

http://www.cevi.org.uk/docs/Impact_Measure_Report.pdf

http://www.home-start.org.uk/about_us/what_we_do/policy_practice_research

<http://www.effectiveservices.org/our-work/homestart>

Executive Summary (non-technical):

Development of an overarching measure of impact for Home-Start UK: a feasibility study - executive summary Ghate D and Moran P (2013)

available on the web at:

http://www.cevi.org.uk/docs/Impact_Summary_1.pdf

The *Parent Coping Scale*: background and technical information Ghate D and Moran P (2013)

available on the web at:

http://www.cevi.org.uk/docs/Parent_Coping_Scale.pdf

Home-Start UK www.home-start.org.uk

Colebrooke Centre for Evidence and Implementation www.cevi.org.uk

Centre for Effective Services www.effectiveservices.org

This project was undertaken as a collaboration between Home-Start UK, Deborah Ghate and the Centre for Effective Services

ⁱDeborah Ghate is the Chief Executive of the Colebrooke Centre for Evidence and Implementation, a UK-based independent not-for-profit centre for implementation science and practice, focusing on the implementation of better services and systems for children and families. She was the founding Chief Executive of the Centre for Effective Services, between 2008 and 2011.

ⁱⁱ CES is an independent not-for-profit centre for the promotion and support of evidence-informed policy and practice in child, family and community services in Ireland and Northern Ireland.

ⁱⁱⁱ Dumka, L., Stoerzinger, H., Jackson, K., and Roosa, M. (1996) Examination of the cross-cultural and cross-language equivalence of the parenting self-agency measure. *Family Relations*, 45, 216-222.

^{iv} Ghate D. and Hazel N. (2002) *Parenting in Poor Environments: Stress, Support and Coping* London: Jessica Kingsley Publishers

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